

FY 2022 Education and Workforce Development RFA Additional Information for Part IV, C

Note that the required content and forms for applications vary by the program area priority described in the RFA. Along with the information on this first page, see the appropriate program area priority section for relevant details:

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PART IV—APPLICATION AND SUBMISSION INFORMATION

C. Content and Form of Application Submission

In addition to the information in the AFRI Education and Workforce Development RFA, additional AFRI specific application instructions can be found below. **All application attachments must be in a portable document format (PDF).**

There is a separate section for each AFRI EWD RFA Program Area starting with a table of contents for that section. Using the bookmark feature in your PDF reader will allow you to navigate easily to the different sections in this document.

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For Agricultural Workforce Training Grant applications, follow the instructions below.

1. SF 424 R&R Cover Sheet

Information related to this form are explained in detail in Part V, 2 of the NIFA Grants.gov Application Guide. See Part V, 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 dealt with in detail 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 dealt with in detail in Part V, 4 of the NIFA Grants.gov Application Guide.

a. Field 7. Project Summary/Abstract

Title the attachment as 'Project Summary' in the document header and save file as 'ProjectSummary'.

The summary should explain 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.

The following instructions are in addition to those included in Part V, 4.7 of the NIFA Grants.gov Application Guide.

The Project Summary **must** indicate the following:

- 1) Project title;
- 2) Indicate the primary AFRI Farm Bill Priority area focus of the project by selecting one of the following:
 - a) Plant health and production and plant products;
 - b) Animal health and production and animal products;
 - c) Food safety, nutrition, and health;
 - d) Bioenergy, natural resources, and environment;
 - e) Agriculture systems and technology; or
 - f) Agriculture economics and rural communities.
- 3) Project duration;
- 4) Project Director;
- 5) Submitting organization;
- 6) Other organizations involved in the project;
- 7) Name or type of Industry-accepted credential the project will generate or participants will achieve;
- 8) Number of participants per year; and
- 9) Location(s) (colleges, businesses, etc.) at which the proposed activities will occur.

In addition to the information requested above, please provide a 250-word abstract. The abstract should briefly describe the project's objectives, activities, participants to be recruited

(if applicable), and intended impact. The abstract should also include the relevance of the project to the goals of the Agricultural Workforce Training program area.

b. Field 8. Project Narrative

Title the attachment as 'Project Narrative' in the document header and save file as 'ProjectNarrative'.

The Project Narrative may **not exceed ten-pages** of written text using 12-point font with single line spacing (i.e., no more than six lines per vertical inch), including all figures and tables. Do not use a condensed or narrow font (e.g., Arial Narrow).

To ensure fair and equitable competition, applications exceeding the applicable page limitation will be returned without review.

The Project Narrative attachment must include all of the following:

1) Specific Application Type Information

a) Resubmissions – Response to Previous Review (only applies to Resubmitted Applications, see Part II § B of the RFA.)

The Project Narrative attachment for resubmissions should include two components:

i) 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 ii) the Project Narrative below. The one-page "Response to Previous Review" does not count against the Project Narrative page limit.

b) 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 of the RFA. 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.

2) Overview

a) Provide a brief description of the objectives of the program to be developed. The AFRI Priority area(s) and workforce need being addressed; the anticipated project audience; and the project's target objectives.

b) Project Justification: Summarize the body of knowledge justifying the need for the proposed project. Describe any ongoing or recently completed, significant activities related to the proposed project.

3) Approach

a) Curriculum Development Mechanisms

i) Describe what elements of curriculum development for workforce training the project will pursue. Curriculum development can include and is not limited to creation of curriculum and instructional delivery systems, pilot testing/implementation of curriculum and delivery methods, development of assessment tools, and evaluation.

- ii) Describe the industry-accepted credentials the project is to generate and/or participants are to obtain after their participation in the project; include the applicability and potential pitfalls generating or obtaining such credentials.
 - iii) Innovation: Describe the proposal's creative approach to agricultural workforce training. Using either actual experiences or literature, show why you selected this approach.
 - b) Plan of Operation and Methodology
 - i) Applications should provide detailed descriptions of the research, education and/or extension activities that will be pursued. This discussion should indicate how these activities will lead to enhanced agricultural workforce training. The review process will give preference to projects that will catalyze and result in the implementation of self-sustaining models for agricultural workforce training.
 - ii) Describe procedures for accomplishing the objectives of the project. Describe plans for management of the project to ensure its proper and efficient administration. Describe the way in which resources and personnel will be used to conduct the project.
 - iii) Timetable: Identify all important project milestones (performance targets that indicate when project goals will be met) and dates as they relate to project start-up, execution, evaluation, dissemination, and closeout.
 - iv) (If applicable) Recruitment, Selection, and Continued Support for Participants. The recruitment plan should be described with as much specificity as possible. How will participants be recruited? What criteria will be used to select participants? How will participants who terminate the program early, be replaced? What additional support will be provided to participants after the termination of the project?
- 4) **The Research, Education and/or Extension Environment**
 - a) Describe the experience of the key personnel in providing quality agricultural workforce training.
 - b) Institutional Support/Partnerships. Fully describe the institutional climate for the proposed training. How does the proposed project align with and contribute to the applicant and partner institutions' goals for enhancing workforce training in their community/state/region? Projects that involve partnerships with local government, economic development organizations, and workforce-focused nonprofit organizations are encouraged.
 - c) Describe the environment of the host site(s), including, but not limited to, physical plan(s), accommodations for participants with disabilities, accessibility, location(s) of proposed activities, etc.
- 5) **Project Evaluation and Reporting**
 - a) Clearly define a plan with a timeline to extensively evaluate the project using formative and summative assessment tools that can help inform future implementations of workforce training programs. Identify pitfalls and limitations to proposed approaches and how these will be addressed.
 - b) As applicable, define the approach for evaluating participant outcomes.
- 6) **Expected Outputs**

Please use the format provided below. Expected Outputs table does not count against the ten-page limit of the Project Narrative.

Total expected outputs during grant period	Expected Number
(1) Number of products to be developed through grant funds during the grant period (i.e., curricula, academic programs, recruitment/retention programs, materials, on-the-job training opportunities)	
(2) Number of students to be directly supported by this grant (i.e., scholarships, fellowships, paid on-the-job training opportunities, included as a cost in your project budget)	
a. Number of underrepresented ¹ students to be supported during the grant period (Provide the best estimate based on past experience)	
(3) Number of students who will indirectly benefit from the products produced from the grant during the grant period (i.e., using the curriculum/instrumentation, enrolled in the program, recruited or retained but not paid by the grant using scholarships, fellowships and assistantships).	

c. Field 9. Bibliography & References Cited

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

No Page Limit. Title the attachment as ‘Facilities & Other Resources’ in the document header and save file as ‘FacilitiesOtherResources’.

e. Field 11. Equipment

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 Underrepresented = those whose representation among food and agricultural professionals is disproportionately less than their proportion in the general population as indicated in standard statistical references, or as documented on a case-by-case basis by national survey data (e.g., the U.S. Department of Education's Digest of Education Statistics, U.S. Department of Agriculture’s Food and Agricultural Education Information Systems, etc.).

1) **Key Personnel Roles**

2-Page Limit. Title the attachment as ‘Key Personnel’ and save file as ‘KeyPersonnel’.

Clearly describe the roles and responsibilities of the PD, collaborator(s), etc. (biographical sketches for key personnel including mentor(s) should not be included here). If it will be necessary to enter into formal consulting or collaborative arrangements with others, such arrangements should be fully explained and justified. Evidence (letters of support) for this type of collaboration should be provided in the ‘Documentation of Collaboration’ attachment (see item 5) below).

2) **Logic Model**

2-Page Limit. **Required for all Integrated Project applications. Encouraged for Research, Education, or Extension 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](#).

Failure to include a logic model for an integrated project may result in the application not being considered for review.

3) **Management Plan**

3-Page Limit. **Required for Integrated Project applications. Encouraged for Research, Education, or Extension 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 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)**

2-Page Limit. Required for all 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 of the RFA). See Part III, 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

No Page Limit. Title the attachment as ‘Documentation of Collaboration’ in the document header and save file as ‘Collaboration’.

Include evidence of collaboration and contributions amongst the host institution and partners.

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

6) Preprints

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

Optional: May be needed if applying for a FASE Strengthening Standard Grant.

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 of the RFA.

8) Representations Regarding Felony Conviction and Tax Delinquent Status for Corporate Applicants

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\(f5\)](#)).

a. Project Role Field

Complete appropriately.

b. Other Project Role Category Field

Complete appropriately, if applicable.

c. Attach Biographical Sketch Field

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.

The Biographical sketch of the applicant (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.

In addition, Biographical sketch must include:

- 1) A presentation of academic, extension, and/or research credentials including, as applicable: earned degrees, teaching experience, employment history, professional activities, honors and awards, and grants received; and
- 2) Indicate the number of continuing education courses developed and taught/trained the number of educators by the applicant.
- 3) Include all relevant publications in refereed journals during the past four (4) years including those in press.

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).

d. Attach Current and Pending Support Field

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 each senior/key person identified.

Note: Even if no other funding is currently reported under the 'Active' section of this attachment, each senior/key person must list this grant application under the 'Pending' section of this attachment.

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.

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.

a. 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 of the RFA, 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 § C of the RFA, 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.

The sources and the amount of all matching support from outside the applicant organization must be summarized on a separate page and placed in the application immediately following the Budget Justification. All pledge agreements must be placed in the application immediately following the summary of matching support.

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.

b. 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 an application is funded, the Project Director will be required to attend one AFRI NIFA EWD Project Directors’ meeting during the performance period of the award. Reasonable travel expenses (location to be determined by NIFA program staff) should be included as part of the project budget. Reasonable travel expenses should be included as part of the project budget.

See Part I § C of the RFA for limitation of budget amounts, use of funds, and budget periods.

- 1) Projects that include partnering with eXtension must include financial support for the Community of Practice core functions as well as project specific activities.
- 2) For Integrated Project Applications, projects must budget sufficient resources to carry out the proposed set of research, education, and/or 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.

c. Subcontract Arrangements

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

- 1) 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.
- 2) 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.

d. 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 § D of the RFA for additional information.

e. Field K. Budget Justification

No Page Limit. Title the attachment as ‘Budget Justification’ 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.

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 signed by the Authorized Representative and other evidence should be provided in the Documentation of Collaboration (see [Part IV § C.3\(f5\)](#)) 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. Allowable expenditures must be appropriately discussed in the budget justification. 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.

- 1) *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/or 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.

7. Supplemental Information Form

Instructions related to this form are explained in detail in Part VI, 1 of the NIFA Grants.gov Application Guide.

a. Field 2. Program to which you are applying

Enter the Program Code Name and the Program Code for the Program Area to which you are applying from the information provided in the Program Area Descriptions beginning in Part I § C of the RFA. An application can only be submitted to one program area. Note that accurate entry of the Program Area Code Name and Program Area 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 Contact.

b. Field 8. Conflict of Interest List

No Page Limit. Title the attachment as ‘Conflict of Interest’ in the document header and save file as ‘Conflict of Interest’. 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).

Food and Agriculture Non-formal Education (FANE)

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1. SF 424 R&R Cover Sheet

Information related to the questions on this form are explained in detail in Part V, 2 of the NIFA Grants.gov Application Guide. See Part V, 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)

Information related to this form are explained in detail in Part V, 3 of the NIFA Grants.gov Application Guide.

3. R&R Other Project Information

Information related to this form are explained in detail in Part V, 4 of the NIFA Grants.gov Application Guide.

a. Field 7. Project Summary/Abstract

Title the attachment as ‘Project Summary’ in the document header and save file as ‘ProjectSummary’. See Part V. 4.7 of NIFA Grants.gov Application Guide for further instructions and a link to the suggested template.

