



NATIONAL SCIENCE FOUNDATION
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NSF 19-032

Dear Colleague Letter: Conference Proposals on Concepts for Advancing Sustainable Urban Systems (SUS) Research Networks

December 18, 2019

In January 2018, NSF's Advisory Committee for Environmental Research and Education (ACERE) completed the report entitled "Sustainable Urban Systems: Articulating a Long-Term Convergence Research Agenda." This report is accessible at the following link: <https://www.nsf.gov/ere/ereweb/ac-ere/sustainable-urban-systems.pdf>.

With this DCL, NSF is calling for conference¹ proposals on "Concepts for Advancing Sustainable Urban Systems (SUS) Research Networks." The deadline for submission of these proposals is 5:00 PM submitter's local time, March 22, 2019. These conference proposals may be submitted at any time up to and including the deadline. The conference proposals are to be submitted via FastLane to the Environmental Sustainability program (PD 18-7643) in the Chemical, Bioengineering, Environmental, and Transport System Division (CBET) of NSF's Directorate for Engineering (ENG). Guidance on conference proposal content and the associated budget request is provided below.

NSF has had two earlier competitions on Research Networks. The most recent solicitation on Research Networks is accessible at the following link: https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf14534.

The two earlier competitions led to the establishment of five Research Networks, each funded for about \$12 million with an original duration of 4 to 5 years.

Preparation of conference proposals on "Concepts for Advancing Sustainable Urban Systems (SUS) Research Networks" should be guided, but not constrained, by the ACERE report and the most recent Research Networks solicitation (links to both are provided above). Conference proposals are expected to present promising ideas and visions for advancing SUS Large-Scale Research Networks beyond what is described in these two documents. In particular, it would be beneficial for conference proposals to include plans to identify activities that could catalyze strong industry-municipality-academia collaborations on use-inspired research that has high potential for significant societal and sustainability impacts. It would

also be advantageous for proposals to describe activities that will develop a deeper understanding of urban systems as integrated, social-ecological-technological systems and that will improve education related to SUS themes. As delineated in the ACERE report, "urban systems" include rural regions due to the systems interdependence of urban areas and rural regions. Likewise, for the ACERE SUS report, "sustainable" encompasses "resilient."

Proposers are encouraged to address themes of convergence science and engineering, and should bring together researchers, educators, and practitioners from academia, industry, municipalities, and nonprofit organizations. Conferences should draw participants from diverse sectors, some of which may typically not be represented, such as community members, humanities scholars, and artists. Proposers are also encouraged to consider geographical diversity as appropriate for the topic when describing specific strategies for recruiting conference participants. Proposals that explore innovative approaches to broadening participation and the incorporation of concepts and aspects of NSF Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science initiative (INCLUDES) into conference proceedings and outcome reports are also desired. Information on NSF INCLUDES is accessible at the following link: https://www.nsf.gov/news/special_reports/nsfincludes/index.jsp.

Conferences must be interdisciplinary. Conference proposals are to identify a Conference Organizing Committee composed of members drawn from multiple disciplines and organizations, and possibly including practitioners and stakeholders. An individual may appear on a maximum of 2 conference proposals in a senior role (PI, co-PI, or Senior Personnel). The Organizing Committee is to be engaged in formulating, executing, and reporting on the conference. Conferences may touch on themes of an international nature where potential benefits for the U.S. are made clear. Engagement of international researchers in conferences is welcome but NSF support is limited to U.S. participants. All conferences should be held in the U.S. unless explicit written authorization in advance is obtained from an NSF program officer.

Conference budget requests are not to exceed \$50,000. Up to 20 conferences may be supported by this DCL, contingent on proposal quality and availability of funds. Conference proposals are to follow guidance posted in NSF's *Proposal & Award Policies & Procedures Guide* (PAPPG) Chapter II.E.7, as provided at the following link: https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg.

Proposals are to include a tentative conference location and agenda. Conferences are to be held during the summer of 2019, and conference outcome reports should be made available to the research community no later than September 30, 2019. The Project Description of a given conference proposal should articulate the desired outcomes of the conference in terms of visions for large-scale research networks as articulated in the ACERE report. In addition to

listing the confirmed Organizing Committee, PIs should articulate how attendees will be selected — including strategies for recruiting a diverse set of participants. PIs are advised to consider the proposed conference date(s) in the context of the foreseeable calendar of potentially conflicting events (e.t., other conferences in the field) and the out-of-office challenges of the summer season. Proposals should go beyond a full schedule of talks in describing activities that clearly tie into the expected outcomes of the conference; typically, this would mean including interactive breakout sessions in the conference design.

Review of conference proposals will be competitive, evaluated internally at NSF by members of the NSF SUS Working Group.

For reference, NSF's efforts on SUS, S&CC (Smart & Connected Communities), CoPe (Coastlines and People), and LTER (Long Term Ecological Research) – Urban Ecology are compared and contrasted at the following link: <https://www.nsf.gov/ere/ereweb/urbansystems>.

Questions on conference proposal preparation may be submitted to either Bruce Hamilton at bhamilto@nsf.gov or Brandi Schottel at bschotte@nsf.gov.

Sincerely,

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¹ For purposes of this DCL, the term "conference" and "workshop" are synonymous for consistency with the language in the [Proposal & Award Policies & Procedures Guide](#).