

NSF 17-025

Frequently Asked Questions (FAQs) for NSF 16-610, Smart & Connected Communities (S&CC)

The following set of questions and answers refer to FAQs about the Smart & Connected Communities (S&CC) program solicitation (NSF 16-610). They are not intended to be a modification of the solicitation.

Before preparing S&CC proposals, please read the S&CC solicitation and refer to general information about NSF proposal submission including the Proposal & Award Policies & Procedures Guide (PAPPG) submission guidelines available at https://www.nsf.gov/publications/pub_summ.jsp?ods_key=papp.

FAQs about FastLane, the NSF site for submitting proposals, can be found at https://www.fastlane.nsf.gov/NSFHelp/flashhelp/fastlane/FastLane_Help/fastlane_help.htm#fastlane_faqs_introduction.htm.

Please note, **Preliminary Proposals** submitted in response to this solicitation should be submitted in accordance with the NSF Proposal & Award Policies & Procedures Guide (PAPPG) (NSF 16-1). **Full Proposals** submitted in response to this solicitation should be submitted in accordance with the revised NSF PAPPG (NSF 17-1), which is effective for proposals submitted, or due, on or after January 30, 2017.

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1. What is the Smart and Connected Communities (S&CC) solicitation number?

The S&CC solicitation number is NSF 16-610.

2. For the purpose of this solicitation, how is a "community" defined and how many communities are required for partnership?

For the purpose of this solicitation, communities are physical, geographically-defined entities, such as towns, cities, or incorporated rural areas, often consisting of various populations, with a governance structure and an ability to engage in meaningful ways with the proposed research.

Proposers must define the community and reflect how the community will engage in meaningful ways with the proposed activities.

Participation of at least one community is required. It is expected that this participation will be undertaken through collaboration with one or more community partners, as defined below.

3. What is a community partner, and who might be a community partner for my research?

Community partners are those collaborators who are directly linked to the community (as defined above).

As described in the solicitation, examples of community partner organizations and anchor institutions include but are not limited to governments including government departments, schools, libraries, health and social service providers, non-profits, cultural organizations, and businesses.

4. What is meant by community engagement and what are some examples of it?

Community engagement refers broadly to activities undertaken with a community that contribute to the proposed work.

As outlined in the solicitation, examples of community engagement include but are not limited to the following:

- Refining the conceptual framework of the research or defining community member needs and concerns;
- Providing (access to) facilities, resources, and/or expertise that are instrumental to enhancing community functioning:
- Identifying or supplying data and enabling the interface of that data with the proposed program of work;
- Conceiving of or supporting research demonstrations, experimentation, proofs of concept and/or pilot projects by enabling use of infrastructure or community services;
- Participating in "living labs" where science, technology, and engineering advances are staged iteratively through pilot studies in communities;
- Assisting in the planning or evaluation of the proposed work, including helping to define or create metrics and support data collection and/or interpretation within the community context;
- Engaging or helping to define, discover, or contact other potential stakeholders; and
- Creating and/or utilizing knowledge-building communities, formal or informal educational environments, and/or communities of practice for a future diverse and innovative workforce.

5. Can community partners be funded through this solicitation? If so, how may this be done?

Funding is allowable for community partners pursuant to the guidelines in the PAPPG. There are multiple funding mechanisms depending upon the nature of the engagement.

6. When must a letter of collaboration be included in the proposal?

Please see PAPPG Chapter II.C.2.d(iv) for information regarding letters of collaboration from unfunded collaborators. A letter of collaboration, for example, may be used to demonstrate community engagement from unfunded partners. In addition, that engagement should be detailed in the proposal as outlined in the solicitation.

7. The solicitation states, "To meet the multidisciplinary criterion, proposals must meaningfully integrate across both social and technological research dimensions." What constitutes a multidisciplinary team and how can multidisciplinarity be demonstrated in the proposal?

The proposal should establish the team's competency spanning the areas of social and technological research as defined in the solicitation. This does not explicitly require a given PI to hold a degree in a specific discipline or an appointment in a specific academic department; however, relevant expertise must be substantiated (e.g., in the Biographical Sketch and in the "Integration and Management Plan," as described below).

The "Integration and Management Plan" Supplementary Document must contain an *Integration and Multi-Disciplinary Context* section. As detailed in the solicitation, this section should characterize the multidisciplinary, holistic nature of the approach by identifying the disciplines involved in the research and how the proposed research elements, including social and technological dimensions, are integrated together.

