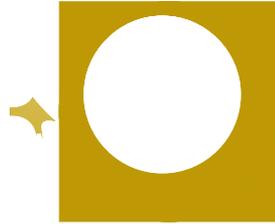


Smart and Connected Communities: CPS PI Meeting

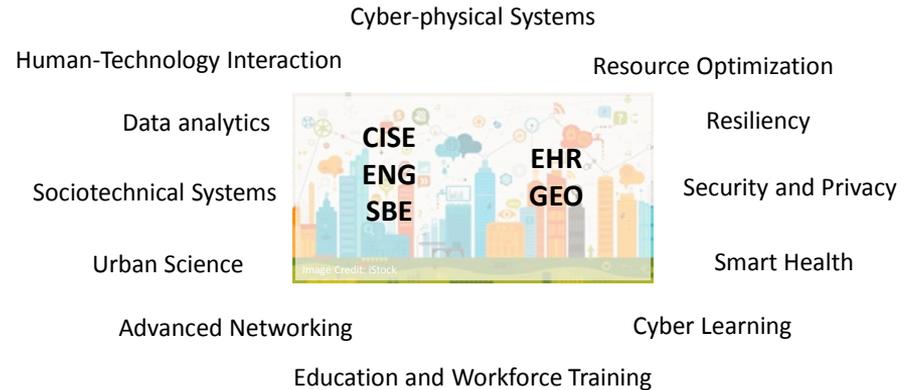


**National Science Foundation
October 2016**

History of NSF Investments in Smart and Connected Communities

- S&CC DCL
- Cyber Physical Systems
- US Ignite
- Global Cities Team Challenge
- Big Data & Big Data Spokes
- Smart and Connected Health
- Partnerships for Innovation
- Cyberlearning

NSF Investments Span Disciplines & Research Areas for S&CC



S&CC At a Glance

- **Goal:** To pursue research and research capacity-building activities that integrate multiple disciplinary perspectives and undertake meaningful community engagement
- **Components:** Integrative Research, Research Capacity-Building, Community Engagement
- **Total funding:** \$18.5M across 18-29 awards, subject to the availability of funds
- **Multi-directorate:** CISE, ENG, SBE, EHR, GEO
- **Who may submit** – Academic, non-profit, for profit, state and local governments, potential for work with international partners
- **Read the solicitation carefully** ([NSF 16-610](#)) and visit www.nsf.gov/scc for more info about NSF's investments

| Award Category | Preliminary Proposal Required/Deadline | Proposal Deadline |
|--|--|-------------------|
| Integrative Research Grants Track 1: 3-5 years; up to \$5M | Yes; 11/30/2016 | 2/16/17 |
| Integrative Research Grants Track 2: 3-4 years; up to \$1M | Yes; 11/30/2016 | 2/16/17 |
| Research Coordination Network: up to 5 years; up to \$500k | No; n/a | 2/16/17 |
| Planning Grants: 1 year; up to \$100k | No; n/a | 2/16/17 |

S&CC Award Information

- Anticipated Funding: \$18,500,000
- Estimated Number of Awards: 18-29
- The number of awards in each category will be dependent on the overall mix of proposals and the degree to which they meet the solicitation goals, NSF Merit Review Criteria and Solicitation Specific Review Criteria.
- NSF anticipates up to approximately:
 - One to three Integrative Research Grants (IRG) Track 1 awards;
 - Five to eight Integrative Research Grants (IRG) Track 2 awards;
 - Two to three Research Coordination Networks (RCN) awards; and
 - 10 to 15 Planning Grants.
- Note: Future program commitments will depend on the availability of funds.

S&CC Component: Community Engagement

- Essential component of both integrative research and research capacity-building.
- Refers to substantive interaction with individuals, institutions, and other organizations in target communities.
- Investigators and community partners are encouraged to work closely to develop and evaluate creative approaches to achieving meaningful engagement for mutual benefit.