The Project Summary **must** indicate the following:

- 1) Project title
- 2) Indicate the primary AFRI Farm Bill priority area focus of the project by selecting one of the following six Farm Bill priority areas.
 - a) Plant health and production and plant products;
 - b) Animal health and production and animal products;
 - c) Food safety, nutrition, and health;
 - d) Bioenergy, natural resources, and environment;
 - e) Agriculture systems and technology; or
 - f) Agriculture economics and rural communities.
- 3) Project duration;
- 4) Project Director;
- 5) Submitting organization;
- 6) Other organizations involved in the project;
- 7) Location(s) (universities, national labs, field stations, etc.) at which the proposed activities will occur;
- 8) Technology being addressed;
- 9) Number of participants per year;
- 10) Relevance of the project to the goals of FANE program area; and

- 11) Relevance of the project to the goals of AFRI Education and Workforce Development (EWD).

In addition to the information requested above please provide a 250-word abstract. The abstract should briefly describe the project's objectives, activities, and participants to be recruited, and intended impact.

b. Field 8. Project Narrative

Title the attachment as 'Project Narrative' in the document header and save file as 'ProjectNarrative'.

The Project Narrative section may not exceed **ten**-pages of written text using 12-point font with single line spacing (i.e., no more than six lines per vertical inch), including all figures and tables. Do not use a condensed or narrow font (e.g., Arial Narrow).

To ensure fair and equitable competition, applications exceeding the applicable page limitation will be returned without review.

The Project Narrative must include all of the following (see page and font restrictions noted above):

1) Specific Application Type Information

- a) **Resubmissions – Response to Previous Review (only applies to Resubmitted Applications, see Part II § B of the RFA.)**

The Project Narrative attachment for resubmissions should include two components: i) 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 ii) the Project Narrative. The one-page "Response to Previous Review" does not count against the Project Narrative page limit.

2) Overview

- a) Provide a brief **description** of the objectives of the program to be developed; the AFRI priority area(s) and technology being addressed; the anticipated project audience; the project's target objectives; timetable; and participating organizations' commitment to the activity.
- b) Project **Justification**: Summarize the body of knowledge justifying the need for the proposed project. Describe any ongoing or recently completed, significant activities related to the proposed project.

3) The Extension Environment

- a) For the project director, the faculty who may serve as mentors, and the institution(s) or organization(s) where the activities will occur, describe their experience(s) working with youth, specifically their experience in implementing positive youth development strategies.
- b) Describe the experience of key personnel in providing quality nonformal education in agricultural technology.
- c) Institutional Support/Partnerships. Fully describe the institutional climate for the proposed project. How does the proposed project align with and contribute to the applicant and partner institutions' goals for enhancing understanding of agricultural technology in their community/state/region? Projects that involve

partnerships with local government, economic development organizations, and nonprofit organizations are encouraged.

- d) Describe the environment of the host site(s), including, but not limited to, physical plan(s), accommodations for participants with disabilities, accessibility, location(s) of proposed activities, etc.

4) **Approach**

a) Youth Involvement

- i) The proposed involvement of youth in the design, execution, and evaluation of activities that promote learning about agricultural technology should be described with as much specificity as possible, including utilization of appropriate youth development strategies, and a whole-child approach.

b) Outreach Materials Development

- i) Describe what element of outreach and materials the project will pursue to clearly communicate the demonstrated benefits of agricultural technology, the safety record of the regulatory system, and how technology can address agricultural challenges.
- ii) Innovation: Describe the proposal's creative approach to cultivate interest and build public confidence in the safe and enhanced use of technology in agriculture, the environment, and food systems. Use either actual experiences and/or literature to show why you selected this approach.

c) Plan of Operation and Methodology

- i) Applications should provide detailed descriptions of the extension activities that will be pursued. This discussion should indicate how these activities will lead to interest and build public confidence in the safe and enhanced use of technology in agriculture, the environment, and food systems. The review process will give preference to projects that will catalyze and result in the implementation of self-sustaining models.
- ii) Describe procedures for accomplishing the objectives of this project. Describe plans for management of the project to ensure its proper and efficient administration. Describe the way in which resources and personnel will be used to conduct the project.
- iii) Timetable: Identify all important project milestones (performance targets that indicate when project goals will be met) and dates as they relate to project start-up, execution, evaluation, dissemination, and closeout.
- iv) (If applicable) Recruitment, Selection, and Continued Support for Participants. The recruitment plan should be described with as much specificity as possible. How will participants be recruited? What criteria will be used to select participants? How will underrepresented groups be recruited?

5) **Project Evaluation and Reporting**

- a) Clearly define a plan with a timeline to extensively evaluate the project using formative and summative assessment tools that can help inform future implementations of agricultural technology nonformal education programs. Identify pitfalls and limitations to proposed approaches and how these will be addressed;
- b) Define the approach for tracking how the development of the consumer-friendly content builds confidence in the safe use of technology in agricultural and food systems;

- c) Describe how potential adoption of the agricultural technology will be utilized by other institutions and/or organizations.
- d) Specifically describe the **youth-centered learning outcomes** (e.g. skills or knowledge obtained, interest and competencies in STEM and food and agricultural sciences, etc.) and associated measures to evaluate outcomes;
- e) Describe how these outcome measures were chosen; and
- f) Provide strategies to assess, at the project-level, management of the project for successful outcomes.

6) **Expected Outputs**

Please use the table format below. Expected Outputs table does not count against the ten-page limit of the Project Narrative.

Total expected outputs during grant period	Expected Number
(1) Number of products to be developed through grant funds during the grant period (i.e., curricula, outreach materials)	
(2) Number of underrepresented ² youth to be supported during the grant period (Provide the best estimate based on past experience)	
(3) Number of youth participants to be directly supported by this grant	
(4) Number of youth who will indirectly benefit from the products produced from the grant during the grant period (i.e. using the materials, enrolled in the project)	

² Underrepresented = those whose representation among food and agricultural professionals is disproportionately less than their proportion in the general population as indicated in standard statistical references, or as documented on a case-by-case basis by national survey data (e.g., the U.S. Department of Education's Digest of Education Statistics, U.S. Department of Agriculture's Food and Agricultural Education Information Systems, etc.).

c. Field 9. Bibliography & References Cited

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

No Page Limit. Title the attachment as ‘Facilities & Other Resources’ in the document header and save file as ‘FacilitiesOtherResources’.

e. Field 11. Equipment

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**

2-Page Limit. Title the attachment as ‘Key Personnel’ and save file as ‘KeyPersonnel’.

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

Clearly describe the roles and responsibilities of the PD, collaborator(s), mentor(s) *etc.* (biographical sketches for key personnel including mentor(s) should not be included here). If it will be necessary to enter into formal consulting or collaborative arrangements with others, such arrangements should be fully explained and justified. Evidence (letters of support) for this type of collaboration should be provided in the ‘Documentation of Collaboration’ attachment (see item 2) below).

2) **Logic Model**

2-Page Limit. **Required for all Integrated Project applications. Encouraged for Research, Education, or Extension 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](#).

3) **Management Plan**

3-Page Limit. Required for Integrated Project applications. Encouraged for Research, Education, or Extension 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 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)

2-Page Limit. Required for all 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 of the RFA). **See Part III, 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

No Page Limit. Title the attachment as ‘Documentation of Collaboration’ in the document header and save file as ‘Collaboration’.

Documentation of Collaboration – Evidence of collaboration and contributions amongst the host institution and other institutions and/or organizations.

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

6) Minority-Serving Institution Documentation

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 of the RFA.

7) Representations Regarding Felony Conviction and Tax Delinquent Status for Corporate Applicants

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

Detailed information related to this form are explained in detail 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\(f5\)](#)).

a. Project Role Field

Complete appropriately.

A member(s) of the host institution(s) must be listed as the PD or co-PD, as appropriate, on the application.

b. Other Project Role Category Field

Complete appropriately, if applicable.

c. Attach Biographical Sketch Field

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. See Part V, 5.2 of the NIFA Grants.gov application guide

The Biographical sketch of the applicant (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.

In addition, Biographical sketch must include the following information:

- 1) Activities that demonstrate scholastic achievement and excellence. These may include but are not limited to a presentation of academic, extension, and/or research credentials including, as applicable: earned degrees, teaching experience, employment history, professional activities, honors and awards, and grants received.

- 2) indicate TOTAL number of undergraduate students directly mentored or trained through experiential learning activities during the past four (4) years; and
- 3) include all relevant publications in refereed journals during the past four (4) years, including those in press.

The Biographical sketch of the Primary mentor (more than one Primary Mentor if integrated project only) must include the number of mentees mentored at least for the last 5 years.

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 § C7\(b\)](#) below for more information).

d. Attach Current and Pending Support Field

No Page Limit. Title the attachment as ‘Current and Pending Support’ in the document header and save file as ‘CurrentPendingSupport’.

Current and Pending Support for each senior/key person identified and the scientific mentor(s) (as documentation of on-going work in the mentor's laboratory) must be completed.

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

Note: Even if no other funding is currently reported under the ‘Active’ section of this attachment, each senior/key person must list this grant application under the ‘Pending’ section of this attachment.

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.

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.

a. Matching Funds

If you conclude that matching funds are not required as specified under Part III § C of the RFA, 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 § C of the RFA, 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.

For applied Research or Integrated Projects with an applied research component, if a funded project is commodity-specific and not of national scope, the grant recipient is required to match the NIFA funds awarded on a dollar-for-dollar basis from non-federal sources with cash and/or in-kind contributions.

The sources and the amount of all matching support from outside the applicant organization must be summarized on a separate page and placed in the application immediately following the Budget Justification. All pledge agreements must be placed in the application immediately following the summary of matching support.

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.

b. Budget Periods

Applications must contain a budget for each budget period; a cumulative budget will automatically be generated.

If a FANE grant application is funded, the Project Director will be required to attend one AFRI NIFA EWD Project Directors’ meeting during the performance period of the award. Reasonable travel expenses (location to be determined by NIFA program staff) should be included as part of the project budget. Reasonable travel expenses should be included as part of the project budget.

See Part I § C of the RFA for limitation of budget amounts, use of funds, and budget periods.

- 1) Projects that include partnering with eXtension must include financial support for the Extension Foundation core functions as well as project specific activities.
- 2) For Integrated Project Applications, projects must budget sufficient resources to carry out the proposed set of research, education, and/or 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 Extension Foundation core functions as well as project-specific activities.

c. Subcontract Arrangements

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

- 1) 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.

- 2) 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.

d. 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 § D of the RFA for additional information.

e. Field K. Budget Justification

No Page Limit. Title the attachment as 'Budget Justification' 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. 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 § C3\(f5\)](#)) 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. **Allowable expenditures must be appropriately discussed in the budget justification.** 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.

- 1) *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/or 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.

7. Supplemental Information Form

Instructions related to this form are explained in detail in Part VI, 1 of the NIFA Grants.gov Application Guide.

a. Field 2. Program to which you are applying

Enter the Program Code Name and the Program Code for the Program Area to which you are applying from the information provided in the Program Area Descriptions beginning in Part I § C of the RFA. An application can only be submitted to one program area. Note that accurate entry of the Program Area Code Name and Program Area 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 Contact.

b. Field 8. Conflict of Interest List

No Page Limit. Title the attachment as ‘Conflict of Interest’ in the document header and save file as ‘Conflict of Interest’. 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).

Professional Development for Agricultural Literacy (PDAL)

Professional Development for Agricultural Literacy (PDAL).....	22
1. SF 424 R&R Cover Sheet.....	Error! Bookmark not defined.
2. SF 424 R&R Project/Performance Site Location(s).....	22
3. R&R Other Project Information	22
4. R&R Senior/Key Person Profile (Expanded)	28
5. R&R Personal Data	29
6. R&R Budget	29
7. Supplemental Information Form.....	31

Information related to this form are explained in detail in Part V, 2 of the NIFA Grants.gov Application Guide. See Part V, 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 dealt with in detail in Part V, 3 of the NIFA Grants.gov Application Guide.

3. R&R Other Project Information

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

a. Field 7. Project Summary/Abstract

Title the attachment as 'Project Summary' in the document header and save file as 'ProjectSummary'.