8. How is the S&CC solicitation distinguished from other solicitations?

A central distinguishing feature of the S&CC solicitation is the requirement to incorporate community engagement and integrative research, whereas these elements are not required (although may be present) in several other programs [e.g., Cyber-Physical Systems (CPS), Critical Resilient Interdependent Infrastructure Systems (CRISP), Secure and Trustworthy Cyberspace (SaTC), Innovations at the Nexus of Food, Energy, and Water Systems (INFEWS), Cyber-Human Systems (CHS), and NSF core programs].

9. Can I propose a single, standalone conference in response to this solicitation?

Proposals for single, standalone conferences (also known as workshops) will not be considered through this solicitation. However, conferences may be an element of a proposal submitted in response to this solicitation [e.g., conferences may be a part of S&CC Research Coordination Networks (RCNs) or S&CC Planning Grants]. Standalone conference proposals may be submitted by following the guidance in the PAPPG.

10. Are international collaborations allowed as part of a proposal responding to this solicitation?

U.S. institutions may propose collaborative work with partners in foreign countries. Proposals that have anticipated and clearly-defined international dimensions/components should ensure that the collaboration is compelling, enhancing intellectual merit and/or broader impacts.

Please note that NSF generally provides support only to U.S.-based organizations and will thus typically consider

proposals that involve international collaborations provided support is requested only for the U.S. portion of the effort.

11. Who should I contact with questions about my proposal?

Please contact any of the program officers listed on the solicitation. It is recommended that this contact happen well in advance of the proposal deadline.

12. In the context of the solicitation, can a university or university system itself be a smart and connected community or does it have to be working with a municipality?

A university or university system has to be working with a well-defined community, as described in the solicitation and above. Neither a university nor a university system in itself represents the type of community envisioned for the solicitation. However, the municipality surrounding the university, if engaged, is an example of a community envisioned in the solicitation.

ALL TRACKS: PROPOSALS

13. Are there eligibility restrictions on the number of proposals in which a PI, co-PI, or senior personnel can participate?

Yes. Eligibility restrictions may be found in the Section IV of the solicitation.

14. Who are Senior Personnel?

Senior Personnel are defined in PAPPG Exhibit II-7, Definitions of Categories of Personnel.

15. Does every proposal need to address the integrative research, research-capacity building, and community engagement components of the solicitation?

Yes. As detailed in the solicitation, all successful S&CC projects are expected to pursue research and research capacity-building activities that integrate multiple disciplinary perspectives and undertake meaningful community engagement, and to include appropriate and robust evaluation plans for assessing activities and outcomes.

In each category successful proposals will reflect integrative, multidisciplinary research, tangible research capacity-building, and meaningful community engagement, the nature of which will vary by the proposal category.

16. What are the requirements for multi-institution collaborative proposal submissions?

As stated in the solicitation, proposals involving multiple institutions, must be submitted by one lead institution with funding for all other participating institutions made through subawards. Proposals submitted as separately submitted collaborative proposals will be returned without review. See the NSF PAPPG for additional information.

17. Are there any special considerations for work involving human subjects?

As detailed in the solicitation, proposals involving human subjects should include a supplementary document of no more than two pages in length summarizing potential risks to human subjects.

18. What is the duration of awards?

Award duration is dependent upon the project category and scope of work proposed, as outlined below:

- Integrative Research Grants (IRGs) Track 1: 3 to 5 years;
- Integrative Research Grants (IRGs) Track 2: 3 or 4 years;
- Research Coordination Networks (RCNs): 4 or 5 years; and
- Planning Grants: 1 year.

19. What are the required elements of preliminary and full proposals?

Refer to the solicitation for complete details regarding preliminary and full proposal requirements.

20. Can National Laboratories participate in a proposal?

NSF does not normally support research or education activities by scientists, engineers or educators employed by Federal agencies or Federally-Funded Research and Development Centers (FFRDCs). NSF recommends reviewing the PAPPG for specific requirements and then contacting the cognizant Program Officers for the S&CC program solicitation.

21. In what role might community representatives serve on the proposal?

It is up to the PI to determine the role of the community representative(s) (e.g., co-PI, senior personnel, other personnel, or other means to demonstrate engagement).

22. Is there a limit to the number of co-Pls on a proposal?

As stated in PAPPG Part I, Chapter II, a proposal may identify up to four additional co-Pls.

