(c) **Technology delivery systems.** (1) The purpose of this initiative is to promote innovations and improvements in the delivery of benefits of food and agricultural sciences to producers and consumers, particularly those who are currently disproportionately low in receipt of such benefits.

(2) Examples include, but are not limited to:

(i) Computer-based decision support systems to assist small-scale farmers to take advantage of relevant technologies, programs, policies, etc.

(ii) Efficacious delivery systems for nutrition information or for resource management assistance for low-income families and individuals.

(d) **Other creative proposals.** The purpose of this initiative is to encourage other creative proposals, outside the areas previously outlined, that are designed to provide needed enhancement of the Nation’s food and agricultural research system.

§ 3406.17 **Program application materials—research.**

Program application materials in an application package will be made available to eligible institutions upon request. These materials include the program announcement, the administrative provisions for the program, and the forms needed to prepare and submit research grant applications under the program.

§ 3406.18 **Content of a research proposal.**

(a) **Proposal cover page.** (1) Form NIFA–712, “Higher Education Proposal Cover Page,” must be completed in its entirety. Note that providing a Social Security Number is voluntary, but is an integral part of the NIFA information system and will assist in the processing of the proposal.

(2) One copy of Form NIFA–712 must contain the pen-and-ink signatures of the principal investigator(s) and Authorized Organizational Representative for the applicant institution.

(3) The title of the research project shown on the “Higher Education Proposal Cover Page” must be brief (80-character maximum) yet represent the major thrust of the project. This information will be used by the Department to provide information to the Congress and other interested parties.

(4) In block 7. of Form NIFA–712, enter “Capacity Building Grants Program.”

(5) In block 8.a. of Form NIFA–712, enter “Research.” In block 8.b. identify the code of the targeted need area(s) as found on the reverse of the form. If a proposal focuses on multiple targeted need areas, enter each code associated with the project. In block 8.c. identify the major area(s) of emphasis as found on the reverse of the form. If a proposal focuses on multiple areas of emphasis, enter each code associated with the project; however, please limit your selection to three areas. This information will be used by the program staff for the proper assignment of proposals to reviewers.

(6) In block 9. of Form NIFA–712, indicate if the proposal is a complementary project proposal or joint project proposal as defined in §3406.2 of this part. If it is not a complementary project proposal or a joint project proposal, identify it as a regular proposal.

(7) In block 13. of Form NIFA–712, indicate if the proposal is a new, first-time submission or if the proposal is a resubmission of a proposal that has been submitted to, but not funded under the 1890 Institution Capacity Building Grants Program in a previous competition.

(b) **Table of contents.** For ease of locating information, each proposal must contain a detailed table of contents just after the Proposal Cover Page. The Table of Contents should include page numbers for each component of the proposal. Pagination should begin immediately following the summary documentation of USDA agency cooperation.

(c) **USDA agency cooperator.** To be considered for funding, each proposal must include documentation of cooperation with at least one USDA agency or office. If multiple agencies are involved as cooperators, documentation must be included from each agency. When documenting cooperative arrangements, the following guidelines should be used:

(1) A summary of the cooperative arrangements must immediately follow
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the Table of Contents. This summary should:

(i) Bear the signatures of the Agency Head (or his/her designated authorized representative) and the university project director;

(ii) Indicate the agency’s willingness to commit support for the project;

(iii) Identify the person(s) at the USDA agency who will serve as the liaison or technical contact for the project;

(iv) Describe the degree and nature of the USDA agency’s involvement in the proposed project, as outlined in §3406.6(a) of this part, including its role in:

(A) Identifying the need for the project;

(B) Developing a conceptual approach;

(C) Assisting with project design;

(D) Identifying and securing needed agency or other resources (e.g., personnel, grants/contracts; in-kind support, etc.);

(E) Developing the project budget;

(F) Promoting partnerships with other institutions to carry out the project;

(G) Helping the institution launch and manage the project;

(H) Providing technical assistance and expertise;

(I) Providing consultation through site visits, E-mail, conference calls, and faxes;

(J) Participating in project evaluation and dissemination of final project results; and

(K) Seeking other innovative ways to ensure the success of the project and advance the needs of the institution or the agency; and

(v) Describe the expected benefits of the partnership venture for the USDA agency and for the 1890 Institution.