The summary should explain 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.

The following instructions are in addition to those included in Part V, 4.7 of the NIFA Grants.gov Application Guide.

The Project Summary **must** indicate the following:

- 1) Project title;
- 2) Indicate the primary AFRI Farm Bill Priority area focus of the project by selecting one of the following:
 - a) Plant health and production and plant products;
 - b) Animal health and production and animal products;
 - c) Food safety, nutrition, and health;
 - d) Bioenergy, natural resources, and environment;
 - e) Agriculture systems and technology; or
 - f) Agriculture economics and rural communities.
- 3) Project duration;
- 4) Project Director;
- 5) Submitting organization;
- 6) Other organizations involved in the project;
- 7) Location(s) (schools, colleges, universities, national labs, field stations, etc.) at which the proposed professional development activities will occur;
- 8) Facilitator to participant ratio;
- 9) Number of participants per year; and
- 10) If any international component included.

In addition to the information requested above, please provide a 250-word abstract. The abstract should briefly describe the project's objectives, activities, education professionals to be recruited, and intended impact. The abstract should also include the relevance of the project to the goals of the PDAL program area.

b. Field 8. Project Narrative

Title the attachment as 'Project Narrative' in the document header and save file as 'ProjectNarrative'.

The Project Narrative may **not exceed ten-pages** of written text using 12-point font with single line spacing (i.e., no more than six lines per vertical inch), including all figures and tables. Do not use a condensed or narrow font (e.g., Arial Narrow).

To ensure fair and equitable competition, applications exceeding the applicable page limitation will be returned without review.

The Project Narrative must include all of the following:

1) **Specific Application Type Information**

a) **Resubmissions – Response to Previous Review (only applies to Resubmitted Applications, see Part II § B of the RFA.)**

The Project Narrative attachment for resubmissions should include two components: i) 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 ii) the Project Narrative below. The one-page “Response to Previous Review” does not count against the Project Narrative page limit.

b) **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 of the RFA. 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.

2) **Overview**

- a) Provide a brief description of the objectives of the PDAL program to be developed. What AFRI Priority area(s) is (are) being addressed; who are the targeted participants; what skills gaps and/or academic challenges are being addressed; and what student outcomes will be impacted.
- b) Project Justification: Summarize the body of knowledge justifying the need for the proposed project. Describe any ongoing or recently completed, significant activities related to the proposed project.

3) **Approach**

- a) Approach to K-14 food and agricultural sciences professional development
- i) Describe the type and details of how immersive learning experiences will be provided for K-14 educational professionals.
- ii) Innovation. Describe the proposal’s creative approach to K-14 professional development in the food and agricultural sciences. Using either actual experiences or literature, show why you selected this approach.
- b) Plan of Operation and Methodology
- i) Nature of Participant Activities. Provide detailed description of the research, education and/or extension activities that will be pursued. How will these experiences lead to enhanced student outcomes?
- ii) Describe procedures for accomplishing the objectives of the project. Describe plans for management of the project to ensure its proper and efficient administration. Describe the way in which resources and personnel will be used to conduct the project.
- iii) Timetable. Identify all important project milestones (performance targets that indicate when project goals will be met) and dates as they relate to project start-up, execution, evaluation, dissemination, and closeout.
- c) Recruitment, Selection, and Continued Support for K-14 Educators
- i) The recruitment plan should be described with as much specificity as possible, including the types and/or names of academic institutions where educational

professionals will be recruited and the efforts that will be made to attract educators from low-resource schools.

- ii) Describe the criteria that will be used to select participants.
- iii) Indicate how participants, who terminate the program early, will be replaced.
- iv) Describe additional support that will be provided to participants after the termination of the project.

4) The Research, Education and/or Extension Environment

- a) Describe the experience of the of the key personnel in providing quality immersive, experiential learning experiences in the food and agricultural sciences and training in the most effective pedagogical strategies for K-14 education.
- b) Institutional Support/Partnerships. Describe the institutional climate for the proposed training. How does the proposed project align with and contribute to applicant and partner institutions’ goals for enhancing K-14 education in their community/state/region?
- c) Describe the environment of the host site(s), including, but not limited to, physical plan(s), accommodations for participants with disabilities, accessibility, location(s) of proposed activities, etc.

5) Project Evaluation and Reporting

- a) Clearly define a plan with a timeline to extensively evaluate the project using formative and summative assessment tools that can help inform future implementations of immersive learning based professional development programs. Identify pitfalls and limitations to proposed approach and how these will be addressed.
- b) Define the approach for evaluating both participant (educator) *and* K-14 student outcomes.
- c) The review process will give preference to projects that will catalyze and result in the implementation self-sustaining models for professional development that better prepare current (i.e. not pre-service) education professionals to provide outstanding teaching, guidance, institutional structures, etc. that are needed to enhance student outcomes in the food and agricultural sciences.

6) Expected Outputs

Please use the format provided below. Expected Outputs table does not count against the ten-page limit of the Project Narrative.

Total expected outputs during grant period	Expected Number
1. Number of products to be developed through grant funds during the grant period (i.e., curricula, academic programs, recruitment/retention programs, materials, experiential learning opportunities)	
2. Number of K-14 education professionals supported by this grant for professional development during the grant period	
3. Number of students who will indirectly benefit from the products produced from the grant during the grant period (i.e., using the curriculum/instrumentation).	

c. Field 9. Bibliography & References Cited

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

No Page Limit. Title the attachment as ‘Facilities & Other Resources’ in the document header and save file as ‘FacilitiesOtherResources’.

e. Field 11. Equipment

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 § C6](#) 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**

2-Page Limit. Title the attachment as ‘Key Personnel’ and save file as ‘KeyPersonnel’.

Clearly describe the roles and responsibilities of the PD, collaborator(s), etc. (biographical sketches for key personnel including mentor(s) should not be included here). If it will be necessary to enter into formal consulting or collaborative arrangements with others, such arrangements should be fully explained and justified. Evidence (letters of support) for this type of collaboration should be provided in the ‘Documentation of Collaboration’ attachment (see item 5) below).

2) **Logic Model**

2-Page Limit. Required for all Integrated Project applications. Encouraged for Research, Education, or Extension 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](#).

Failure to include a logic model for an integrated project may result in the application not being considered for review.

3) **Management Plan**

3-Page Limit. Required for Integrated Project applications. Encouraged for Research, Education, or Extension 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 termination of an award.

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4) **Data Management Plan (DMP)**

2-Page Limit. Required for Research, Education, Extension, or 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 of the RFA). **See Part III, 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**

No Page Limit. Title the attachment as ‘Documentation of Collaboration’ in the document header and save file as ‘Collaboration’.

For PDAL applications, include evidence of collaboration and contributions amongst the host institution and other institutions from which the teacher participants will be recruited. Examples include Letters from the Superintendents, Principals and/or Department Heads of the respective schools.

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**

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**

Optional: May be needed if applying for FASE Strengthening Standard Grant.

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 of the RFA.

8) **Representations Regarding Felony Conviction and Tax Delinquent Status for Corporate Applicants**

This is required for corporate applicants. See Part VI, 2 of the NIFA Grants.gov Application Guide for a description of the term, “corporation.”

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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 § C3\(f5\)](#)).

a. Project Role Field

Complete appropriately.

b. Other Project Role Category Field

Complete appropriately, if applicable.

c. Attach Biographical Sketch Field

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.

The Biographical sketch of the applicant (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.

In addition, Biographical sketch must include:

- 1) A presentation of academic, extension, and/or research credentials including, as applicable: earned degrees, teaching experience, employment history, professional activities, honors and awards, and grants received; and
- 2) Indicate the number of continuing education courses developed and taught/trained the number of educators by the applicant.
- 3) Include all relevant publications in refereed journals during the past four (4) years including those in press.

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 § C7\(b\)](#) for more information).

d. Attach Current and Pending Support Field

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 each senior/key person identified.

Note: Even if no other funding is currently reported under the ‘Active’ section of this attachment, each senior/key person must list this grant application under the ‘Pending’ section of this attachment.

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.

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.

a. 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 of the RFA, 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 § C of the RFA, 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.

The sources and the amount of all matching support from outside the applicant organization must be summarized on a separate page and placed in the application immediately following the Budget Justification. All pledge agreements must be placed in the application immediately following the summary of matching support.

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.

b. 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 PDAL application is funded, the Project Director will be required to attend one AFRI NIFA EWD Project Directors’ meeting during the performance period of the award. Reasonable travel expenses (location to be determined by NIFA program staff) should be included as part of the project budget. Reasonable travel expenses should be included as part of the project budget.

See Part I § C of the RFA for limitation of budget amounts, use of funds, and budget periods.

- 1) Projects that include partnering with eXtension must include financial support for the Community of Practice core functions as well as project specific activities.
- 2) For Integrated Project Applications, projects must budget sufficient resources to carry out the proposed set of research, education, and/or 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.

c. Subcontract Arrangements

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

- 1) 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.
- 2) 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.

d. 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 § D of the RFA for additional information.

e. Field K. Budget Justification

No Page Limit. Title the attachment as ‘Budget Justification’ 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. 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 signed by the Authorized Representative and other evidence should be provided in the Documentation of Collaboration (see [Part IV § C3\(f5\)](#)) 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. Allowable expenditures must be appropriately discussed in the budget justification. 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.

- 1) *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/or 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.

7. Supplemental Information Form

Instructions related to this form are explained in detail in Part VI, 1 of the NIFA Grants.gov Application Guide.

a. Field 2. Program to which you are applying

Enter the Program Code Name and the Program Code for the Program Area to which you are applying from the information provided in the Program Area Descriptions beginning in Part I § C of the RFA. An application can only be submitted to one program area. Note that accurate entry of the Program Area Code Name and Program Area 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 Contact.

b. Field 8. Conflict of Interest List

No Page Limit. Title the attachment as ‘Conflict of Interest’ in the document header and save file as ‘Conflict of Interest’. 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).

Research and Extension Experiences for Undergraduates (REEU)

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1. SF 424 R&R Cover Sheet.....	Error! Bookmark not defined.
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2. SF 424 R&R Project/Performance Site Location(s)

Information related to this form are explained in detail in Part V, 3 of the NIFA Grants.gov Application Guide.

3. R&R Other Project Information

Information related to this form are explained in detail in Part V, 4 of the NIFA Grants.gov Application Guide. In the sections below, please note fields/sections that apply only to REEU applications or REE-ECN applications in some cases.

a. Field 7. Project Summary/Abstract

Title the attachment as 'Project Summary' in the document header and save file as 'ProjectSummary'. See Part V. 4.7 of NIFA Grants.gov Application Guide for further instructions and a link to the suggested template.

1) Specific Application Type Information

- a) For **REEU project applications**, the Project Summary **must** indicate the following:
 - i) Project title
 - ii) Indicate the primary AFRI Farm Bill priority area focus of the project by selecting one of the following six Farm Bill priority areas.
 - (A) Plant health and production and plant products;
 - (B) Animal health and production and animal products;
 - (C) Food safety, nutrition, and health;
 - (D) Bioenergy, natural resources, and environment;
 - (E) Agriculture systems and technology; or
 - (F) Agriculture economics and rural communities.
 - iii) Project duration;
 - iv) Principal Investigator;
 - v) Submitting organization;
 - vi) Other organizations involved in the project's operation;
 - vii) Location(s) (universities, national labs, field stations, etc.) at which the proposed undergraduate research and/or extension will occur;
 - viii) Main field(s) and sub-field(s) of the research and/or extension;
 - ix) Number of mentors;
 - x) Mentor to participant ratio;
 - xi) Number of undergraduate participants per year;
 - xii) Percentage of undergraduate students from the host institution;
 - xiii) Number of weeks per year that the students will participate;
 - xiv) If any international component included, where;
 - xv) Relevance of the project to the goals of REEU program area; and
 - xvi) Relevance of the project to the goals of AFRI Education and Workforce Development (EWD); and
 - xvii) Provide a 250-word abstract that briefly describes the project's objectives, activities, and students to be recruited, and intended impact

- b) For **REE-ECN project applications**, the Project Summary **must** contain the following:
 - i) Project title
 - ii) Project duration;
 - iii) Principal Investigator(s);
 - iv) Submitting organization;
 - v) Other organizations involved in the project's operation; and
 - vi) Provide a 250-word abstract that briefly describes the project's objectives, activities, and intended impact.

b. Field 8. Project Narrative

Title the attachment as 'Project Narrative' in the document header and save file as 'ProjectNarrative'.

