

Gulf Coast Center for Evacuation and Transportation Resiliency

Request for Proposals



College of
Engineering
Department of
Civil & Environmental Engineering

Fiscal Year 2014-2015



Gulf Coast Center for Evacuation and Transportation Resiliency (CETR)
Louisiana State University
www.evaccenter.lsu.edu

Call for proposals to support research, education, and technology transfer projects related to *Evacuation* and development of strategies for *Resilient Transportation Systems*.

PROPOSALS ARE DUE ON OR BEFORE:
Friday, August 1st, 2014, by 5:00 p.m.

The CETR invites all interested faculty and research staff of LSU to submit proposals to pursue new and innovative research related to evacuation and resilient transportation systems. The Center, which is housed in the Department of Civil and Environmental Engineering, was created to:

"...address a multitude of issues that impact transportation processes under emergency conditions such as evacuation and other types of major events as well as the need to develop and maintain the ability of transportation systems to economically, efficiently, and safely respond to the changing conditions and demands that may be placed upon them."

Proposals are sought for projects related, but not limited, to the development of modeling and analysis techniques; innovative design and control strategies; behavior; and travel demand estimation and planning methods that can be used to predict and improve travel under periods of immediate and overwhelming demand. In addition to research on emergency transportation processes, proposals on the broader study of transportation resiliency, economic competitiveness, multimodal freight and passenger transport and highway congestion are also encouraged. Such projects could include, but not be limited to, work on the key components of redundant transportation systems, analysis of congestion in relation to resiliency, impact of climate change and peak oil, underrepresented groups in transportation and transportation finance.

This program seeks primarily to support graduate students as well as faculty and staff salary (for amounts up to \$49,999); which also must be matched on at least a one-to-

one and a half basis. Projects committing to a higher match will receive preferential priority during the project selection process. For specific questions pertaining to match eligibility, please contact Scott Parr.

Due to the requirements of the federal UTC program support, proposal submissions cannot include funds to support international travel or equipment. Once awarded the principle investigator will work with the administrative staff at CETR to finalize a project budget, including the project matched requirement of one-to-one and a half basis using a non-federal funding source.

The CETR seeks to award project grant(s) for durations of up to 12 months. No time extensions will be granted. At a minimum, a final project report of results and findings and at least one peer-reviewed technical journal paper submission are required as a deliverable at the end of the grant period. For cases in which grants are awarded for projects involving the development of products, a prototype will also need to be submitted. Issuance of awards is contingent on available funding.

Criteria for selection of awards as ranked from highest to lowest priority:

1. Theoretical-oriented seed projects with potential to grow into larger-scale research that will attract external (e.g., local, state, federal, and private agencies) funding. Proposers are encouraged to provide supporting correspondence and documents, if available.
2. Uniqueness of the proposed idea and its potential for implementation.
3. Multi-modal transportation applications and multi-disciplinary cooperation across departments and colleges.
4. Qualifications of the PI and the Co-PIs as evidenced by past experience in the field of the proposed work.
5. Strong component of student involvement, technology transfer, and/or educational contribution.

All complete proposal submissions will be reviewed and rated by the CETR Technical Advisory Board. If necessary, proposers may be asked to clarify or present technical details of their proposal to this committee. This committee is composed of representatives of academia, government, and private industry.

Areas of Focus:

This year the Center shall be focusing on the following key areas of research:

1. Studies of driver behavior and the roadway environment that involve the use of the LSU driving simulator
2. Livability and Emergency Management of Coastal and River Valley Communities
3. Strategies to improve resiliency of transportation infrastructure
4. Emergency Evacuation Planning, Management and Modeling
5. Economic Competitiveness for passenger and freight transportation systems
6. Maritime and Multimodal Logistics Management

7. Multimodal Freight efficiency for domestic and international shipping
8. Highway Congestion mitigation with multimodal strategies
9. Smart investments in intercity passenger travel facilities

Each proposal must contain the following items:

1. A title page listing the PI and Co-PIs and their affiliation.
2. Technical description not to exceed five (5) pages.
3. A description of recent activities carried out by the PI and/or the Co-Pis relevant to the proposed topic including papers published, research contracts, presentations, Master Degree theses, and Ph.D. Dissertations. This summary should not exceed two (2) pages.

Proposals must also include the following list of information as required by the federal sponsor (if any of these items do not pertain to your proposal, list that item and state “not applicable”):

- Project Title
- Principal Investigator, Institution, Telephone Number, Email Address
- External Project Contact, Address, Telephone Number
- Project Objective
- Project Abstract
- Task Descriptions
- Potential Benefits of the Project (*including potential to use as a basis to attract future external funding*)
- Relationship to Recently Completed, On-going, or Proposed Research Projects
- Contribution to the “Area of Focus” and the field of Evacuation or Transportation Resilience
- Milestones, Dates (Project Start and End Dates), Budget and Deliverables

All proposals must be submitted electronically in PDF format. The proposals should be emailed to Dr. Brian Wolshon (brian@rsip.lsu.edu) and Scott Parr (sparr2@lsu.edu) . The **Deadline** for submitting the proposal is **Friday August 1st, 2014** with an anticipated start date of October 2014.

Questions regarding this program and proposal submissions should be directed to:

Scott Parr
Research Associate 5
Gulf Coast Center for Evacuation
and Transportation Resiliency
Louisiana State University
Baton Rouge, Louisiana 70803
phone: 225-578-9165
email: sparr2@lsu.edu

Brian Wolshon, Ph.D., P.E.
Edward A. and Karen Wax Schmitt Distinguished Professor
Department of Civil and Environmental Engineering
Director, Gulf Coast Center for Evacuation and Transportation Resiliency
Louisiana State University
Baton Rouge, Louisiana 70803
phone: 225-578-5247
email: brian@rsip.lsu.edu