(2) A detailed discussion of these partnership arrangements should be provided in the narrative portion of the proposal, as outlined in paragraph (d)(2)(iv)(C) of this section.

(3) Additional documentation, including letters of support or cooperation, may be provided in the Appendix.

(d) Project summary. (1) A Project Summary should immediately follow the summary documentation of USDA agency cooperation. The information provided in the Project Summary will be used by the program staff for a variety of purposes, including the proper assignment of proposals to peer reviewers and providing information to peer reviewers prior to the peer panel meeting. The name of the institution, the targeted need area(s), and the title of the proposal must be identified exactly as shown on the “Higher Education Proposal Cover Page.”

(2) If the proposal is a complementary project proposal, as defined in §3406.2 of this part, clearly state this fact and identify the other complementary project(s) by citing the name of the submitting institution, the title of the project, the principal investigator, and the grant number (if funded in a previous year) exactly as shown on the cover page of the complementary project so that appropriate consideration can be given to the interrelatedness of the proposals in the evaluation process.

(3) If the proposal is a joint project proposal, as defined in §3406.2 of this part, indicate such and identify the other participating institutions and the key person responsible for coordinating the project at each institution.

(4) The Project Summary should be a concise description of the proposed activity suitable for publication by the Department to inform the general public about awards under the program. The text should not exceed one page, single-spaced. The Project Summary should be a self-contained description of the activity which would result if the proposal is funded by USDA. It should include: The objective of the project, a synopsis of the plan of operation, a statement of how the project will enhance the capacity of the institution, a description of how the project will enhance research in the food and agricultural sciences, and a description of the partnership efforts between, and the expected benefits for, the USDA agency cooperators(s) and the 1890 Institution and the plans for disseminating project results. The Project Summary should be written so that a technically literate reader can evaluate the use of Federal funds in support of the project.
(e) Resubmission of a proposal—(1) Resubmission of previously unfunded proposals. (i) If the proposal has been submitted previously, but was not funded, such should be indicated in block 13. on Form NIFA–712, “Higher Education Proposal Cover Page,” and the following information should be included in the proposal:

(A) The fiscal year(s) in which the proposal was submitted previously;
(B) A summary of the peer reviewers’ comments; and
(C) How these comments have been addressed in the current proposal, including the page numbers in the current proposal where the peer reviewers’ comments have been addressed.

(ii) This information may be provided as a section of the proposal following the Project Summary and preceding the proposal narrative or it may be placed in the Appendix (see paragraph (j) of this section). In either case, the location of this information should be indicated in the Table of Contents, and the fact that the proposal is a resubmitted proposal should be stated in the proposal narrative. Further, when possible, the information should be presented in a tabular format. Applicants who choose to resubmit proposals that were previously submitted, but not funded, should note that resubmitted proposals must compete equally with newly submitted proposals. Submitting a proposal that has been revised based on a previous peer review panel’s critique of the proposal does not guarantee the success of the resubmitted proposal.

(ii) This information may be provided as a section of the proposal following the Project Summary and preceding the proposal narrative or it may be placed in the Appendix (see paragraph (j) of this section). In either case, the location of this information should be indicated in the Table of Contents, and the fact that the proposal is a resubmitted proposal should be stated in the proposal narrative. Further, when possible, the information should be presented in a tabular format. Applicants who choose to resubmit proposals that were previously submitted, but not funded, should note that resubmitted proposals must compete equally with newly submitted proposals. Submitting a proposal that has been revised based on a previous peer review panel’s critique of the proposal does not guarantee the success of the resubmitted proposal.

(2) Resubmission of previously funded proposals. Recognizing that capacity building is a long-term ongoing process, the 1890 Institution Capacity Building Grants Program is interested in funding subsequent phases of previously funded projects in order to build institutional capacity, and institutions are encouraged to build on a theme over several grant awards. However, proposals that are sequential continuations or new stages of previously funded Capacity Building Grants must compete with first-time proposals. Therefore, principal investigators should thoroughly demonstrate how the project proposed in the current application expands substantially upon a previously funded project (i.e., demonstrate how the new project will advance the former project to the next level of attainment or will achieve expanded goals). The proposal must also show the degree to which the new phase promotes innovativeness and creativity beyond the scope of the previously funded project. Please note that the 1890 Institution Capacity Building Grants Program is not designed to support activities that are essentially repetitive in nature over multiple grant awards. Principal investigators who have had their projects funded previously are discouraged from resubmitting relatively identical proposals for future funding.