The Project Narrative section may not exceed a total of **ten-pages** of written text using 12-point font with single line spacing (i.e., no more than six lines per vertical inch), including all figures and tables. Do not use a condensed or narrow font (e.g., Arial Narrow).

To ensure fair and equitable competition, applications exceeding the applicable page limitation will be returned without review.

The Project Narrative (see page and font restrictions noted above)

1) Specific Application Type Information

a) Response to Previous Review (only applies to Resubmitted Applications, see Part II § B of the RFA)

The Project Narrative attachment for resubmissions should include two components: i) 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 ii) the Project Narrative. The one-page “Response to Previous Review” does not count against the Project Narrative page limit.

b) Progress Report (Only applies to proposals building on previously awarded REEU projects)

This requirement only applies to project directors who are submitting a proposal in the current FY competition **AND** who have held an REEU award in the last five years. These applications must include a progress report within the applicable page limitation of the Project Narrative and should highlight program accomplishments, evaluation outcomes, and resulting adjustments and developments in the program’s scope and logistics (if any). This section should be labeled “Progress Report.”

2) Overview

a) For **REEU project applications**: Provide a brief description of the objectives of the proposed host site(s)/location(s), targeted student participants, intellectual focus, organizational structure, timetable, and participating organizations' commitment to the activity.

b) For **REE-ECN project applications**: Provide a clear statement of the proposal’s objectives and goals. Briefly describe the activities that will take place to support these objectives and goals and the Project Director’s experience in developing, managing and maintaining similar projects.

3) The Research, Education and/or Extension Environment (REEU applications only)

a) For the project director, the faculty who may serve as mentors, and the institution(s) or organization(s) where the activities will occur, describe the experience, and the record of the involvement with undergraduate students. Include information on the record of faculty/mentors in publishing work involving undergraduate authors and in providing professional development opportunities for undergraduate students.

b) Describe the environment of the host site(s), including, but are not limited to, physical plan(s), accommodations for students with disabilities, accessibility, location(s) of proposed activities, etc.

4) **Objectives and Outcomes (REE-ECN applications only)**

- a) Present the objectives, goals and expected outcomes of the project in relation to the needs identified in the Program Area Priorities.

5) **Approach**

- a) For **REEU project applications**, the Approach **must** include the following:

i) Student Recruitment, Selection, and Retention

(A) The recruitment plan should be described with as much specificity as possible, including the types and/or names of academic institutions where students will be recruited and the efforts that will be made to attract members of underrepresented groups.

(B) The number of students per project should be appropriate to the institutional or organizational setting and to the manner in which research is conducted in the discipline.

(C) Indicate how undergraduate fellows, who terminate the program early, will be replaced.

ii) Nature of Student Activities

(A) Proposals should address the approach to undergraduate research, education and/or extension training being taken and should provide detailed descriptions of the research, education and/or extension projects that the undergraduate students will pursue. This discussion should indicate the significance of the research, education and/or extension area(s) and, when appropriate, the underlying theoretical framework, hypotheses, and questions.

(B) Proposals must present plans that will ensure the development of student faculty interaction and student-student communication.

iii) Mentoring Plan

(A) This subsection should discuss the diversity of the mentor pool; any training, mentoring, or monitoring that mentors have received or will receive to help them mentor students effectively during the research experience; and any plans by which mentoring relationships will be sustained after students leave the site where the experiential learning activities take place.

(B) Describe the mentoring activities for the students in detail. These should be clearly articulated, and inclusive of student-centered deliverables associated with the mentoring activities.

iv) Institutional Support

(A) Fully describe the institutional climate for the proposed training. How does the proposed project align with the institution's goals for experiential learning? How does the proposed project contribute to achieving these goals?

(B) The review process will give preference to projects that will catalyze and result in the implementation of a self-sustaining model for increased/enhanced experiential learning for diverse undergraduate student populations at the host and partner institutions.

- a) For **REE-ECN project applications**, the Approach **must** include the following:

- i) Provide a thorough description of the activities proposed to achieve these objectives and a justification for these actions. This section must include a

description of each activity proposed for each objective; a timeline of the proposed activities; expected measurable outputs for each year of the five year project;

- ii) This section must include descriptions of the following mandatory activities of the Network: the digital clearinghouse, public facing website for REEU programs, listserv, and PD meeting plans;
- iii) Describe any other novel proposed elements that increase the Network’s value for Project Directors and potential student participants;
- iv) Include pitfalls that may be encountered and limitations to proposed activities;
- v) Present an evaluation plan, which includes performance target and the means by which the outcomes will be analyzed, assessed or interpreted each year and at the end of the project.

6) Project Evaluation and Reporting (REEU applications only)

- a) Clearly define a plan with a timeline to extensively evaluate the project using formative and summative assessment tools that can help inform future implementations of experiential learning programs. Identify pitfalls and limitations to proposed approaches and how these will be addressed;
- b) Define the approach for longitudinal tracking of the students after completion of the Research and Extension Experiences for Undergraduates program; include strategies for tracking Fellows to their exit point from the institution; and if employed where and at what level, if graduate training then what institutions and in what level/areas of study etc.;
- c) Specifically describe the **student-centered learning outcomes** (e.g. skills or knowledge obtained, presentations and publications, graduation rates, students matriculating to graduate schools, etc.) and associated measures to evaluate outcomes;
- d) Describe how these outcome measures were chosen; and
- e) Provide strategies to assess, at the project-level, management of the project for successful outcomes.

7) Personnel and Resources (REE-ECN applications only)

- a) Describe in detail the key project personnel’s experience in maintaining an education focused network, undergraduate or REEU specific experiential learning, and communities of practice;
- b) Provide information on the institutional resources and facilities to be used to house and manage a digital clearinghouse, listserv, and website;
- c) Provide other personnel needs, assignments and the division of labor anticipated to carry out the project;
- d) Discuss collaborating organizations (if any) and their role in the project;
- e) Include plans for transferability of the Network post-award.

8) Expected Outputs (REEU applications only)

Please use the table format below. Expected Outputs table does not count against the ten-page limit of the Project Narrative.

Total expected outputs during grant period	Expected Number
(1) Number of <u>male</u> students to be directly supported by this grant (i.e., scholarships, fellowships, assistantships, internships	

Total expected outputs during grant period	Expected Number
included as a cost in your project budget) for undergraduate education	
(2) Number of underrepresented ³ <u>male</u> students to be supported during the grant period (Provide the best estimate based on past experience)	
(3) Number of <u>female</u> students to be directly supported by this grant (i.e., scholarships, fellowships, assistantships, internships included as a cost in your project budget) for undergraduate education	
(4) Number of underrepresented ⁴ <u>female</u> students to be supported during the grant period (Provide the best estimate based on past experience)	
(5) Number of students supported by this grant (i.e., scholarships, fellowships, assistantships) who are pursuing:	
5-A. Two-year or other certificates	
5-B. Four-year Undergraduate degrees	
(6) Number of students who will be supported by this grant on:	
6-A. Domestic experiences with a government or non-governmental organization that is not affiliated with your university	
6-B. International experiences including study abroad, educational travel longer than a month, etc.	

c. Field 9. Bibliography & References Cited

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

No Page Limit. Title the attachment as ‘Facilities & Other Resources’ in the document header and save file as ‘FacilitiesOtherResources’.

³ Underrepresented = those whose representation among food and agricultural professionals is disproportionately less than their proportion in the general population as indicated in standard statistical references, or as documented on a case-by-case basis by national survey data (e.g., the U.S. Department of Education's Digest of Education Statistics, U.S. Department of Agriculture’s Food and Agricultural Education Information Systems, etc.).

⁴ Underrepresented = those whose representation among food and agricultural professionals is disproportionately less than their proportion in the general population as indicated in standard statistical references, or as documented on a case-by-case basis by national survey data (e.g., the U.S. Department of Education's Digest of Education Statistics, U.S. Department of Agriculture’s Food and Agricultural Education Information Systems, etc.).

e. Field 11. Equipment

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 § C6](#)) 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

2-Page Limit. Title the attachment as ‘Key Personnel’ and save file as ‘KeyPersonnel’.

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

Clearly describe the roles and responsibilities of the PD, collaborator(s), mentor(s) *etc.* (biographical sketches for key personnel including mentor(s) should not be included here). If it will be necessary to enter into formal consulting or collaborative arrangements with others, such arrangements should be fully explained and justified. Evidence (letters of support) for this type of collaboration should be provided in the ‘Documentation of Collaboration’ attachment (see item 2) below).

2) Logic Model

2-Page Limit. Required for all Integrated Project applications. Encouraged for Research, Education, or Extension 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](#).

3) Management Plan

3-Page Limit. Required for Integrated Project applications. Encouraged for Research, Education, or Extension 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 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)**

2-Page Limit. Required for Research, Education, Extension, or 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 of the RFA). **See Part III, 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) **Mentor Letter(s) and Documentation of Collaboration**

No Page Limit. Title the attachment as ‘Documentation of Collaboration’ in the document header and save file as ‘Collaboration’. **(This is for REEU applications ONLY.)**

- a) Primary Mentor Letter of Commitment – One Primary Mentor letter is required. If there is more than one Primary Mentor, a Primary mentor letter should be provided for each primary mentor. The mentor letter(s) should indicate: **A description of committed responsibilities and projected time with the undergraduate students throughout the proposed project.**
- b) Collaborating Mentor Letters – As applicable, other mentor letter(s) should clearly describe committed responsibilities and projected time with the undergraduate students throughout the proposed project.
- c) Documentation of Collaboration – Evidence of collaboration and contributions amongst the host institution and other institutions from which the undergraduate students will be recruited. Examples include Letters from the Deans and/or Department Heads of the respective schools.

Evidence, *e.g.*, letter(s) of support, should 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) **Minority-Serving Institution Documentation**

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 of the RFA.

7) **Representations Regarding Felony Conviction and Tax Delinquent Status for Corporate Applicants**

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 this form are explained in detail 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 § C3\(f5\)](#)).

a. Project Role Field

Complete appropriately.

- 1) For **REEU applications** – A member(s) of the host institution(s) must be listed as the PD or co-PD, as appropriate, on the application.

b. Other Project Role Category Field

Complete appropriately, if applicable. Enter “Mentor” for corresponding scientific mentor(s).

c. Attach Biographical Sketch Field

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. See Part V, 5.2 of the NIFA Grants.gov application guide.

The Biographical sketch of the applicant (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.

In addition, Biographical sketch must include the following information:

- 1) Activities that demonstrate scholastic achievement and excellence. These may include but are not limited to a presentation of academic, extension, and/or research credentials including, as applicable: earned degrees, teaching experience, employment history, professional activities, honors and awards, and grants received.
- 2) indicate TOTAL number of undergraduate students directly mentored or trained through experiential learning activities during the past four (4) years; and

- 3) include all relevant publications in refereed journals during the past four (4) years, including those in press.

The Biographical sketch of the Primary mentor (more than one Primary Mentor if integrated project only) must include the number of mentees mentored at least for the last 5 years.

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 § C7\(b\)](#) for more information).

d. Attach Current and Pending Support Field

No Page Limit. Title the attachment as ‘Current and Pending Support’ in the document header and save file as ‘CurrentPendingSupport’.

Current and Pending Support for each senior/key person identified and the scientific mentor(s) (as documentation of on-going work in the mentor's laboratory) must be completed.

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

Note: Even if no other funding is currently reported under the ‘Active’ section of this attachment, each senior/key person must list this grant application under the ‘Pending’ section of this attachment.

