



Smart Transportation Infrastructure Initiative

Request for Proposals

Proposals Due: March 11, 2022, 5:00 p.m.

The [Smart Transportation Infrastructure Initiative](#) at the University of Illinois Urbana-Champaign is announcing a request for proposals to support research projects on topics related to multimodal transportation, autonomous technology integration into cyber-physical systems, vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) communication, security, data management, shared mobility services, smart and resilient infrastructure, electrification, electric vehicles and trucks, energy harvesting, and mobility planning for environmental sustainability and social equity. The goal of this RFP is to develop exploratory research ideas that engage disciplines and departments across campus, collect preliminary data or other information to develop a research project, and prepare and submit research proposals for external funding to support the Illinois Autonomous and Connected Track (I-ACT), a large multi-investigator effort of the Grainger College of Engineering, the University of Illinois, and the State of Illinois. A consortium of consulting companies is currently designing I-ACT, and a conceptual video of the track is available [here](#).

Proposals are invited from UIUC's faculty and research staff. The period of performance will be for one year (12 months), and a project's budget may not exceed \$50,000. Eight projects were awarded last year and seven will be awarded in 2022 and another eight in 2023. Note that this is a tremendous opportunity for Illinois researchers to engage with the vision and activities of I-ACT. The following key factors will be considered in the selection process:

- Quality, innovativeness and interdisciplinarity of the proposed research.
- Impact of the proposed work on smart mobility.
- Connection to the [research themes](#) for the development of I-ACT.
- Potential and specificity for developing a larger externally funded research program relevant to I-ACT, including names of agencies and relevant programs likely to issue RFPs in the next year.
- Productivity of the applicants and quality of their scholarship.

Successful applicants will be expected to submit one or more proposals through STII to a competitive external source for funding (e.g., NSF, FHWA, FAA, DOT, DOE, DOD, USDA) over the course of the following year and to work with STII to communicate the findings of their research, publications, and other outcomes through STII's website. Support will be provided in the

form of faculty time, a research assistantship for graduate students at UIUC, postdoc time, and travel.

Proposal Format

Please use the proposal template and budget template located [here](#).

Each proposal should contain the following items combined into a single PDF file (convert the proposal word file into a PDF file before submitting):

- A **cover page** with the project title, principal investigator and co-principal investigator information (names, affiliations, and email addresses), and a 150-word executive summary.
- The narrative of the **technical part** of the proposal (including i) Background, ii) Research Objective, iii) Work Plan, iv) Anticipated Research Results, and v) Expected Implementable Outcome – please see template for [details](#)) should be a maximum of three single-spaced pages (minimum 11-point font with one-inch margins) including figures and tables but not including the Timeline, Itemized Budget, Budget Justification, Biosketches, and Appendices (references, etc.). The proposal should describe the problem, approach, potential impact, and most importantly, incorporating the research outcome into the I-ACT development and plans for seeking external funding, including names of agencies and relevant programs likely to issue RFPs in the next year. Please address the five key items of the technical part of the proposal in addition to the following:
 - Timeline
 - Itemized Budget (use the budget template as stated above)
 - Budget Justification
 - A two-page NSF–style bio (<https://www.nsf.gov/bfa/dias/policy/biosketch.jsp>) for each PI/Co-PI. Each bio should include the PI’s or Co-PI’s five most relevant recent publications as well as five other publications.

Proposals should be submitted on-line using the [OVCRI Special Programs](#) system.

In addition to submitting a proposal, the Special Programs system will also ask the proposer to submit the names and email addresses of four (4) on-campus individuals that the proposer believes would be qualified to review the proposal.

The deadline for proposal submissions is 5 p.m. on Friday, March 11, 2022. Applicants will be informed about decisions by **April 15, 2022**, with an anticipated start date for funding of June 1, 2022.

Questions about this RFP may be sent to STII@illinois.edu.