(f) Narrative of a research proposal. The narrative portion of the proposal is limited to 20 pages in length. The one-page Project Summary is not included in the 20-page limitation. The narrative must be typed on one side of the page only, using a font no smaller than 12 point, and double-spaced. All margins must be at least one inch. All pages following the summary documentation of USDA agency cooperation must be paginated. It should be noted that peer reviewers will not be required to read beyond 20 pages of the narrative to evaluate the proposal. The narrative should contain the following sections:

(1) Significance of the problem—(1) Impact—(A) Identification of the problem or opportunity. Clearly identify the specific problem or opportunity to be addressed and present any research questions or hypotheses to be examined.

(B) Rationale. Provide a rationale for the proposed approach to the problem or opportunity and indicate the part that the proposed project will play in advancing food and agricultural research and knowledge. Discuss how the project will be of value and importance at the State, regional, national, or international level(s). Also discuss how the benefits to be derived from the project will transcend the proposing institution or the grant period.

(C) Literature review. Include a comprehensive summary of the pertinent scientific literature. Citations may be footnoted to a bibliography in the Appendix. Citations should be accurate, complete, and adhere to an acceptable...
journal format. Explain how such knowledge (or previous findings) is related to the proposed project.

(D) Current research and related activities. Describe the relevancy of the proposed project to current research or significant research support activities at the proposing institution and any other institution participating in the project, including research which may be as yet unpublished.

(ii) Continuation plans. Discuss the likelihood or plans for continuation or expansion of the project beyond USDA support. Discuss, as applicable, how the institution’s long-range budget, and administrative and academic plans, provide for the realistic continuation or expansion of the line of research or research support activity undertaken by this project after the end of the grant period. For example, are there plans for securing non-Federal support for the project? Is there any potential for income from patents, technology transfer or university-business enterprises resulting from the project? Also discuss the probabilities of the proposed activity or line of inquiry being pursued by researchers at other institutions.

(iii) Innovation. Describe the degree to which the proposal reflects an innovative or non-traditional approach to a food and agricultural research initiative.

(iv) Products and results. Explain the kinds of products and results expected and their impact on strengthening food and agricultural sciences higher education in the United States, including attracting academically outstanding students or increasing the ethnic, racial, and gender diversity of the Nation’s food and agricultural scientific and professional expertise base.

(2) Overall approach and cooperative linkages—(i) Approach—(A) Objectives. Cite and discuss the specific objectives to be accomplished under the project.

(B) Plan of operation. The procedures or methodologies to be applied to the proposed project should be explicitly stated. This section should include, but not necessarily be limited to a description of:

(1) The proposed investigations, experiments, or research support enhancements in the sequence in which they will be carried out.
(2) Procedures and techniques to be employed, including their feasibility.
(3) Means by which data will be collected and analyzed.
(4) Pitfalls that might be encountered.
(5) Limitations to proposed procedures.

(C) Timetable. Provide a timetable for execution of the project. Identify all important research milestones and dates as they relate to project start-up, execution, dissemination, evaluation, and close-out.

(ii) Evaluation plans. (A) Provide a plan for evaluating the accomplishment of stated objectives during the conduct of the project. Indicate the criteria, and corresponding weight of each, to be used in the evaluation process, describe any performance data to be collected and analyzed, and explain the methodologies that will be used to determine the extent to which the needs underlying the project are being met.

(B) Provide a plan for evaluating the effectiveness of the end results upon conclusion of the project. Include the same kinds of information requested in paragraph (f)(2)(ii)(A) of this section.

(iii) Dissemination plans. Provide plans for disseminating project results and products including the possibilities for publications. Identify target audiences and explain methods of communication.

(iv) Partnerships and collaborative efforts. (A) Explain how the project will maximize partnership ventures and collaborative efforts to strengthen food and agricultural sciences higher education (e.g., involvement of faculty in related disciplines at the same institution, joint projects with other colleges or universities, or cooperative activities with business or industry). Also explain how it will stimulate academia, the States, or the private sector to join with the Federal partner in enhancing food and agricultural sciences higher education.

