

2019 C2SMART Center Request for Proposals

Program Objectives

C2SMART is a Tier 1 University Transportation Center composed of a consortium of universities: New York University, City College of New York, Rutgers University, University of Texas El Paso, and University of Washington. The main research priority of C2SMART is **Improving Mobility of People and Goods** with a focus on the topic area of **Smart Cities**.

C2SMART is soliciting proposals from its consortium members for research projects in 2019. Project proposals will undergo a rigorous peer-review process and be evaluated on the merit of the proposed research as well as how well it fits with the center's themes. Additionally, the proposed projects' outputs, such as products or tools, inclusion of external partners, and potential for real-world implementation will be taken into consideration.

Guidelines for Submitting a Proposal

Each proposal should fit into at least one of the Center's three key research areas (Figure 1), as well as a 4th research area new for this RFP. This year, C2SMART is aiming to fund one or more research projects that fit the center's theme and also specifically aim to solve a mobility problem faced by **disadvantaged populations**. Each research proposal should identify in detail how it fits into one or more of the following themes:

- *Research Area 1:* Urban Mobility and Connected Citizens
- *Research Area 2:* Urban Analytics for Smart Cities
- *Research Area 3:* Resilient, Secure, and Smart Transportation Infrastructure
- *Special Topic Research Area 4:* Disadvantaged Travelers

Additionally, the following key characteristics should be addressed in each proposal:

- Which agency or industry partners will serve either as partners in the research or as users of the research output
- Technology products that will be created as outputs to the research (tools, software, hardware, models, etc.)
- Compliance of the project with the center's [Technology Transfer Plan](#)
- Datasets that will be generated as a result of the research, and how the data will be managed and made available as outlined in the center's [Data Management Plan](#)
- How the research will translate into implementable results for agencies, industry, or others, and the plan to work with local agencies and/or industry partners to test and benchmark the research output
- How the research findings will be disseminated through measurable outreach, education, or workforce development/training efforts
- Where the minimum 50% non-federal cost share comes from and how it will support the proposed research

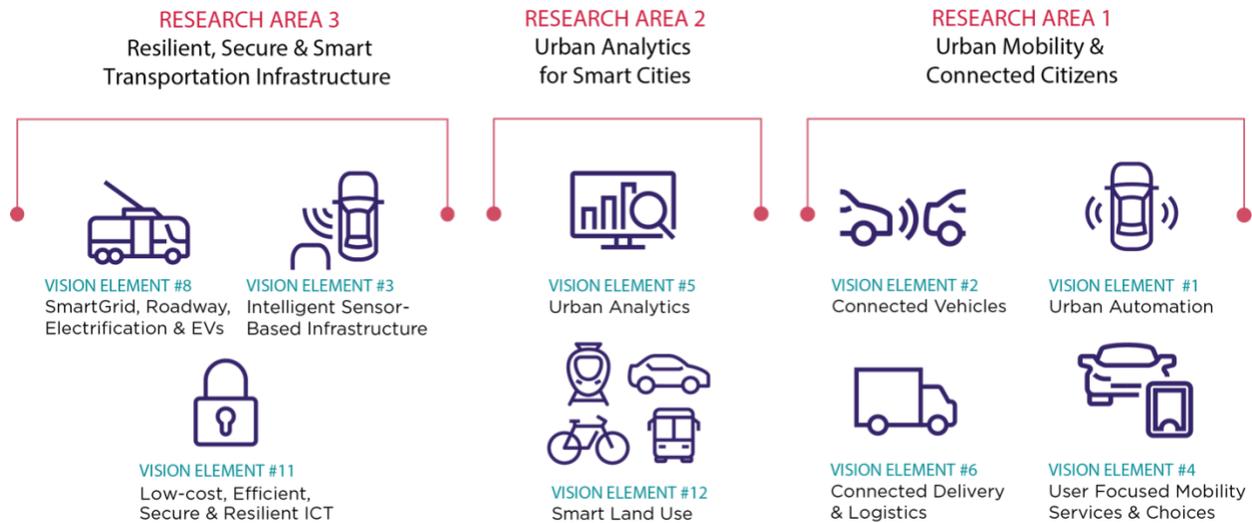


Figure 1 – C2SMART Core Research Areas

Proposal Budget

Center funding for selected proposals is limited to the following maximums, which include indirect costs, but exclude the minimum 50% non-federal cost share required for each project:

- Single institution, single principal investigator initiation proposals for Assistant Professors only (no co-principal investigator): \$30,000
- Single institution, single principal investigator (no co-principal investigator): \$50,000
- Single institution, multiple co-principal investigators: \$90,000
- Multi-institution, multiple co-principal investigators: \$150,000

All C2SMART-funded projects are required to have a minimum of 50% of the project budget matched from another non-federal cost-sharing source.