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.

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.

a. Matching funds

If you conclude that matching funds are not required as specified under Part III § C of the RFA, 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 § C, 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.

For applied Research or Integrated Projects with an applied research component, if a funded project is commodity-specific and not of national scope, the grant recipient is required to match the NIFA funds awarded on a dollar-for-dollar basis from non-federal sources with cash and/or in-kind contributions.

The sources and the amount of all matching support from outside the applicant organization must be summarized on a separate page and placed in the application immediately following the Budget Justification. All pledge agreements must be placed in the application immediately following the summary of matching support.

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.

b. Budget Periods

Applications must contain a budget for each budget period; a cumulative budget will automatically be generated.

If a REEU grant application is funded, the Project Director will be required to attend one AFRI NIFA EWD Project Directors’ meeting during the performance period of the award. Reasonable travel expenses (location to be determined by NIFA program staff) should be included as part of the project budget. Reasonable travel expenses should be included as part of the project budget.

See Part I § C of the RFA for limitation of budget amounts, use of funds, and budget periods.

- 1) Projects that include partnering with eXtension must include financial support for the Community of Practice core functions as well as project specific activities.
- 2) For Integrated Project Applications, projects must budget sufficient resources to carry out the proposed set of research, education, and/or 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.

c. Subcontract Arrangements

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

- 1) 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.
- 2) 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.

d. 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 § D of the RFA for additional information.

e. Field K. Budget Justification

No Page Limit. Title the attachment as ‘Budget Justification’ 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. 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 § C3\(f5\)](#)) 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. **Allowable expenditures must be appropriately discussed in the budget justification.** 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.

- 1) *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/or 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.

7. Supplemental Information Form

Instructions related to this form are explained in detail in Part VI, 1 of the NIFA Grants.gov Application Guide.

a. Field 2. Program to which you are applying

Enter the Program Code Name and the Program Code for the Program Area to which you are applying from the information provided in the Program Area Descriptions beginning in Part I § C of the RFA. An application can only be submitted to one program area. Note that accurate entry of the Program Area Code Name and Program Area 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 Contact.

b. Field 8. Conflict of Interest List

No Page Limit. Title the attachment as ‘Conflict of Interest’ in the document header and save file as ‘Conflict of Interest’. 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).

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For Pre- and Post-doctoral Fellowships applications, follow the instructions below.

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, 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 dealt with in detail 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 dealt with in detail in Part V, 4 of the NIFA Grants.gov Application Guide.

a. Field 7. Project Summary/Abstract

Title the attachment as ‘Project Summary’ in the document header and save file as ‘ProjectSummary’. See Part V, 4.7 of NIFA Grants.gov Application Guide for further instructions and a link to the suggested template.

The Project Summary **must** indicate the following:

- 1) Names and institutions of the PD and Primary Mentor (more than one if Integrated project only);
- 2) Predoctoral or Postdoctoral application
- 3) Project type (research, education, extension, or integrated research, education and/or extension) and concise project description in the applicant's proposed predoctoral program or postdoctoral training;
- 4) Indicate the primary AFRI Farm Bill priority area focus of the project by selecting one of the following:
 - i) Plant health and production and plant products;
 - ii) Animal health and production and animal products;
 - iii) Food safety, nutrition, and health;
 - iv) Bioenergy, natural resources, and environment;
 - v) Agriculture systems and technology; or
 - vi) Agriculture economics and rural communities.
- 5) Relevance of the project to the goals of pre- or post-doctoral program area;
- 6) Relevance of the project to the goals of AFRI Education and Workforce Development (EWD).

The **postdoctoral applicant**, in their Project Summary/Abstract, should indicate the Priority Area name, Program Area name, and Program Area Priority Code from the AFRI Foundational and Applied Science request for applications that most closely topically matches the proposed project plan. **Postdoctoral proposals** will be adjudicated by a respective AFRI Foundational and Applied Science Program Area. A table of the AFRI Foundational and Applied Science Priority and Program Areas, along with Priority Codes and other information is listed below and can be found at [FY 2022 AFRI Foundational and Applied Science RFA \(usda.gov\)](#)

NIFA Postdoctoral Fellowship Applicants

1. Match your proposed project topically with one of the programs listed below.
2. Cite the program code in your project summary/abstract.
3. Submit your application with the Postdoctoral Fellowship program code (A7201) on the SF424.

NIFA AFRI Farm Bill Priority Area [1]	NIFA AFRI Foundational and Applied Science Program Area	Program Code
PHPPP	1a. Foundational Knowledge of Agricultural Production Systems	A1102
PHPPP	1b. Foundational Knowledge of Plant Products	A1103
PHPPP	1c. Pests and Beneficial Species in Agricultural Production Systems	A1112
PHPPP	1d. Physiology of Agricultural Plants	A1152
PHPPP	1e. Plant Breeding for Agricultural Production	A1141

PHPPP	1f. Pollinator Health: Research and Application	A1113
PHPPP	1g. Conventional Plant Breeding for Cultivar Development	A1143
AHPAP	2a. Animal Reproduction	A1211
AHPAP	2b. Animal Nutrition, Growth and Lactation	A1231
AHPAP	2c. Welfare of Agricultural Animals	A1251
AHPAP	2d. Diseases of Agricultural Animals	A1221
AHPAP	2e. Animal Breeding, Genetics, and Genomics	A1201
FSNH	3a. Food Safety and Defense	A1332
FSNH	3b. Novel Foods and Innovative Manufacturing Technologies	A1364
FSNH	3c. Diet, Nutrition and the Prevention of Chronic Diseases	A1344
FSNH	3d. Food and Human Health	A1343
FSNH	3e. Mitigating Antimicrobial Resistance Across the Food Chain	A1366
BNRE	4a. Soil Health	A1401
BNRE	4b. Water Quantity and Quality	A1411
BNRE	4c. Sustainable Bioeconomy through Biobased Products	A1414
BNRE	4d. Sustainable Agroecosystems: Health, Functions, Processes and Management	A1451
AST	5a. Engineering for Agricultural Production and Processing	A1521
AST	5b. Biorefining and Biomanufacturing	A1531
AST	5c. Nanotechnology for Agricultural and Food Systems	A1511
AST	5d. Engineering for Precision Crop and Water Management	A1551
AERC	6a. Small and Medium-Sized Farms	A1601
AERC	6b. Economics, Markets and Trade	A1641
AERC	6c. Social Implications of Food and Agricultural Technologies	A1642
AERC	6d. Rural Economic Development	A1661
AERC	6e. Environmental and Natural Resource Economics	A1651
Crosscutting	7a. Agricultural Microbiomes in Plant Systems and Natural Resources	A1402
Crosscutting	7b. Critical Agricultural Research and Extension (CARE)	A1701
Crosscutting	7c. Data Science for Food and Agricultural Systems (DSFAS)	A1541

[1] PHPPP=Plant Health and Production and Plant Products, AHPAP=Animal Health and Production and Animal Products; FSNH=Food Safety, Nutrition, and Health; BNRE=Bioenergy, Natural Resources, and Environment; AST=Agriculture Systems and Technology; AERC=Agriculture Economics and Rural Communities; Crosscutting=Crosscutting Programs

b. Field 8. Project Narrative

Title the attachment as ‘Project Narrative’ in the document header and save file as ‘ProjectNarrative’.

- 1) For **Predoctoral Grant** applications, the Project Narrative section may not exceed a total of **six-pages** using 12-point font with single line spacing (i.e., no more than six lines per vertical inch), including all figures and tables. Do not use a condensed or narrow font (e.g., Arial Narrow).
- 2) For **Postdoctoral Grant** applications, the Project Narrative section may not exceed a total of **ten-pages** using 12-point font with single line spacing (i.e., no more than six lines per vertical inch), including all figures and tables. Do not use a condensed or narrow font (e.g., Arial Narrow).

To ensure fair and equitable competition, applications exceeding the applicable page limitation will be returned without review.

NOTE: ALL components of the project narrative (e.g., Response to Previous Review, if applicable; the Training/Career Development Plan; the Mentoring Plan; the Project Plan; and the Evaluation Plan) will be considered in accordance with the evaluation criteria.

For Predoctoral Fellowships and Postdoctoral Fellowships, Project Narrative Attachment must include all of the following:

- 1) **Specific Application Type Information**
 - a) **Response to Previous Review (only applies to Resubmitted Applications, see Part II § B of the RFA)**

The Project Narrative attachment for resubmissions should include two components: i) 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 ii) the Project Narrative (see item 2 below). The one-page “Response to Previous Review” does not count against the Project Narrative page limit.
- 2) **Training/Career Development Plan**

The Training/Career Development Plan is a description of all activities that the applicant plans to perform and participate in which will enhance the pre- or postdoctoral training during the fellowship award period.

 - a) For **Predoctoral Fellowship** applicants, this plan must include
 - i) personal statement addressing future career directions or preparation for entering the workforce,
 - ii) overall career goals and objectives, as well as how, if awarded, the fellowship will allow them to accomplish their professional goals and objectives,
 - iii) any other training objectives,
 - iv) any extension and educational activities (e.g., teaching in formal or informal settings) to enhance their career development that will be undertaken during their doctoral training.
 - b) For **Postdoctoral Fellowship** applicants, this plan must include plans for transition to career independence by development of professional skills. These professional skills include teaching competencies; what those career and training goals are; and results of the postdoctoral fellow’s previous and current research and scholarships that include publications, presentations, etc.
- 3) **Mentoring Plan**

The applicants are expected to identify a Primary Mentor who will be willing to help them in their application and projects as well as professional development (more than one Primary Mentor is acceptable for Integrated Projects only). If there are other collaborating mentors, their role and responsibilities to the project and development of the applicant's skills should be clearly described. For predoctoral applications, if the primary mentor is not the student's graduate advisor or laboratory sponsor, the relationship between advisor's work and the primary mentor's research should be clearly defined, and the contribution of each individual in the student's project as well as degree completion should be included. The commitment of the mentor(s) is included in the evaluation criteria as it pertains to project personnel. In describing the role of the mentor, the applicant should:

- a) Briefly indicate how the mentoring and educational training will add to the skill sets of the NIFA Fellow.
- b) Briefly explain the commitment of the primary mentor.
- c) Briefly describe the role of collaborating mentors (if applicable).
- d) With respect to the Primary Mentor, provide a list of former mentees and their current positions.

NOTE: The Primary Mentor must submit a Letter of Commitment (as an attachment to Field 12, Other Attachments, of the Other Project Information form) explicitly indicating their respective responsibilities throughout the proposed project in relation to the Project Director.

- e) Briefly list and explain the role of other non-primary mentors.

4) **Project Plan**

a) **Predoctoral Applicants**

It is expected that predoctoral students will be working with a primary mentor or advisor who has funded research and that the fellow may work on another aspect of this research. Moreover, the mentor/advisor will already have the facilities, equipment, technologies and methodologies for the projects developed with the fellow. Experimental methods, especially if these are routinely or generally used, do not need detailed description. However, sufficient details on the experimental approach or strategy as well as pitfalls must be provided to allow assessment of feasibility of study. The Project scope should be within the 3-year timeframe of the fellowship.

b) **Postdoctoral Applicants**

The research should be totally independent of the mentor's work. Proven techniques and technologies as part of the experimental approach, especially if these are routinely employed, don't have to be provided in detail. Experimental approaches or strategies including possible pitfalls and alternatives must be provided in order to assess the overall feasibility of the proposed study. Avoid open-ended screens or undefined outcomes. The scope of the project should be within the 2-year timeframe.

5) **Introduction**

The introduction should include a well-defined problem, a clear statement of the long-term goal(s), and supporting objectives of the proposed project. Summarize the body of knowledge or other past activities that substantiate the need for the proposed project. Describe ongoing or recently completed activities related to the proposed project including the work of key project personnel. Include preliminary

data/information pertinent to the proposed work. All works cited should be referenced (see Bibliography & References Cited).

