

**To:** CMU Researchers  
**From:** Prof. Raj Rajkumar, Director, Mobility21 National UTC  
**Date:** November 12, 2019  
**Subject:** Mobility21 University Transportation Center AY2020/2021 Request for Proposals

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CMU's Mobility21, the USDOT National University Transportation Center (UTC) for Improving the Mobility of People and Goods, is soliciting proposals for research projects to be funded in AY2020/2021 (July 1, 2020 – June 30, 2021). Any Carnegie Mellon University faculty member is eligible to apply.

Typical project awards for UTC funds are in the range of **\$25,000 - \$100,000** per year. Projects that demonstrate significant promise and impact mobility may be considered for multi-year funding requests. Up to two multi-faculty projects, each seeking to transform mobility using ground-breaking ideas, and with a multi-year schedule at substantially higher budgets, will also be entertained.

Projects to be funded will typically fit within at least one of the seven thrust areas listed below with a particular focus on Improving Mobility for **All**:

1. Smart City Technologies,
2. Multi-Modal Connections,
3. Assistive Technologies for People with Disabilities,
4. Data Modeling and Analytical Tools,
5. Novel Modes of Transport,
6. Regional Planning, and
7. Improved Transportation Access to Disadvantaged Neighborhoods.

A project proposal can address surface transportation mobility in any mode, and should demonstrate a strong potential for deployment and practical impact. Proposals, which do not fit into one of these thrust areas but otherwise fulfill the core Mobility21 mission and have strong deployment potential, will also be considered. Proposed projects that solve a real-world transportation problem in partnership with a transportation agency, company or organization have the best chance of being selected for funding. Due to USDOT program requirements, projects require a 1:1 match from *non-federal* sources. Please include in your proposal matching sources and letters of support from deployment partners. We will consider past performance, including responsiveness to UTC reporting requirements and participation in UTC meetings/events, as part of the review process.

The anticipated start date for selected projects is July 1, 2020. The award period will run through June 30, 2021. Semi-annual activity progress reports are due on September 30, 2020 and March 31, 2021. The final research report is due July 31, 2021. The final semi-annual activity progress report/update and final research report is due on September 30, 2021.

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## Reporting & Other Requirements

Please see the attached "[Guidance for Principal Investigators For Project Proposal, Pre-, and Post-Award Activities](#)" for more detailed information.

## Proposal Submission Process - **All proposals MUST be submitted through the UTC Research Projects database by 11:59 PM, Friday, January 3, 2020.**

1. Register for an account, if you do not already have one: <http://ppms.cit.cmu.edu/>. Your [ORCID](#) is required.
2. Click on <https://ppms.cit.cmu.edu/projects/create/26> and enter your log-in info.
3. Enter your proposal information. The following sections must be completed as part of the proposal: project information, abstract, investigators, budget (using the budget document in the system), match sources, and partners. Letters of support can be saved as a "Supplement Information Document."
4. When ready, press "Submit."

## Schedule

- January 3, 2020 – Proposals Due.
  - ✓ Proposals must be entered into the UTC Research Projects Database by 11:59 PM. All sections listed in step 3 above must be completed in order for the proposal to be considered.
- January 31, 2020 – Awards announced, pending supplemental information as described below being submitted.
- March 4, 2020 – Supplemental Project Documents Due.
  - ✓ Additional project documents, including powerpoint slides (saved as "Supplemental Information Document," a data management plan (saved as "Data Management Plan Document"), "use of human subjects approval" (if required), and final budget (if changed) must be entered into the project record in UTC Research Projects Database. Additional guidance for these items can be found here: <http://ppms.cit.cmu.edu/resources>.
- April 2020 – Researchers will receive confirmation of all award requirements being received.
- June 2020 – Oracle string provided for funded projects.
- July 1, 2020 – Project begins.
- September 30, 2020 – 1<sup>st</sup> Semi-annual activity progress & performance indicators reports due.
  - ✓ An email will be sent along with a link to complete the reports.
- March 31, 2021 – 2<sup>nd</sup> Semi-annual activity progress report due.
  - ✓ An email will be sent along with a link to complete the report.
- June 30, 2021 – Project ends.
- July 31, 2021 – Final project research report due.
  - ✓ Email final research report to Lisa Kay Schweyer, [LKSchweyer@cmu.edu](mailto:LKSchweyer@cmu.edu).
- September 30, 2021 – 3<sup>rd</sup> Semi-annual activity progress report due.
  - ✓ An email will be sent along with a link to complete the report.

**Talk with us about your project idea, proposal preparation, match sources, or deployment partners.**

### We are here to help.

**Prof. Raj Rajkumar (rajkumar@cmu.edu), Director, Mobility21 National UTC**

**Chris Hendrickson (cth@andrew.cmu.edu), Director, Traffic21 Institute**

**Stan Caldwell (stancaldwell@cmu.edu), Executive Director, Mobility21 National UTC**

**Lisa Kay Schweyer (LKSchweyer@cmu.edu), Program Manager, Mobility21 National UTC**

## Guidance for Principal Investigators For Project Proposal, Pre-, and Post-Award Activities

This resource document is designed to outline and assist principal investigators with the project proposal, pre-, and post-award activities.