Full proposals with backup documentation should be submitted to the PI’s consortium member representative (listed below). Following the deadline, proposals are then sent to a Review Committee of peers for evaluation and feedback. Funding for a proposed project may be provided on the condition that the scope is modified to better meet the needs of the Center, and proposers may be asked to modify scopes of work to address reviewer comments. For example, if two projects are submitted separately that seem to be tackling a similar topic area, the Center may identify the opportunity for cooperation and ask the PIs to consider making a joint proposal.

PIs are encouraged to contact their consortium member representative *prior* to submitting a full proposal to inform them of the PI’s intent to submit, and also to ensure that the proposal idea fits the center’s themes.

Proposal Submission Requirements

The proposal should be submitted to each consortium institution's representative in the format of the provided Research Project Description template along with a budget in the provided Microsoft Excel template. The template covers the following:

1. A 1-page cover in the prescribed USDOT format
2. A complete scope of work covering:
 - a. Background and review of prior research, highlighting any previously conducted C2SMART Center research in the area
 - b. Problem statement, research objectives, and proposed methodology
 - c. Key project elements and milestones
 - d. Deliverables or outputs that will come about as a result of this research
 - e. Discussion of intellectual merit and broader impacts and benefits arising from implementing the proposed research
 - f. How the research will be implemented and disseminated
 - g. Plans for technology transfer and data management
 - h. Outreach activities
 - i. Key functions and modes of the research
3. A detailed list of tasks and their proposed timeline, along with when deliverables or outputs will be produced
4. A description of project personnel involved and commitment levels, including:
 - a. Anticipated collaboration with consortium members, other partners, public agencies, or industry
 - b. Research staff, students, and faculty time committed to this project
 - c. A description of where the minimum 50% non-federal cost-sharing will come from
 - d. A detailed breakdown of anticipated charged time and supplies, equipment, or travel associated with the project
5. Brief responses to additional evaluation questions included in the template (max 2 sentences each)

In addition, appendices should be included that provide the following:

- I. 2-page max CVs of the PI and all key personnel (NSF style) highlighting relationship with prior C2SMART research and outcomes
- II. 2-page max budget justification
- III. Cost share commitment letters and other letters of support if agency or industry partners have been identified
- IV. If the research requires IRB approval for human subjects research, documentation should be included to indicate the plan to seek IRB approval if the proposal is funded

Review Criteria

Each consortium member institution will internally pre-screen submitted proposals prior to the designated Review Committee to ensure proposals meet the minimum requirements. Based on submitted proposals, the Review Committee will seek a minimum of 2 peer reviews from outside of the Center. These reviews are meant to provide additional perspective only; the Review Committee will make the final decisions, which are justifiable to the Center's Advisory Board. The Review Committee will rank proposals in order of acceptance, after which funding will be allocated accordingly. Conditions to the scope of the project may be added in order for a project to be accepted.

The proposals will be judged along the following criteria:

- 1) Does the proposed topic have strong intellectual merit?
- 2) Does the proposed topic contribute to the mission and one or more of the thrust areas in C2SMART, including the Special Topic Research Area of this RFP?
- 3) Does the project take advantage of prior C2SMART or other research to expand the scope and value of the research without replicating previously answered questions?
- 4) Does the project provide implementable outcomes including knowledge transfer to public agencies and professionals?
- 5) Does the project provide training to students and the academic community?
- 6) Does the project take advantage of industry resources including current C2SMART industry partners?
- 7) Does the project scope, budget, data, and schedule appear feasible?
- 8) Do the principal investigators have a good track record of providing deliverables per requirements and completing projects on-time?

Deadlines and Schedule

All responses to this RFP are due to consortium member representatives by November 30, 2018 with no exceptions. Review, follow-up, selection, and funding allocations will take place over December 2018 and January 2019, with notice of award occurring in February 2019. All projects will be expected to commence by March 1, 2019 with a scheduled completion date of February 29, 2020 (in the case of one-year projects).

Proposals should be submitted via email to the following consortium member representatives:

- **New York University:** Professor Joseph Chow (joseph.chow@nyu.edu)
- **Rutgers University:** Professor Hani Nassif (nassif@soe.rutgers.edu)
- **City College of New York:** Professor Camille Kamga (ckamga@utrc2.org)
- **University of Washington:** Professor Jeff Ban (banx@uw.edu)
- **University of Texas at El Paso:** Professor Kelvin Cheu (rcheu@utep.edu)