6) **Rationale and Significance**

- a) Concisely present the rationale behind the proposed project and how it will advance the current knowledge in the field;
- b) Clearly describe the specific relationship of the project's objectives to one of the Program Area Priorities. The Program Area Priority(ies) must be specifically identified; and
- c) Describe how the proposed curricular activities (predoctoral) will support educational goals and project activities.

7) **Approach**

Provide a concise description of the proposed project and the problem(s) to be addressed. Clearly describe the approaches to be used. Specifically, this section must include:

- a) A description of the project details proposed and the sequence in which the activities are to be performed;
- b) Methods to be used in carrying out the proposed project and feasibility of the methods (detail only if a new and unproven method is to be used; if employing commonly used methods provide information on the expertise available);
- c) Expected outcomes and outcome measures;
- d) Means by which results will be analyzed, assessed, or interpreted;
- e) How results or products will be used;
- f) Pitfalls that may be encountered, and possible alternatives;
- g) Limitations to proposed procedures;
- h) A full explanation of any materials, procedures, situations, or activities related to the project that may be hazardous to personnel, along with an outline or precautions to be exercised to avoid or mitigate the effects of such hazards;
- i) A timeline for attainment of objectives and for production of deliverables that include annual milestones with specific, measurable outcomes; and
- j) Establishment of a profile on an established professional social networking site to document career progress during and beyond the term of the Fellowship.

8) **Evaluation Plan**

A plan for evaluating progress towards **objectives related to the training/career development plan, mentoring plan, and project plan**. The plan must include milestones, which signify the completion of a major deliverable, events, or accomplishment and serve to verify that the project is on schedule and on track for successful conclusion. The plan should also include descriptions of indicators that will be measured to evaluate whether the education activities are successful in achieving project goals and contribute to the achievement of the stated program goals and outcomes; and a dissemination plan describing the methods that will be used to communicate findings and project accomplishments.

- a) For **Education Project Applications** – In addition to the Project Narrative requirements above, the proposed Education Project should clearly articulate:
 - i) The potential for advancing the quality of education by addressing a specific problem or opportunity; and
 - ii) The target audience and the level of education addressed.

- b) For **Extension Project** Applications – In addition to the Project Narrative requirements above, the proposed Extension Project should give emphasis to scholarly principles of engagement and outreach that clearly articulate:
- i) The importance of informal education to address a specific local problem or issue;
 - ii) The theoretical basis of informal outreach methods used;
 - iii) Development and/or implementation of a curriculum-based series of connected learning activities (including educational materials) that engage the public in practical problem solving;
 - iv) A plan for evaluating progress toward achieving project objectives. 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;
 - v) The plan should also include descriptions of indicators that you will measure to evaluate whether the extension activities are successful in achieving project goals and in contributing to achievement of the stated program goals and outcomes; and
 - vi) A dissemination plan describing the methods that will be used to communicate findings and project accomplishments.
- c) For **Integrated Project** Applications – In addition to the Project Narrative requirements above, the proposed Integrated Project should clearly articulate:
- i) Stakeholder involvement in project development, implementation, and evaluation, where appropriate;
 - ii) 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 [AFRI Project Types \(usda.gov\)](https://www.usda.gov/afri/project-types)); and
 - iii) A dissemination plan describing the methods that will be used to communicate findings and project accomplishments.
 - iv) 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 should also include descriptions of indicators that you will measure to evaluate whether the research, education, and/or extension activities are successful in achieving project goals and in contributing to achievement of the stated program goals and outcomes.

c. Field 9. Bibliography & References Cited

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

No Page Limit. Title the attachment as ‘Facilities & Other Resources’ in the document header and save file as ‘FacilitiesOtherResources’.

e. Field 11. Equipment

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 § C6](#) 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**

2-Page Limit. Title the attachment as ‘Key Personnel’ and save file as ‘KeyPersonnel’.

Clearly describe the roles and responsibilities of the PD, collaborator(s), mentor(s) *etc.* (biographical sketches for key personnel including mentor(s) should not be included here). If it will be necessary to enter into formal consulting or collaborative arrangements with others, such arrangements should be fully explained and justified. Evidence (letters of support) for this type of collaboration should be provided in the ‘Documentation of Collaboration’ attachment (see item 5) below).

2) **Mentor Letter, Reference Letters, and Documentation of Collaboration**

No Page Limit. Title the attachment as ‘Documentation of Collaboration’ in the document header and save file as ‘Collaboration’.

Mentor Letter and the Reference Letters must be included in the Documentation of Collaboration.

a) Primary Mentor Letter of Commitment

One Primary Mentor letter is required. If there is more than one Primary Mentor (Integrated Projects Only), a Primary mentor letter should be provided for each mentor. The mentor letter(s) should indicate:

- i) the quality of the applicant in regard to their ability to develop into a leader in agriculture;
- ii) the applicant’s oral and written communication skills and critical and analytical skills;
- iii) the applicant’s level of intellectual independence;
- iv) the role of the student and mentor in the development of the application;
- v) **their respective committed responsibilities throughout the proposed project in relation to the Project Director;**
- vi) a statement that the research by the applicant is independent and not an extension of the mentor’s research (for postdoctoral applicants only); and

vii) any other pertinent and relevant information to indicate the applicant is deserving of being awarded a prestigious AFRI EWD Pre- or Post-doctoral Fellowship.

b) Collaborating Mentor Letters

As applicable, the other mentor letter(s) should generally comment on items a) through d), f), and g) of the Primary Mentor Letter of Commitment noted above.

c) Reference Letter(s)

Three reference letters are required. Letters should not come from identified mentors but must be obtained from other individuals who know the applicant well to substantially speak towards the applicant's academic and research accomplishments and ability to complete the doctoral degree program, or undertake an independent postdoctoral research, education, extension, or integrated research, education and/or extension project. Reference letters should be no longer than one- page.

d) Academic Standing

i) For **predoctoral applications**, documentation from the graduate advisor, graduate committee or the institution indicating that the applicant has advanced to candidacy, as per institutional requirements, by:

(A) Fiscal Year 2022 competition: October 27, 2022

ii) For **postdoctoral applications**, documentation from the graduate advisor, graduate committee or the institution that all doctoral degree requirements were satisfied:

(A) **Fiscal Year 2022 competition:** no earlier than **January 1, 2019**, and no later than **June 8, 2023**

3) **Logic Model**

2-Page Limit. Required for all Research, Education, Extension or 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](#).

Failure to include a logic model for an integrated project may result in the application not being considered for review.

4) **Management Plan**

3-Page Limit. Required for all Research, Education, Extension, or 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 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.

5) **Data Management Plan (DMP)**

2-Page Limit. Required for all 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 of the RFA). See **Part III, 3.1 of the NIFA Grants.gov Application Guide for NIFA attachment specifications.**

For 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](#).

6) **Documentation of Collaboration**

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.

7) **Preprints**

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.

8) **Minority-Serving Institution Documentation**

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 of the RFA.

9) **Representations Regarding Felony Conviction and Tax Delinquent Status for Corporate Applicants**

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 § C3\(f6\)](#)).

a. Project Role Field

Complete appropriately.

1) For **Predoctoral Fellowship** Grant Applications

The predoctoral student must be the sole PD listed on the application. The mentor should not be listed as a co-PD. Select “Graduate Student” for the Predoctoral Fellowship applicant. Select “Other (Specify)” for the corresponding scientific mentor(s).

2) For **Postdoctoral Fellowship** Grant Applications

The postdoctoral student must be the sole PD listed on the application. The mentor should not be listed as a co-PD. Select “Post Doctoral” for the Postdoctoral Fellowship applicant. Select “Other (Specify)” for the corresponding scientific mentor(s).

b. Other Project Role Category Field

Complete appropriately, if applicable. Enter “Mentor” for corresponding scientific mentor(s).

c. Attach Biographical Sketch Field

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.

The Biographical sketch of the applicant (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.

In addition, biographical sketch must include the following information:

- 1) Activities that demonstrate scholastic achievement and excellence. These may include but are not limited to academic indicators, awards, honors, publications, presentations, professional society membership, etc. and other metrics that demonstrate scholastic achievement and excellence.
 - a) **Predoctoral applicants** must include Grade Point Average (GPA).
 - b) **Postdoctoral applicants** must include date of completion of the terminal degree.

The Biographical sketch of the Primary mentor (more than one Primary Mentor allowed on for integrated projects) must include the number of mentees mentored for at least the last 5 years.

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 § C7\(b\)](#) for more information).

a) ***Attach Current and Pending Support Field***

No Page Limit. Title the attachment as ‘Current and Pending Support’ in the document header and save file as ‘CurrentPendingSupport’.

Current and Pending Support for both the pre- or post-doctoral applicant and the scientific mentor(s) (as documentation of on-going work in the mentor's laboratory) must be completed.

Current and Pending Support information is only required for the PD (i.e., the student) and the primary mentor. **At the time of the award and release of funds from NIFA to sponsoring institution, Fellows are required to carry out their projects on a full-time basis (i.e. 100% effort), as specified by the sponsoring institution in accordance with its own policies.**

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

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.

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.

a. Matching Funds

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 § C, 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.

For applied Research or integrated Projects with an applied research component, if a funded project is commodity-specific and not of national scope, the grant recipient is required to match the NIFA funds awarded on a dollar-for-dollar basis from non-federal sources with cash and/or in-kind contributions.

The sources and the amount of all matching support from outside the applicant organization must be summarized on a separate page and placed in the application immediately following the Budget Justification. All pledge agreements must be placed in the application immediately following the summary of matching support.

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.

b. 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 Predoctoral fellowship grant application is funded, the Project Director will be required to attend one AFRI NIFA Fellows Project Directors’ meeting during the performance period of the award.

Postdoctoral fellowship Project Directors are required to attend one AFRI NIFA Fellows Project Directors’ meeting AND a PD meeting of the Foundational and Applied Science or the Sustainable Agricultural Systems program area priorities with which the project is most closely aligned during the performance period of the award.

Reasonable travel expenses should be included as part of the project budget. As part of the fellows’ professional development, attendance to other scientific or professional meetings is

encouraged, but fellows must attend at least one Project Directors' meeting during the time of support.

See Part I § C of the RFA for limitation of budget amounts, use of funds, and budget periods.

- 1) Projects that include partnering with eXtension must include financial support for the Community of Practice core functions as well as project specific activities.
- 2) For Integrated Project Applications, projects must budget sufficient resources to carry out the proposed set of research, education, and/or 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.

c. Subcontract Arrangements

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

- 1) 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.
- 2) 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.

d. Field H. Indirect Costs

Indirect costs are not allowed on AFRI EWD Pre- and Post-doctoral Fellowship Grants.

e. Field K. Budget Justification

No Page Limit. Title the attachment as 'Budget Justification' 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. 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 signed by the Authorized Representative and other evidence should be provided in the Documentation of Collaboration (see [Part IV § C3\(f6\)](#)) 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. Allowable expenditures must be appropriately discussed in the budget justification. 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.

- 1) *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/or 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.

7. Supplemental Information Form

Instructions related to this form are explained in detail in Part VI, 1 of the NIFA Grants.gov Application Guide.

a. Field 2. Program to which you are applying

Enter the Program Code Name and the Program Code for the Program Area to which you are applying from the information provided in the Program Area Descriptions beginning in Part I § C of the RFA. An application can only be submitted to one program area. Note that accurate entry of the Program Area Code Name and Program Area 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 Contact.

b. Field 8. Conflict of Interest List

No Page Limit. Title the attachment as ‘Conflict of Interest’ in the document header and save file as ‘Conflict of Interest’. 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).

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For NECIW applications, follow the instructions below.

1. SF 424 R&R Cover Sheet

Information related to this form are explained in detail in Part V, 2 of the NIFA Grants.gov Application Guide. See Part V, 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 dealt with in detail in Part V, 3 of the NIFA Grants.gov Application Guide.

3. R&R Other Project Information

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

a. Field 7. Project Summary/Abstract

Title the attachment as 'Project Summary' in the document header and save file as 'ProjectSummary'.