(B) Provide evidence, via letters from the parties involved, that arrangements necessary for collaborative partnerships or joint initiatives have been
discussed and realistically can be expected to come to fruition, or actually have been finalized contingent on an award under this program. Letters must be signed by an official who has the authority to commit the resources of the organization. Such letters should be referenced in the plan of operation, but the actual letters should be included in the Appendix section of the proposal. Any potential conflict(s) of interest that might result from the proposed collaborative arrangements must be discussed in detail. Proposals which indicate joint projects with other institutions must state which proposer is to receive any resulting grant award, since only one submitting institution can be the recipient of a project grant under one proposal.

(C) Explain how the project will create a new or enhance an existing partnership between the USDA agency cooperator(s) and the 1890 Institution(s). This section should expand upon the summary information provided in the documentation of USDA agency cooperation section, as outlined in paragraph (c)(1) of this section. This is particularly important because the focal point of attention in the peer review process is the proposal narrative. Therefore, a comprehensive discussion of the partnership effort between USDA and the 1890 Institution should be provided.

(3) Institutional capacity building—(i) Institutional enhancement. Explain how the proposed project will strengthen the research capacity, as defined in §3406.2 of this part, of the applicant institution and, if applicable, any other institutions assuming a major role in the conduct of the project. For example, describe how the proposed project is intended to strengthen the institution’s research infrastructure by advancing the expertise of the current faculty in the natural or social sciences; providing a better research environment, state-of-the-art equipment, or supplies; enhancing library collections; or enabling the institution to provide efficacious organizational structures and reward systems to attract and retain first-rate research faculty and students—particularly those from underrepresented groups.

(ii) Institutional commitment. (A) Discuss the institution’s commitment to the project and its successful completion. Provide, as relevant, appropriate documentation in the Appendix. Substantiate that the institution attributes a high priority to the project.

(B) Discuss how the project will contribute to the achievement of the institution’s long-term (five- to ten-year) goals and how the project will help satisfy the institution’s high-priority objectives. Show how this project is linked to and supported by the institution’s strategic plan.

(C) Discuss the commitment of institutional resources to the project. Show that the institutional resources to be made available to the project will be adequate, when combined with the support requested from USDA, to carry out the activities of the project and represent a sound commitment by the institution. Discuss institutional facilities, equipment, computer services, and other appropriate resources available to the project.

(g) Key personnel. A Form NIFA–710, “Summary Vita—Research Proposal,” should be included for each key person associated with the project.

(h) Budget and cost-effectiveness—(1) Budget form. (i) Prepare Form NIFA–713, “Higher Education Budget,” in accordance with instructions provided with the form. Proposals may request support for a period to be identified in each year’s program announcement. A budget form is required for each year of requested support. In addition, a summary budget is required detailing the requested total support for the overall project period. Form NIFA–713 may be reproduced as needed by proposers.

Funds may be requested under any of the categories listed on the form, provided that the item or service for which support is requested is allowable under the authorizing legislation, the applicable Federal cost principles, the administrative provisions in this part, and can be justified as necessary for the successful conduct of the proposed project.

(ii) The approved negotiated research rate or the maximum rate allowed by law should be used when computing indirect costs. If a reduced rate of indirect costs is voluntarily requested from
USDA, the remaining allowable indirect costs may be used as matching funds. In the event that a proposal reflects an incorrect indirect cost rate and is recommended for funding, the correct rate will be applied to the approved budget in the grant award.

(2) **Matching funds.** When documenting matching contributions, use the following guidelines:

(i) When preparing the column entitled “Applicant Contributions to Matching Funds” of Form NIFA–713, only those costs to be contributed by the applicant for the purposes of matching should be shown. The total amount of this column should be indicated in item M.

(ii) In item N of Form NIFA–713, show a total dollar amount for Cash Contributions from both the applicant and any third parties; also show a total dollar amount (based on current fair market value) for Non-cash Contributions from both the applicant and any third parties.

