



NATIONAL SCIENCE FOUNDATION  
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**NSF 20-024**

## Dear Colleague Letter: Supporting Transition of Research into Cities Through the U.S. ASEAN (Association of Southeast Asian Nations Cities) Smart Cities Partnership

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December 4, 2019

Dear Colleagues:

Through this Dear Colleague Letter (DCL), the National Science Foundation's (NSF) Directorate for Computer and Information Science and Engineering (CISE) together with the Department of State's Bureau of East Asia and Pacific Affairs wishes to notify the U.S. community of its intention to support the following high-impact research-transition funding requests aligned with the U.S.-ASEAN Smart Cities Partnership:

- Supplemental funding requests for active awards funded by the NSF [Cyber-Physical Systems](#) (CPS) and [Smart and Connected Communities](#) (S&CC) programs; and
- Early-concept Grants for Exploratory Research (EAGER) proposals exploring early-stage, untested, but potentially transformative, research ideas or approaches building on prior success in activities related to smart and connected communities and/or transitioning to practice research that is relevant to communities.

S&CC research integrates social and technological dimensions and is targeted at one or more communities. While S&CC research may eventually yield successful outcomes in the targeted communities, when initially applied to new environments and cultural contexts, new challenges will emerge. Such challenges introduce an element of high risk where the solutions have a corresponding potential for high impact in improving quality of life. Through this DCL, NSF is specifically announcing its intention to support such activities, where the "new environment" is within the ASEAN region. Supplemental funding requests and EAGER proposals will provide support for periods of up to two years and up to \$300,000.

Both supplemental funding requests and EAGER proposals are for PIs or project teams that have demonstrated success or potential for success in their outcomes to date. These activities must also involve high-impact research and advance smart and connected

communities in one of the ASEAN cities listed below, which are part of the [ASEAN Smart Cities Partnership](#).

Country	Eligible Cities
Brunei	Bandar Seri Begawan
Cambodia	Battambang, Phnom Penh, Siem Reap
Indonesia	Makassar, Banyuwangi, Jakarta
Laos	Luang Prabang, Vientiane
Malaysia	Johor Bahru, Kuala Lumpur, Kota Kinabalu, Kuching
Myanmar	Naypyitaw, Mandalay, Yangon
Philippines	Cebu City, Davao City, Manila
Singapore	Singapore
Thailand	Bangkok, Chonburi, Phuket
Vietnam	Da Nang, Hanoi, Ho Chi Minh City

For specific areas of interest within each of the above cities, see the ASEAN smart cities plans compiled by each city: <https://asean.org/storage/2019/02/ASCN-Consolidated-SCAPs.pdf>. Note that activities in Cambodia must involve education or the environment.

Proposals must discuss active transitioning of the research into one of the indicated ASEAN cities working together with representatives from that city. **Proposals that do not incorporate at least one of the eligible ASEAN cities will be returned without review.**

U.S.-based researchers are encouraged to collaborate with international researchers if the collaboration is essential for the facilitation and success of the proposed activities. In these cases, the budget may include subawards for these international researchers. The budget may also include subawards for community partners in the ASEAN city in which the activities are being proposed. Refer to the NSF [Proposal and Award Policies and Procedures Guide \(PAPPG\)](#) Chapters I.E.1 and I.E.6 for further details and guidance on subawards for international collaborators.

Research transition activities may include, but are not limited to, the following:

- Expanding pilot activities to an eligible ASEAN city—considering the unique character(s) and challenge(s) of that new community;
- Accelerated maturation or scale-up of the research technology readiness level, moving from subscale deployment to integration in operational systems in one or more application domains in an eligible ASEAN city, together with relevant transition partner(s);
- Partnering with industry as well as an eligible ASEAN city, to harden or commercialize the technology or approach emerging from the research project, for performance in a larger, real-world context.

It is strongly encouraged that any software developed as part of funded projects be released under an open source license listed by the Open Source Initiative (<http://www.opensource.org/>).

All supplemental funding requests and EAGER proposals may be subject to external review pursuant to the NSF merit review criteria of Intellectual Merit and Broader Impacts described in the NSF PAPPG. Proposals must also address the following items as part of the summary of the proposed work and the justification of the need for funds:

- Summary of the current or previously funded award and/or activities that provides the foundation for the proposed activities; the vision and goals from that prior award and/or activities, spanning intellectual merit and broader impacts; and key research accomplishments from that prior award and/or activities;
- Successes and limitations of the award and/or activities described above, providing compelling justification that the technology readiness level is sufficient for transition into one of the ASEAN cities listed above;
- A work plan describing the proposed research activities, along with the goals, milestones, and predicted outcomes; how the activities will expand the current project's

research and development activities; how these activities will address the needed capabilities and lead to potential impact; the appropriateness of the funding request to the proposed scope and scale of the work; and the team's approach for transitioning the proposed research into one of the ASEAN cities listed above;

- A description of the project team that articulates the readiness of the academic, community, and possible industry stakeholders, to carry out the activities and achieve high impact results in the selected ASEAN city;
- A description of the team in the ASEAN city and/or country; the history of the relationship between the U.S. and ASEAN teams; the roles of the ASEAN team members in the work; and any agreements that have been reached; and
- An evaluation plan outlining tangible metrics to assess the outcomes of the proposed research transition activities, and how these outcomes will inform the potential for transition into additional cities including: possible risk(s) and associated mitigation approach(es); transferability and/or scalability beyond the proposed activities, sustainability (politically and financially) beyond the funded period; and coordination between the researchers and community members in the selected ASEAN city.

EAGER proposals must additionally follow guidance in the NSF PAPPG Chapter II.E.2.

To be considered for funding in fiscal year (FY) 2020, supplemental funding requests and EAGER proposals must be submitted by March 1, 2020, but earlier submissions are encouraged.

PIs interested in submitting supplemental funding requests and EAGER proposals responsive to this DCL (or with other questions pertaining to this DCL) are strongly encouraged to contact one of the following NSF/CISE program directors prior to submitting:

- David Corman, Program Director, CISE/CNS, telephone: (703) 292-8754, email: [dcorman@nsf.gov](mailto:dcorman@nsf.gov);
- Sandip Roy, Program Director, CISE/CNS, telephone: (703) 292-7096, email: [saroy@nsf.gov](mailto:saroy@nsf.gov);
- Ralph Wachter, Program Director, CISE/CNS, telephone: (703) 292-8950, email: [rwachter@nsf.gov](mailto:rwachter@nsf.gov).

Sincerely,

Erwin Gianchandani  
Acting Assistant Director  
Directorate for Computer and Information Science and Engineering