The summary should explain 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.

The following instructions are in addition to those included in Part V, 4.7 of the NIFA Grants.gov Application Guide.

The Project Summary **must** indicate the following:

- 1) Project title;
- 2) Indicate the primary AFRI Farm Bill Priority area focus of the project by selecting one of the following:
 - a) Plant health and production and plant products;
 - b) Animal health and production and animal products;
 - c) Food safety, nutrition, and health;
 - d) Bioenergy, natural resources, and environment;
 - e) Agriculture systems and technology; or
 - f) Agriculture economics and rural communities.
- 3) Project duration;
- 4) Project Director;
- 5) Submitting organization;
- 6) Other organizations involved in the project;
- 7) Location(s) (schools, colleges, universities, national labs, field stations, etc.) at which the proposed activities will occur;
- 8) Number of participants per year; and

In addition to the information requested above, please provide a 250-word abstract. The abstract should briefly describe the project's objectives, activities, and intended impact. The abstract should also include the relevance of the project to the goals of the NECIW program area.

b. Field 8. Project Narrative

Title the attachment as 'Project Narrative' in the document header and save file as 'ProjectNarrative'.

The Project Narrative may **not exceed ten-pages** of written text using 12-point font with single line spacing (i.e., no more than six lines per vertical inch), including all figures and tables. Do not use a condensed or narrow font (e.g., Arial Narrow).

To ensure fair and equitable competition, applications exceeding the applicable page limitation will be returned without review.

The Project Narrative must include all of the following:

1) Overview

- a) Provide a brief description of the objectives of the PDAL program to be developed. What AFRI Priority area(s) is (are) being addressed; who are the targeted participants; what skills gaps and/or academic challenges are being addressed; and what student outcomes will be impacted.
- b) Project Justification: Summarize the body of knowledge justifying the need for the proposed project. Describe any ongoing or recently completed, significant activities related to the proposed project.

2) Approach

- a) Approach to K-14 food and agricultural sciences professional development
 - i) Describe the type and details of how immersive learning experiences will be provided for K-14 educational professionals.
 - ii) Innovation. Describe the proposal's creative approach to K-14 professional development in the food and agricultural sciences. Using either actual experiences or literature, show why you selected this approach.
- b) Plan of Operation and Methodology
 - i) Nature of Participant Activities. Provide detailed description of the research, education and/or extension activities that will be pursued. How will these experiences lead to enhanced student outcomes?
 - ii) Describe procedures for accomplishing the objectives of the project. Describe plans for management of the project to ensure its proper and efficient administration. Describe the way in which resources and personnel will be used to conduct the project.
 - iii) Timetable. Identify all important project milestones (performance targets that indicate when project goals will be met) and dates as they relate to project start-up, execution, evaluation, dissemination, and closeout.
- c) Recruitment, Selection, and Continued Support for K-14 Educators
 - i) The recruitment plan should be described with as much specificity as possible, including the types and/or names of academic institutions where educational professionals will be recruited and the efforts that will be made to attract educators from low-resource schools.
 - ii) Describe the criteria that will be used to select participants.
 - iii) Indicate how participants, who terminate the program early, will be replaced.

iv) Describe additional support that will be provided to participants after the termination of the project.

3) The Research, Education and/or Extension Environment

- a) Describe the experience of the of the key personnel in providing quality immersive, experiential learning experiences in the food and agricultural sciences and training in the most effective pedagogical strategies for K-14 education.
- b) Institutional Support/Partnerships. Describe the institutional climate for the proposed training. How does the proposed project align with and contribute to applicant and partner institutions’ goals for enhancing K-14 education in their community/state/region?
- c) Describe the environment of the host site(s), including, but not limited to, physical plan(s), accommodations for participants with disabilities, accessibility, location(s) of proposed activities, etc.

4) Project Evaluation and Reporting

- a) Clearly define a plan with a timeline to extensively evaluate the project using formative and summative assessment tools that can help inform future implementations of immersive learning based professional development programs. Identify pitfalls and limitations to proposed approach and how these will be addressed.
- b) Define the approach for evaluating both participant (educator) *and* K-14 student outcomes.
- c) The review process will give preference to projects that will catalyze and result in the implementation self-sustaining models for professional development that better prepare current (i.e. not pre-service) education professionals to provide outstanding teaching, guidance, institutional structures, etc. that are needed to enhance student outcomes in the food and agricultural sciences.

5) Expected Outputs

Please use the format provided below. Expected Outputs table does not count against the ten-page limit of the Project Narrative.

Total expected outputs during grant period	Expected Number
1. Number of products to be developed through grant funds during the grant period (i.e., curricula, academic programs, recruitment/retention programs, materials, experiential learning opportunities)	
2. Number of K-14 education professionals supported by this grant for professional development during the grant period	
3. Number of students who will indirectly benefit from the products produced from the grant during the grant period (i.e., using the curriculum/instrumentation).	

c. Field 9. Bibliography & References Cited

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

No Page Limit. Title the attachment as ‘Facilities & Other Resources’ in the document header and save file as ‘FacilitiesOtherResources’.

e. Field 11. Equipment

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 § C6](#) 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**

2-Page Limit. Title the attachment as ‘Key Personnel’ and save file as ‘KeyPersonnel’.

Clearly describe the roles and responsibilities of the PD, collaborator(s), etc. (biographical sketches for key personnel including mentor(s) should not be included here). If it will be necessary to enter into formal consulting or collaborative arrangements with others, such arrangements should be fully explained and justified. Evidence (letters of support) for this type of collaboration should be provided in the ‘Documentation of Collaboration’ attachment (see item 5) below).

2) **Logic Model**

2-Page Limit. Required for all Integrated Project applications. Encouraged for Research, Education, or Extension 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](#).

Failure to include a logic model for an integrated project may result in the application not being considered for review.

3) **Management Plan**

3-Page Limit. Required for Integrated Project applications. Encouraged for Research, Education, or Extension 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 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)**

2-Page Limit. Required for Research, Education, Extension, or 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 of the RFA). **See Part III, 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**

No Page Limit. Title the attachment as ‘Documentation of Collaboration’ in the document header and save file as ‘Collaboration’.

For NECIW applications, include evidence of collaboration and contributions amongst the host institution and other institutions from which the teacher participants will be recruited. Examples include Letters from the Superintendents, Principals and/or Department Heads of the respective schools.

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**

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

Optional: May be needed if applying for FASE Strengthening Standard Grant.

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 of the RFA.

8) Representations Regarding Felony Conviction and Tax Delinquent Status for Corporate Applicants

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 § C3\(f5\)](#)).

a. Project Role Field

Complete appropriately.

b. Other Project Role Category Field

Complete appropriately, if applicable.

c. Attach Biographical Sketch Field

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.

The Biographical sketch of the applicant (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.

In addition, Biographical sketch must include:

- 1) A presentation of academic, extension, and/or research credentials including, as applicable: earned degrees, teaching experience, employment history, professional activities, honors and awards, and grants received; and
- 2) Indicate the number of continuing education courses developed and taught/trained the number of educators by the applicant.
- 3) Include all relevant publications in refereed journals during the past four (4) years including those in press.

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 § C7\(b\)](#) for more information).

d. Attach Current and Pending Support Field

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 each senior/key person identified.

Note: Even if no other funding is currently reported under the ‘Active’ section of this attachment, each senior/key person must list this grant application under the ‘Pending’ section of this attachment.

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.

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.

a. 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 of the RFA, 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 § C of the RFA, 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.

The sources and the amount of all matching support from outside the applicant organization must be summarized on a separate page and placed in the application immediately following the Budget Justification. All pledge agreements must be placed in the application immediately following the summary of matching support.

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.

b. 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 NECIW application is funded, the Project Director will be required to attend one AFRI NIFA EWD Project Directors’ meeting during the performance period of the award. Reasonable travel expenses (location to be determined by NIFA program staff) should be included as part of the project budget. Reasonable travel expenses should be included as part of the project budget.

See Part I § C of the RFA for limitation of budget amounts, use of funds, and budget periods.

- 1) Projects that include partnering with eXtension must include financial support for the Community of Practice core functions as well as project specific activities.
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If it will be necessary to enter into a formal subcontract agreement with another institution, then refer to the following items:

- 1) 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.
- 2) 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.

d. 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 § D of the RFA for additional information.

e. Field K. Budget Justification

No Page Limit. Title the attachment as ‘Budget Justification’ 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. 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 signed by the Authorized Representative and other evidence should be provided in the Documentation of Collaboration (see [Part IV § C3\(f5\)](#)) 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. Allowable expenditures must be appropriately discussed in the budget justification. 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.

- 1) *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/or 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.

7. Supplemental Information Form

Instructions related to this form are explained in detail in Part VI, 1 of the NIFA Grants.gov Application Guide.

a. Field 2. Program to which you are applying

Enter the Program Code Name and the Program Code for the Program Area to which you are applying from the information provided in the Program Area Descriptions beginning in Part I § C of the RFA. An application can only be submitted to one program area. Note that

accurate entry of the Program Area Code Name and Program Area 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 Contact.

b. Field 8. Conflict of Interest List

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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).

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For YEA applications, follow the instructions below.

1. SF 424 R&R Cover Sheet

Information related to this form are explained in detail in Part V, 2 of the NIFA Grants.gov Application Guide. See Part V, 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 dealt with in detail in Part V, 3 of the NIFA Grants.gov Application Guide.

3. R&R Other Project Information

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

a. Field 7. Project Summary/Abstract

Title the attachment as 'Project Summary' in the document header and save file as 'ProjectSummary'.

The summary should explain 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.

The following instructions are in addition to those included in Part V, 4.7 of the NIFA Grants.gov Application Guide.

The Project Summary **must** indicate the following:

- i) Project title
- ii) Indicate the primary AFRI Farm Bill priority area focus of the project by selecting one of the following six Farm Bill priority areas.
 - Plant health and production and plant products;
 - Animal health and production and animal products;
 - Food safety, nutrition, and health;
 - Bioenergy, natural resources, and environment;
 - Agriculture systems and technology; or
 - Agriculture economics and rural communities.
- iii) Project duration;
- iv) Project Director;
- v) Submitting institution;
- vi) Other institutions and organizations involved in the project;
- vii) Location(s) (universities, national labs, field stations, etc.) at which the proposed activities will occur;
- viii) Number of participants per year;

In addition to the information requested above, please provide a 250-word abstract. The abstract should briefly describe the project's objectives, activities, education professionals to be recruited, and intended impact. The abstract should also include the relevance of the project to the goals of the YEA program area.

b. Field 8. Project Narrative

Title the attachment as 'Project Narrative' in the document header and save file as 'ProjectNarrative'.

The Project Narrative may **not exceed ten-pages** of written text using 12-point font with single line spacing (i.e., no more than six lines per vertical inch), including all figures and tables. Do not use a condensed or narrow font (e.g., Arial Narrow).

To ensure fair and equitable competition, applications exceeding the applicable page limitation will be returned without review.

The Project Narrative must include all the following (see page and font

restrictions noted above):

1) Overview

- a) Provide a brief description of the objectives of the program to be developed; the AFRI priority area(s) and USDA priorities being addressed; the anticipated project audience; the project's target objectives; timetable; and participating institutions' and organizations' commitment to the project.
- b) Project Justification: Summarize the body of knowledge justifying the need for the proposed project. Describe any ongoing or recently completed, significant activities related to the proposed project.

2) The Research, Education and Extension Environment

- a) For the project director, mentors, and the institution(s) or organization(s) where the activities will occur, describe their experience(s) working with youth, including underrepresented youth and communities, specifically their experience in implementing positive youth development strategies.
- b) Describe the experience of key personnel in conducting fundamental or applied youth development research, education, and extension activities.
- c) Institutional Support/Partnerships. Fully describe the institutional climate for the proposed project. How does the proposed project align with and contribute to the applicant and partner institutions' goals for enhancing positive youth development?