(iii) To qualify for any incentive benefits stemming from matching support or to satisfy any cost sharing requirements, proposals must include written verification of any actual commitments of matching support (including both cash and non-cash contributions) from third parties. Written verification means—

(A) For any third party cash contributions, a separate pledge agreement for each donation, signed by the authorized organizational representative(s) of the donor organization (or by the donor if the gift is from an individual) and the applicant institution, which must include:

(1) The name, address, and telephone number of the donor;

(2) The name of the applicant institution;

(3) The title of the project for which the donation is made;

(4) The dollar amount of the cash donation; and

(5) A statement that the donor will pay the cash contribution during the grant period;

(B) For any third party non-cash contributions, a separate pledge agreement for each contribution, signed by the authorized organizational representative(s) of the donor organization (or by the donor if the gift is from an individual) and the applicant institution, which must include:

(1) The name, address, and telephone number of the donor;

(2) The name of the applicant institution;

(3) The title of the project for which the donation is made;

(4) A good faith estimate of the current fair market value of the non-cash contribution; and

(5) A statement that the donor will make the contribution during the grant period.

(iv) All pledge agreements must be placed in the proposal immediately following Form NIFA–713. The sources and amounts of all matching support from outside the applicant institution should be summarized in the Budget Narrative section of the proposal.

(v) Applicants should refer to OMB Circulars A–110, “Uniform Administrative Requirements for Grants and Agreements With Institutions of Higher Education, Hospitals and Other Non-profit Organizations,” and A–21, “Cost Principles for Educational Institutions,” for further guidance and other requirements relating to matching and allowable costs.

(3) **Chart on shared budget for joint project proposal.** (i) For a joint project proposal, a plan must be provided indicating how funds will be distributed to the participating institutions. The budget section of a joint project proposal should include a chart indicating:

(A) The names of the participating institutions;

(B) the amount of funds to be disbursed to those institutions; and

(C) the way in which such funds will be used in accordance with items A through L of Form NIFA–713, “Higher Education Budget.”

(ii) If a proposal is not for a joint project, such a chart is not required.

(4) **Budget narrative.** (i) Discuss how the budget specifically supports the proposed project activities. Explain how each budget item (such as salaries and wages for professional and technical staff, student workers, travel, equipment, etc.) is essential to achieving project objectives.

(ii) Justify that the total budget, including funds requested from USDA...
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and any matching support provided, will be adequate to carry out the activities of the project. Provide a summary of sources and amounts of all third party matching support.

(iii) Justify the project’s cost-effectiveness. Show how the project maximizes the use of limited resources, optimizes research value for the dollar, achieves economies of scale, or leverages additional funds. For example, discuss how the project has the potential to generate a critical mass of expertise and activity focused on a high-priority research initiative(s) or promote coalition building that could lead to future ventures.

(iv) Include the percentage of time key personnel will work on the project, both during the academic year and summer. When salaries of university project personnel will be paid by a combination of USDA and institutional funds, the total compensation must not exceed the faculty member’s regular annual compensation. In addition, the total commitment of time devoted to the project, when combined with time for teaching and research duties, other sponsored agreements, and other employment obligations to the institution, must not exceed 100 percent of the normal workload for which the employee is compensated, in accordance with established university policies and applicable Federal cost principles.

(v) If the proposal addresses more than one targeted need area, estimate the proportion of the funds requested from USDA that will support each respective targeted need area.

(i) **Current and pending support.** Each applicant must complete Form NIFA–663, “Current and Pending Support,” identifying any other current public- or private-sponsored projects, in addition to the proposed project, to which key personnel listed in the proposal under consideration have committed portions of their time, whether or not salary support for the person(s) involved is included in the budgets of the various projects. This information should also be provided for any pending proposals which are currently being considered by, or which will be submitted in the near future to, other possible sponsors, including other USDA programs or agencies. Concurrent submission of identical or similar projects to other possible sponsors will not prejudice the review or evaluation of a project under this program.