### PROJECT PROPOSAL/PRE-AWARD ACTIVITIES

#### SUBMISSION OF PROJECT PROPOSAL

The project proposal is entered directly into the [Traffic21 & University Transportation Center \(UTC\) Projects Database](#). Each section should be completed. All partners should be listed individually in the “Partners” section of the project record, including contact information for the main partner contact (this becomes our [Deployment Partner](#) list). Additional project information can be attached to the project record under the “Documents” section.

#### SUBMISSION OF BUDGET AND COST SHARE

The project budget and related cost share should be uploaded into your project record as a “Project Budget” document. All cost share should each be listed in the “Match” section in the project record. The budget template is available for download in the "Resources Tab." Also, note:

- ✓ **FINAL BUDGET APPROVAL**  
All budgets will be reviewed by your sponsored research office, adjusted as needed in consultation with you, and a final copy will be saved into the project record.
- ✓ **CAPITAL EQUIPMENT**  
All capital equipment (>\$5k) procurements as part of this project *need* to be pre-approved by the USDOT. Contact Stan or Lisa Kay *at least 10 weeks* in advance of desired purchase date to request approval.
- ✓ **FOREIGN TRAVEL**  
All foreign travel must be pre-approved by USDOT. Contact Stan or Lisa Kay *at least 10 weeks* in advance of desired travel date to request approval.

#### DATA MANAGEMENT PLAN (DMP)

A Data Management Plan must be submitted for the project. Please see the [“Resources Tab”](#) in the Traffic21 UTC Projects Database for additional guidance on developing the DMP.

#### POWERPOINT PRESENTATION

Three PowerPoint slides must be submitted for the project. The slides can be uploaded into the project record as an “Other” document, with the name of “PowerPoint.” Please see the [“Resources Tab”](#) in the Traffic21 UTC Projects Database for the template to use.

#### USE OF HUMAN SUBJECTS APPROVAL

If the project proposes the use of human subjects, approvals must be received from the university where the research will be conducted. The approval letter must be attached to the project’s record as an “Other” document, with the name “Use of Human Subjects Approval.”

***Once all these activities are complete, the proposal will be reviewed.  
If approved for funding, the principal investigator will be notified.***

### THE TRAFFIC21 & UTC PROJECTS DATABASE

The Traffic21 Institute uses an on-line database to store information about all projects funded through the institute and the related University Transportation Centers. Each project has a record in the database. All information related to the project will be stored in that record. The Principal Investigator is responsible for ensuring all project information is kept in the project record, even though other people may help add material. Within the database, there is a “Resources” tab, which includes several guidance documents for users. The database is located at [ppms.cit.cmu.edu](http://ppms.cit.cmu.edu).

## POST-AWARD ACTIVITIES

### PROJECT MANAGEMENT

The principal investigator for this effort will be responsible for managing the technical components, spending and related reporting for the project.

### COST-SHARE AND PROJECT SPENDING

The cost-share expenses *must* adhere to the same guidelines as the USDOT funds and *cannot* be used toward any other project as match. Principal investigators will be responsible for all charges to the account and for any expenses made in excess of the allocated budget for this project. Check with your business manager to access the available finance report for your project.

### SEMI-ANNUAL PROJECT ACTIVITY/PROGRESS UPDATES

USDOT requires project & impact reporting every six months. Consequently, you will be asked to answer questions semi-annually about your project's activity, accomplishments, outcomes, and impacts (status of proposed timeline/tasks, publications, conferences, meetings, etc.). This information will be reported through an on-line portal. Please see the "[Resources Tab](#)" in the Traffic21 UTC Projects Database for additional guidance.

### PERFORMANCE INDICATORS REPORTING

USDOT requires an annual reporting of performance indicators including the number of students involved in the UTC research, how many classes are being taught, etc. Once a year, you will be asked to provide this information. Please see the "[Resources Tab](#)" in the Traffic21 UTC Projects Database to view the template & guidance for performance indicators reporting.

### PARTICIPATION IN UTC EVENTS

We expect your active participation during your funding period in attending and presenting at UTC Faculty meetings, Deployment Partner Consortium Symposiums, and presenting at [Smart Mobility Connections](#) (SMC) events.

### PUBLICATIONS

Any publications related to a Mobility21 project should be recorded as "Products – Publications" in the semi-annual progress update. Please note that publications should include this citation: "*This project is funded in part by Carnegie Mellon University's Mobility21 National University Transportation Center, which is sponsored by the US Department of Transportation.*"

### INVENTIONS, PATENTS, LICENSES, TECHNOLOGIES & TECHNIQUES

Any inventions, patents, licenses, technologies and techniques resulting from this project should be recorded as "Products – Other" in the semi-annual project progress update. Additional technical support is available as you develop these other products.

### SPEAKING ENGAGEMENTS, CONFERENCE PRESENTATIONS

Any presentations related to this project should be recorded as "Products – Presentations" in the semi-annual project progress update.

### COMPLETING YOUR PROJECT - FINAL SEMI-ANNUAL PROJECT ACTIVITY/ PROGRESS UPDATE & RESEARCH REPORT

At the end of the project, a final semi-annual project activity/progress update (described above) and research report is required. The research report gives a complete description of the problem, approach, methodology, findings, conclusions, recommendations developed as a result of the project and must completely document all data gathered, analyses performed, and results achieved. Please see the "[Resources Tab](#)" in the Traffic21 UTC Projects Database for additional guidance.

#### QUESTIONS?

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