S&CC Overview

- **What are communities?**

- Physical, geographically-defined entities, such as towns, cities, or incorporated rural areas;
- Diverse and varied populations;
- Governance structure; and
- Ability to engage in meaningful ways with the proposed research.

- **Proposals must integrate across both social and technological research dimensions.**

- Social, Behavioral, and Economic Sciences (SBE) and/or Education and Human Resources portfolios (EHR); with
- Computer and Information Science and Engineering (CISE) and/or Engineering (ENG).
- May also include other NSF Directorates, e.g., Geosciences (GEO).

See the solicitation and FAQ for further details.

S&CC Solicitation: Proposal Categories

- **S&CC Integrative Research Grants (IRGs) Tracks 1 and 2**
 - To support the **conduct of fundamental, multidisciplinary, integrative research** and research capacity building
 - Preliminary proposal required (due November 30)
- **S&CC Research Coordination Networks (RCNs)**
 - To establish a network of multidisciplinary researchers and others to advance S&CC research through **active exchange of ideas, development of fundamental research directions**, and other approaches
 - Four or five years of support at a level not to exceed \$500,000, the total budget
- **S&CC Planning Grants**
 - To stimulate research capacity through multidisciplinary **team-building** and the development of high-impact, fundamental **research concepts**
 - One year of support at a level not to exceed \$100,000, total budget

S&CC Component: Research Capacity-Building

- Goal is to develop and attract research talent to address S&CC integrative research challenges through training, collaborations, networks, seminars, or other approaches.
- Includes activities that further develop the interdisciplinary teams and team members that can contribute to S&CC research and applications.
 - Organized around strongly multidisciplinary, integrative theme(s), and with close community engagement.

S&CC: Proposal Preparation Instructions- Preliminary Proposals - Due Nov 30

- Preliminary proposals are **REQUIRED ONLY** for S&CC Integrative Research Grants (IRG) Tracks 1 and 2.
 - **Must be submitted via the NSF Fastlane system.**
- Preliminary Proposals submitted in response to this solicitation should be submitted in accordance with the NSF *PAPPG* ([NSF 16-1](#)), and follow the instructions in this solicitation.
- Preliminary proposals should consist of four elements as follows; no other sections are permitted and page limitations will be strictly enforced:
 - Cover Sheet (1 page)
 - “S&CC-IRG Preliminary Proposal Track (1 or 2)”, followed by a colon, and the project title.
 - Project Summary (limited to 1 page)
 - Overview, Intellectual Merit, Broader Impacts.
 - Project Description (limited to 4 pages)
 - Vision and Goals, Integrative Research Approach, Research Capacity-Building, Integration and Multi-Disciplinary Context, Management, and Budget and Subawardees.
 - Project Personnel and Partner Institutions (limited to 1 page)

S&CC: Key Takeaways

1. This solicitation supports use-inspired **fundamental research**.
2. A critical requirement and distinguishing feature of this solicitation is **community engagement** – see solicitation for details.
3. Who may **submit**:
 - Universities and Colleges, non-profits, for-profit organizations, state and local governments, etc. in compliance with NSF *PAPPG*;
 - U.S. institutions may propose collaborative work with partners in foreign countries;
 - The number of proposals per PI or Co-PI is limited.
4. Multi-institution proposals must be submitted by **one lead institution using subawards** for funding all other participating institutions.
5. You **cannot** submit a full IRG proposal unless you have submitted a pre-proposal

As always --- Read the solicitation!!

S&CC Solicitation: Program Contacts

| Point of Contact | Email | Telephone |
|--|--|----------------|
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Please contact SCCquestions@nsf.gov with additional questions.



Credit: Douglas Pancoast & Satya Mark Basu, School of the Art Institute of Chicago/Array of Things

Visit www.nsf.gov/scc or contact SCCquestions@nsf.gov.
FAQ are at <https://www.nsf.gov/pubs/2017/nsf17025/nsf17025.jsp>

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