INTEGRATIVE RESEARCH GRANTS (IRGs) TRACKS 1 AND 2: PRELIMINARY PROPOSALS

23. Is a preliminary proposal required for an IRG, including either Track 1 or Track 2?

Yes. Preliminary proposals are required for all IRGs, including Tracks 1 and 2.

24. Are Biographical Sketches required for preliminary proposals?

No. Biographical Sketches are not required for preliminary proposals.

25. When will the outcome of the preliminary proposal review be communicated, and what feedback will be provided?

Notification is anticipated before the end of December 2016. Notification will be in the form of a decision to encourage or discourage submission of a full proposal, and may also address budget concerns. This decision is non-binding. A decision to encourage or discourage submission of a full proposal will not affect whether an award will eventually be made.

26. Is there a limit on the number of preliminary proposals?

The limit on the number of Integrative Research Grants (IRG) Track 1 and 2 proposals per PI, co-PI, or other senior personnel is one; therefore, we anticipate prospective PIs to submit one corresponding preliminary proposal.

27. Can letters of collaboration be submitted as part of an IRG Track 1 or 2 preliminary proposal?

As stated in the S&CC program solicitation (see Section V.A, Proposal Preparation Instructions), no letters of collaboration are to be included in the submission of a preliminary proposal.

INTEGRATIVE RESEARCH GRANTS (IRGs) TRACKS 1 AND 2: FULL PROPOSALS

28. Can an IRG full proposal be submitted if a preliminary proposal is not submitted?

No. A full proposal can only be submitted if a preliminary proposal is received by the deadline specified in the solicitation (November 30, 2016).

29. Can project personnel be changed after submission of the preliminary proposal and before submission of the full proposal?

The following restrictions on changes in personnel apply: the PI cannot be changed once the preliminary proposal has been submitted; other personnel (co-PIs, senior personnel, etc.) may be changed.

30. Can the title and scope of a full IRG proposal differ from that of the corresponding preliminary proposal?

We anticipate the topic, scope and direction of the full proposal to be the same as the preliminary proposal, but details may differ or change. The title should convey the same topic, scope and direction but is not required to be exactly the same.

31. What is the difference between IRG Track 1 and 2?

Track 1 and 2 proposals are distinguished by the size of the research team as well as the scope and duration of the proposed activities. For a given proposal, rationale should be included explaining why the corresponding budget is required to carry out the proposed work.

RESEARCH COORDINATION NETWORK (RCN): PROPOSALS

32. What is an S&CC RCN?

As described in the solicitation, S&CC RCN awards support the establishment of a network of multidisciplinary researchers and others to communicate and coordinate their research, training, and educational activities across disciplinary, organizational, and geographical boundaries to collectively and significantly advance S&CC research or create new S&CC research directions.

Although an S&CC RCN should support neither planning nor conduct of individual research projects, it should engage in activities that will facilitate future fundamental research across scientific communities. More information about the RCN concept and mechanism can be found at NSF 15-527.

33. How does an S&CC RCN differ from a Planning Grant?

As stated in the solicitation, the goal of an S&CC RCN is to nurture and grow the S&CC research and education ecosystem, cultivate new research directions in this area and/or otherwise advance the field through communication and sharing of ideas. In contrast, the goal of an S&CC Planning Grant is to develop an S&CC research concept, by building multidisciplinary research teams that engage community stakeholders.

34. Is a preliminary proposal required for an S&CC RCN grant?

No, a preliminary proposal is not required for an S&CC RCN.

35. Are there any final recommendations for preparing to submit a preliminary proposal or full proposal?

All prospective PIs are encouraged to carefully read the S&CC solicitation. If you have questions, please review the above FAQs. If your questions are not answered by the FAQs, please contact a program officer listed in the solicitation or send an email to sccquestions@nsf.gov.

36. Can you provide examples of successful RCN?

You can view a list of successful awards made through the RCN program, including links to award abstracts, on the NSF Awards database.

PLANNING GRANTS: PROPOSALS

37. What is a Planning Grant?

As described in the solicitation, Planning Grants are supported in order to build multidisciplinary research teams that will engage community stakeholders to develop a holistically integrated fundamental S&CC research concept. Planning Grants may provide a foundation for future collaborative research.

38. Is a preliminary proposal required for a Planning Grant?

No, a preliminary proposal is not required for a Planning Grant.

39. Is there a different indirect cost rate for Planning Grants compared to Integrative Research Grants and Research Coordination Networks?

For a given submitting institution, the indirect cost rate is unchanged regardless of grant type (i.e., Integrative Research Grant, Research Coordination Network, Planning Grant).