



University Transportation Research Center  
RFP Cover Sheet

**Title:** Advanced Reinforced Concrete Materials for Transportation Infrastructure  
**Proposal Number:** 2018-07  
**Sponsor:** NJDOT  
**Date Issued:** August 3, 2018  
**Pre-Proposal Meeting:** On Request by August 29  
**RFP Due at NJDOT:** September 12, 2018 4:00 PM  
**RFP Closing Date:** September 12, 2018

If you plan to apply:  
(research.bureau@dot.nj.gov, 609-530-5637) with any questions.

If you plan to submit a proposal through UTRC, please notify us by email at [peickemeyer@utrc2.org](mailto:peickemeyer@utrc2.org). Also please indicate whether you are open to teaming up with faculty at other universities on this project.

Proposal submission guidelines:  
When you apply, insert the UTRC cover sheet. <http://www.utrc2.org/resources> .

Note that matching funds will not be made available from UTRC for this project.

**Please visit the NJDOT Research Website for important information about this RFP**

**[http://www.state.nj.us/transportation/refdata/research/research\\_procurement.shtm](http://www.state.nj.us/transportation/refdata/research/research_procurement.shtm)**



**New Jersey Department of Transportation  
Bureau of Research  
RESEARCH PROJECT  
Request for Proposal  
2018-19 Program**

**Project Title: Advanced Reinforced Concrete Materials for Transportation Infrastructures**  
**Posting No.: 2018-07**  
**Date of RFP Announcement: 8/3/2018**  
**Closing Date: 9/12/2018**

Proposals must be prepared in accordance with NJDOT's *Supplemental and Proposals guidelines*. Please visit <https://www.state.nj.us/transportation/refdata/research/guidelines.shtm> for the most current version.

## **1 - RESEARCH PROBLEM STATEMENT AND OBJECTIVES**

### **1.1 Problem Statement**

Many transportation agencies have increasingly been deploying advanced infrastructure materials to improve the long-term durability of transportation concrete infrastructures. For example usage of ASTM A1035 reinforcing bars, stainless steel reinforcement, ultra high-performance concrete (UHPC), and among many others. NJDOT seeking research in innovative reinforced concrete materials for New Jersey's environmental and service loading conditions that can increase the longevity of the infrastructures.

### **1.2 Research Objectives**

At minimum, the proposed research shall include Phase1: Identification of innovative reinforced concrete materials for transportation infrastructures including bridges, pavements and others. Phase2: Evaluation of the performance of the selected materials that are best suitable for NJDOT construction projects through lab testing and numerical simulations as directed by the NJDOT Technical Advisory Panel (TAP). Phase3: Develop guidelines and specifications for the new materials as directed by TAP.

*Note: Phase2 may begin after NJDOT Bureau of Research approval of Phase1 deliverables. Similarly, Phase3 may begin after NJDOT Bureau of Research approval of Phase2 deliverables.*

### **1-3. Type of Contract.**

It is proposed that if the Issuing Office enters into a contract because of this Request for Proposal (RFP), it will be a **Cost Reimbursement, Deliverable-Based** contract containing the Standard Contract Terms and Conditions.

## **2 - BUDGET and CONTRACT TIME**

The **TOTAL** project budget shall not exceed **\$350,000**. The PI must provide the anticipated research study duration based on the proposed tasks. Consideration should be given to potential impediments so that adjustments are incorporated into the schedule minimizing the need for time extensions. Contract time shall include sufficient time for the procurement of subcontractors, as well as no less than three months for Final Report review and acceptance. Please be advised that going forward, new task orders having permissible justification will be allowed no more than one time extension with the advent of 2 CFR 200.



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**A 30 month total project duration is preferred.**

**3 - Oral Presentations.** Oral presentations may be requested as part of this RFP. If required, you will be notified by the Bureau of Research to schedule your oral presentation. They will be held at NJDOT headquarters in Trenton, NJ, attended by the Technical Advisory Panel, and be limited to no more than an hour, including time for questions and answers.

#### **4 – DEADLINE**

Proposals (10 single-bound copies) are due at the NJDOT Bureau of Research no later than **4:00 p.m. on September 12, 2018**

**Approximate Start Date: 12/03/2018.** The official start date is the date that the Bureau of Research obtains a signature from the Assistant Commissioner. This date can be utilized for project schedule preparation in the proposal.

#### **5 – CONTACTS**

Interested parties shall send all questions related to this RFP to the Bureau Manager by sending an e-mail to [Research.Bureau@dot.nj.gov](mailto:Research.Bureau@dot.nj.gov) or by phone (609-530-5966). Questions on this topic **shall not** be directed to any Research Project Manager, Research Customer, or any other NJDOT person. All questions must be received **on or before 8/13/2018 in order to be answered.**

A pre-proposal meeting may be scheduled with interested parties upon the request of *more than one* Institution of Higher Education. **This must be requested on or before 8/29/2018.**



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**PROPOSAL DELIVERY INSTRUCTIONS:**

**For private, paid messenger services such as Federal Express, DHL, UPS, etc., or for hand-carried deliveries:**

RFP No.2018-07 PROPOSAL-NJDOT  
New Jersey Department of Transportation  
Bureau of Research  
1035 Parkway Avenue  
Trenton, New Jersey 08625-0600

**For U.S. Postal Service mail:**

New Jersey Department of Transportation  
ATTN: Manager, Bureau of Research  
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Trenton, New Jersey 08625-0600