3) Approach

- a) Positive Youth Development (PYD) Experience
 - 1) The proposed involvement of youth and adult partnerships in the design, execution, and evaluation of activities that promote positive youth development should be described with as much specificity as possible.
 - 2) Describe what elements of PYD the project will pursue. This can include and is not limited to creation of high-quality program settings, nonformal education as a developmental context, indicators of thriving, positive youth development outcomes and long-term outcomes.
 - 3) Describe the mentoring and leadership development opportunities provided by the project and anticipated outcomes. Describe any credentials the project will generate and/or participants are to obtain after their participation in the project; include the applicability and potential pitfalls generating or obtaining such credentials.
 - 4) Innovation: Describe the proposal's creative approach on positive youth development topics related to one or more of the USDA priority areas of: (1) addressing climate change via climate smart agriculture and forestry; (2) advancing racial justice, equity, and opportunity; (3) creating more and better market opportunities; (4) tackling food and nutrition insecurity or (5) promoting workforce development.
 - 5) Use either actual experiences and/or literature to show why you selected this approach.
- b) Plan of Operation and Methodology
 - 1) Applications should provide detailed descriptions of the research, education and extension activities that will be pursued. This discussion should indicate how these activities will lead to positive youth development experiences related to one or more of the USDA priorities.
 - 2) Describe procedures for accomplishing the objectives of this project. Describe

plans for management of the project to ensure its proper and efficient administration. Describe the way in which resources and personnel will be used to conduct the project.

- 3) **Timetable:** Identify all important project milestones (performance targets that indicate when project goals will be met) and dates as they relate to project start-up, execution, evaluation, dissemination, and closeout.
- 4) **Recruitment, Selection, and Continued Support for Participants.** The recruitment plan should be described with as much specificity as possible. How will participants be recruited? What criteria will be used to select participants? As applicable, what additional support will be provided to participants after the termination of the project? How will participants from underrepresented groups be recruited and retained?

4) Project Evaluation and Reporting

- a) Clearly define a plan with a timeline to extensively evaluate the project using formative and summative assessment tools that can help inform future implementations of positive youth development programs. Identify pitfalls and limitations to proposed approaches and how these will be addressed.
- b) Describe how potential adoption of PYD resources will be utilized by other institutions and/or organizations.
- c) Specifically describe the **youth-centered learning outcomes** (e.g., skills or knowledge obtained, interest and competencies), as well as positive youth development outcomes and if measured long-term outcomes. Include associated measures to evaluate outcomes.
- d) Describe how these outcome measures were chosen; and provide strategies to assess, at the project-level, management of the project for successful outcomes.

5) Expected Outputs

Please use the table format below. Expected Outputs table does not count against the ten-page limit of the Project Narrative.

Total expected outputs during grant period	Expected Number
1) Number of products to be developed through grant funds during the grant period (e.g., trainings, curricula, outreach materials, experiential learning opportunities, peer-reviewed publications, conference presentations)	
2) Number of Land Grant Universities with enhanced system of PYD outreach incorporated	
3) Number of underrepresented ² youth to be supported during the grant period (Provide the best estimate based on past experience)	
4) Number of youth participants to be directly supported by this grant	
5) Number of adults participants to be directly supported by this grant	

6) Number of youth and adults who will indirectly benefit from the products produced from the grant during the grant period (e.g., trainings, using the curriculum, materials, enrolled in the project)	
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² Underrepresented = those whose representation among food and agricultural professionals is disproportionately less than their proportion in the general population as indicated in standard statistical references, or as documented on a case-by-case basis by national survey data (e.g., the U.S. Department of Education's Digest of Education Statistics, U.S. Department of Agriculture's Food and Agricultural Education Information Systems, etc.).

6) As an optional requirement, applicants seeking Center of Excellence status

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 http://www.nifa.usda.gov/funding/pdfs/nlgca_colleges.pdf), and schools of veterinary medicine).

YEA Coordination Network (YEA-CN) Project Applications

The information in this section is for YEA Coordination Network (YEA-CN) project applications. See the previous section for “YEA Project Applications” and the next section “YEA Project Applications and YEA Coordination Network (YEA-CN) Applications” for information that applies to both types of applications.

- a. Field 7. Project Summary/Abstract – PDF Attachment.** Title the attachment as ‘Project Summary’ in the document header and save file as ‘Project Summary’. See Part V. 4.7 of NIFA Grants.gov Application Guide for further instructions and a link to the suggested template.

The Project Summary **must** indicate the following:

- i) Project title
- ii) Project duration;
- iii) Project Director;
- iv) Submitting institution;
- v) Other institutions and organizations involved in the project’s operation;
- vi) Relevance of the project to the goals of AFRI Education and Workforce Development (EWD).

In addition to the information requested above, please provide a 250-word abstract. The abstract should briefly describe the project’s objectives, activities, and intended impact.

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

The Project Narrative section may not exceed ten-pages of written text 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.

The Project Narrative (see page and font restrictions noted above)

1) Overview

- a) Provide a clear statement of the proposal’s objectives and goals.
- b) Briefly describe the activities that will take place to support these objectives and goals and the Project Director’s experience in developing, managing and maintaining similar projects.

2) Objectives, Outcomes, and Approach:

- a) Present the objectives, goals and expected outcomes of the project in relation to the needs identified in the Program Area Priorities.
- b) This section must include a description of each activity proposed for each objective and justification; a timeline of the proposed activities; expected measurable outputs for each year of the five-year project; and how NIFA, National 4-H leadership, and other youth serving partners will be engaged.
- c) This section must also include descriptions of the following mandatory activities of the YEA Coordination Network (YEA-CN): Forming a national steering committee, coordination among YEA projects, the clearinghouse,

creation of collaborative spaces, creating a portable public facing website, planning national level professional development efforts, and plans to help ensure sustainability of the YEA program.

- d) Describe any other novel proposed elements that increase the YEA Coordination Network (YEA-CN) value for Project Directors and potential youth participants and how underrepresented youth and communities will be provided enhanced access to participation.
- e) Include pitfalls that may be encountered and limitations to proposed activities.
- f) Present an evaluation plan of YEA national outcomes, which includes how the outcomes will be analyzed, assessed, or interpreted each year and at the duration of the project.

3) Personnel and Resources

- a) Describe in detail the key project personnel's experience in maintaining a coordinated network with multiple partners and collaborators. Specifically, include experience implementing positive youth development research, education, and extension strategies.
- b) Provide information on the institutional resources and facilities to be used to house and manage a digital clearinghouse, collaborative space(s)/listserve, and website.
- c) Provide other personnel needs, assignments and the division of labor anticipated to carry out the project.
- d) Discuss collaborating institutions and organizations and their role in the project.
- e) Include plans for transferability and sustainability of the YEA Coordination Network (YEA-CN) post-award.

Note: Information on Fields 9-12 are also applicable to applications for this program (see below, "YEA Project Applications and YEA Coordination Network (YEA-CN) Applications").

4) Center of Excellence

In addition to meeting the other requirements detailed in Part IV, C., of this Request for Application (RFA), eligible applicants **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 http://www.nifa.usda.gov/funding/pdfs/nlgca_colleges.pdf), and schools of veterinary medicine).

YEA Project Applications and YEA Coordination Network (YEA-CN) Applications

The information below applies to both project application types. See the previous sections for information specific to “YEA Project Applications” and “YEA Coordination Network (YEA-CN) Project Applications.”

c. Field 9. Bibliography & References Cited

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

No Page Limit. Title the attachment as ‘Facilities & Other Resources’ in the document header and save file as ‘FacilitiesOtherResources’.

e. Field 11. Equipment

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 § C6](#) 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

2-Page Limit. Title the attachment as ‘Key Personnel’ and save file as ‘KeyPersonnel’.

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

Clearly describe the roles and responsibilities of the PD, collaborator(s), etc. (biographical sketches for key personnel including mentor(s) should not be included here). If it will be necessary to enter into formal consulting or collaborative arrangements with others, such arrangements should be fully explained and justified. Evidence (letters of support) for this type of collaboration should be provided in the ‘Documentation of Collaboration’ attachment (see item 5) below).

2) **Logic Model**

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](#).

Failure to include a logic model for an integrated project may result in the application not being considered for review.

3) **Management Plan**

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 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 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)**

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 of the RFA). **See Part III, 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**

No Page Limit. Title the attachment as ‘Documentation of Collaboration’ in the document header and save file as ‘Collaboration’.

For YEA projects and YEA-CN project applications, include evidence of collaboration and contributions amongst the host institution and other institutions and/or organizations. 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) **Minority-Serving Institution Documentation**

May be needed if applying for FASE Strengthening Standard Grant. 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 of the RFA.

7) **Representations Regarding Felony Conviction and Tax Delinquent Status for Corporate Applicants**

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 § C3\(f5\)](#)).

a. Project Role Field

Complete appropriately.

- For YEA Projects and YEA Coordination Network (YEA-CN) Applications– **A member(s) of the host institution(s) must be listed as the PD or co-PD, as appropriate, on the application.**

b. Other Project Role Category Field

Complete appropriately, if applicable.

c. Attach Biographical Sketch Field

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.

The Biographical sketch of the applicant (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.

In addition, Biographical sketch must include:

1. A presentation of academic, extension, and/or research credentials including, as applicable: earned degrees, teaching experience, employment history, professional activities, honors and awards, and grants received; and
2. Indicate the number of continuing education courses developed and taught/trained the number of educators by the applicant.
3. Include all relevant publications in refereed journals during the past four (4) years including those in press.

The Biographical sketch of the Primary mentor (more than one Primary Mentor if integrated project only) must include the number of mentees mentored at least for the last 5 years.

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 § C7\(b\)](#) for more information).

d. Attach Current and Pending Support Field

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 each senior/key person identified.

Note: Even if no other funding is currently reported under the ‘Active’ section of this attachment, each senior/key person must list this grant application under the ‘Pending’ section of this attachment.

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.

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.

a. 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 of the RFA, 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 § C of the RFA, 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.

For Integrated Projects with an applied research component, if a funded project is commodity-specific and not of national scope, the grant recipient is required to match the NIFA funds awarded on a dollar-for-dollar basis from non-federal sources with cash and/or in-kind contributions.

The sources and the amount of all matching support from outside the applicant organization must be summarized on a separate page and placed in the application immediately following the Budget Justification. All pledge agreements must be placed in the application immediately following the summary of matching support.

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.

b. 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 YEA Project or YEA-CN project application is funded, the Project Director will be required to attend one AFRI NIFA EWD Project Directors' meeting during the performance period of the award. Reasonable travel expenses (location to be determined by NIFA program staff) should be included as part of the project budget. Reasonable travel expenses should be included as part of the project budget.

See Part I § C of the RFA for limitation of budget amounts, use of funds, and budget periods.

- 1) Projects that include partnering with the Extension Foundation must include financial support for the Community of Practice core functions as well as project specific activities.
- 2) 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 Foundation must include financial support for the Community of Practice core functions as well as project-specific activities.

c. Subcontract Arrangements

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

- 1) 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.
- 2) 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.

d. 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 § D of the RFA for additional information.

e. Field K. Budget Justification

No Page Limit. Title the attachment as 'Budget Justification' 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. 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 signed by the Authorized Representative and other evidence should be provided in the Documentation of Collaboration (see [Part IV § C3\(f5\)](#)) 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. **Allowable expenditures must be appropriately discussed in the budget justification.** 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.

- 1) *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.

7. Supplemental Information Form

Instructions related to this form are explained in detail in Part VI, 1 of the NIFA Grants.gov Application Guide.

a. Field 2. Program to which you are applying

Enter the Program Code Name and the Program Code for the Program Area to which you are applying from the information provided in the Program Area Descriptions beginning in Part I § C of the RFA. An application can only be submitted to one program area. **Note that accurate entry of the Program Area Code Name and Program Area 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 Contact.

b. Field 8. Conflict of Interest List

No Page Limit. Title the attachment as ‘Conflict of Interest’ in the document header and save file as ‘Conflict of Interest’. 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).