(j) **Appendix.** Each project narrative is expected to be complete in itself and to meet the 20-page limitation. Inclusion of material in the Appendix should not be used to circumvent the 20-page limitation of the proposal narrative. However, in those instances where inclusion of supplemental information is necessary to guarantee the peer review panel’s complete understanding of a proposal or to illustrate the integrity of the design or a main thesis of the proposal, such information may be included in the Appendix. Examples of supplemental material are photographs, journal reprints, brochures and other pertinent materials which are deemed to be illustrative of major points in the narrative but unsuitable for inclusion in the proposal narrative itself. Information on previously submitted proposals may also be presented in the Appendix (refer to paragraph (e) of this section). When possible, information in the Appendix should be presented in tabular format. A complete set of the Appendix material must be attached to each copy of the grant application submitted. The Appendix must be identified with the title of the project as it appears on Form NIFA–712 of the proposal and the name(s) of the principal investigator(s). The Appendix must be referenced in the proposal narrative.

(k) **Special considerations.** A number of situations encountered in the conduct of research require special information or supporting documentation before funding can be approved for the project. If such situations are anticipated, proposals must so indicate via completion of Form NIFA–662, “Assurance Statement(s).” It is expected that some applications submitted in response to these guidelines will involve the following:

(1) **Recombinant DNA research.** All key personnel identified in the proposal and all endorsing officials of the proposing organization are required to comply with the guidelines established by the National Institutes of Health entitled “Guidelines for Research Involving Recombinant DNA Molecules,” as revised.
All applicants proposing to use recombinant DNA techniques must so indicate by checking the appropriate box on Form NIFA–712, “Higher Education Proposal Cover Page,” and by completing the applicable section of Form NIFA–662. In the event a project involving recombinant DNA or RNA molecules results in a grant award, the Institutional Biosafety Committee of the proposing institution must approve the research plan before NIFA will release grant funds.

(2) Protection of human subjects. Responsibility for safeguarding the rights and welfare of human subjects used in any grant project supported with funds provided by NIFA rests with the performing organization. Guidance on this is contained in Department of Agriculture regulations under 7 CFR part 1c. All applicants who propose to use human subjects for experimental purposes must indicate their intention by checking the appropriate block on Form NIFA–712, “Higher Education Proposal Cover Page,” and by completing the applicable portion of Form NIFA–662. In the event a project involving human subjects results in a grant award, the Institutional Review Board of the proposing institution must approve the research plan before NIFA will release grant funds.

(3) Laboratory animal care. Responsibility for the humane care and treatment of laboratory animals used in any grant project supported with funds provided by NIFA rests with the performing organization. All key project personnel and all endorsing officials of the proposing organization are required to comply with the Animal Welfare Act of 1966, as amended (7 U.S.C. 2131 et seq.), and the regulations promulgated thereunder by the Secretary of Agriculture in 9 CFR parts 1, 2, 3, and 4 pertaining to the care, handling, and treatment of laboratory animals. All applicants proposing a project which involves the use of laboratory animals must indicate their intention by checking the appropriate block on Form NIFA–712, “Higher Education Proposal Cover Page,” and by completing the appropriate portion of Form NIFA–662. In the event a project involving the use of living vertebrate animals results in a grant award, the Institutional Animal Care and Use Committee of the proposing institution must approve the research plan before NIFA will release grant funds.

(1) Compliance with the National Environmental Policy Act (NEPA). As outlined in 7 CFR part 3407 (the Agriculture regulations implementing NEPA), the environmental data for any proposed project is to be provided to NIFA so that NIFA may determine whether any further action is needed. In some cases, however, the preparation of environmental data may not be required. Certain categories of actions are excluded from the requirements of NEPA.

(1) NEPA determination. In order for NIFA to determine whether any further action is needed with respect to NEPA, pertinent information regarding the possible environmental impacts of a particular project is necessary; therefore, Form NIFA–1234, “NEPA Exclusions Form,” must be included in the proposal indicating whether the applicant is of the opinion that the project falls within a categorical exclusion and the reasons therefor. If it is the applicant’s opinion that the proposed project falls within the categorical exclusions, the specific exclusion must be identified. Form NIFA–1234 and any supporting documentation should be placed at the end of the proposal and identified in the Table of Contents.

(2) Exceptions to categorical exclusions.

Even though a project may fall within the categorical exclusions, NIFA may determine that an Environmental Assessment or an Environmental Impact Statement is necessary for an activity, if substantial controversy on environmental grounds exists or if other extraordinary conditions or circumstances are present which may cause such activity to have a significant environmental effect.