Carnegie Mellon University



Metro21: Smart Cities Institute Carnegie Mellon University

Call for Research Proposals

About Metro21

CMU's <u>Metro21: Smart Cities Institute</u> brings people, technology and policy together to significantly improve the quality of life for metropolitan-area citizens. Metro21's multidisciplinary focus also employs a research, development and deployment approach with key partners to create and test smart-city solutions.

Purpose

This solicitation elicits short research proposals from CMU researchers to identify novel ideas for research, development and deployment of smart city technology, using the Pittsburgh region as a testbed. Metro21 will fund some projects in the short term (to be funded by September 1, 2018). Each project that is selected for short-term funding will be asked to provide a more extensive proposal with a more detailed budget. Other selected projects will be bundled together in Metro21's submission for additional funding from a local foundation (currently funding Metro21). This project funding is expected to commence by January 2019.

Funding Award Amounts

The maximum award that a single short-term project will receive shall not exceed \$100,000. The number of funded projects will depend on the count, scope and quality of the proposals received. A total of \$300,000 is currently available for funding short-term projects.

Project Focus Areas

Smart cities are "systems of systems" - where component systems overlap and integrate into one cohesive system that keeps a community functioning safely and efficiently. Innovations in technology, policy, economics and science along with their interactions are necessary to make cities smarter. Consequently, Metro21's research focus spans all the seven colleges at CMU. As such, this solicitation seeks to fund a cross-section of focus areas that address the varied challenges facing metro areas.

Please include a selection of one or more of these project areas in your proposal:

- Air, water and noise pollution
- Airport facilities and services
- Built infrastructure

- Citizen engagement
- City operations
- Climate change
- Digital infrastructure
- Education
- Equitable mobility
- Equity/poverty
- Health/wellness
- Net zero energy
- Public safety
- Water and sewer
- Workforce development
- Other please define

Format of Proposal Summaries

Each submitted proposal summary has a maximum length of 1 page and should include:

- Brief problem and/or opportunity description with information on the problem or opportunity that the project will address
- Area of focus (please choose from the list above)
- Identify deployment partner whose real-world problem your research will be addressing (*Note*: industry, government agencies, non-profit organizations and community partners are eligible candidates; partners do *not* need to provide funding for the project)
- Project timeline
- Requested budget for the project

Submission Deadlines

Please submit your 1-page proposal summary by June 8, 2018. Summaries should be submitted by completing the google doc here: <u>Research Proposal Form</u>

Contact for Questions/Concerns

Inquiries regarding the process, guidelines or other matters should be directed to Chelsea Cavlovic at <u>ccavlovi@andrew.cmu.edu</u> or via phone at 412-268-4652.