

REQUEST FOR PROPOSALS

Dredging Louisiana's Navigable Waterways

LTRC Project No. 17-4SS, SIO No. DOTLT1000160

PROBLEM STATEMENT

The U.S. Army Corps of Engineers (USACE) is responsible for maintaining the navigation channels to authorized dimensions. The USACE does not have the budget capability to adequately maintain the channels. The lack of dredging has threatened the commercial viability of the channels resulting in a decrease in commercial tonnage on the system and further resulting in significant loss of business to the coastal and inland ports in Louisiana. This reduction in tonnage adversely affects Louisiana's ability to successfully compete for limited federal funds. In addition, the lack of dredging has an adverse effect on traffic conditions and highway infrastructure due to the resulting increased volume of trucks on the road.

OBJECTIVE

The objective of this research is to (1) investigate the impacts that the lack of dredging in Louisiana has on its commerce, ports, waterways, and highways and (2) investigate and recommend possible alternatives (e.g. advanced technologies, engineering solutions, funding, etc.) to complement the traditional USACE and other navigation dredging activities in Louisiana.

RESEARCH APPROACH

The LTRC is seeking the insights of proposers on how best to achieve the research objective. Proposers are expected to describe research plans that can realistically be accomplished within the constraints of available funds and contract time. Proposals must present the proposer's current thinking in sufficient detail to demonstrate their understanding of the issues and the soundness of their approach to meeting the research objective.

For each phase of the proposed research, itemize and discuss the tasks necessary to fulfill the objectives. These task-by-task descriptions are intended to provide a framework for conducting the research and identifying deliverables. ***Refer to section 3.3.5 of the LTRC Manual of Research Procedures (2016 edition) for more guidance.***

http://www.ltrc.lsu.edu/pdf/2016/LTRC_RESEARCH_MANUAL_FINAL.pdf

The research shall address a broad range of issues related to dredging Louisiana's navigable waterways such as, but not limited to, the following:

- New dredging technologies that may be applicable to Louisiana's inland and coastal waterways and their feasibility
- Alternative engineering solutions that are suitable for Louisiana waterways (i.e. training dikes) and their feasibility
- Viability of a state-owned dredge(s). Factors to consider/investigate, at a minimum:
 - Cost (i.e. purchase, operation, maintenance, permits, etc.) associated with owning a dredge

- Which state agency would be responsible for the dredge
- What legislation would be needed
- Comparison of the cost of owning a dredge (and all that entails), leasing a dredge, and hiring a company to do the dredging. The comparison should include the pros and cons of each scenario.
- Innovative funding strategies
- Using the Ouachita-Black Rivers Navigation Project and the Houma Navigation Canal as case studies, determine the impacts (i.e. highways, ports, communities, commerce, etc.) if their authorized navigation channel depths are not maintained. The impacts should address those that have already occurred along with the potential impacts in the future.
- Based on the case studies' results, discuss the suitability extrapolating those findings to Louisiana's other coastal and inland commercially navigable waterways.

DELIVERABLES

The proposal shall include project deliverables for appropriate tasks. Deliverables shall be due as defined in the proposal. The proposal shall include at a minimum the following deliverables:

- Interim Report and Presentation to the PRC
- Final Report, Technical Summary, and summary presentation
 - The researcher shall provide a final report that documents the entire research effort. A Final Draft Report, Technical Summary document (two pages), and summary presentation to the PRC are due three (3) months prior to the project completion date for review and approval. The final report shall direct and recommend future steps toward the incorporation/implementation of the research results into department policy, and include recommendations on other areas that could be further expanded in subsequent research projects.

SPECIAL NOTES

- A. LTRC research projects will be conducted in accordance with the LTRC Manual of Research Procedures, 2016 edition.
(http://www.ltrc.lsu.edu/pdf/2016/LTRC_RESEARCH_MANUAL_FINAL.pdf)
- B. Any work that is anticipated to be required from LTRC or DOTD shall be specifically detailed in the proposal.
- C. Any surveys or questionnaires developed by the research team shall be reviewed and approved by the PRC prior to distribution.
- D. LTRC projects are intended to produce results that will be applied in practice. It is expected that the implementation of the results of this research into practice will evolve as a concerted effort during this project. The final report must contain an implementation plan to include, as a minimum, the following:
 - a. The "product" expected from the research;
 - b. A realistic assessment of impediments to successful implementation;
 - c. The activities necessary for successful implementation; and
 - d. The criteria for judging the progress and consequences of implementation.
- E. To assist in the implementation process, the investigators of this research shall

present the final results to LA DOTD officials in an oral presentation to be held in Baton Rouge, Louisiana at LA DOTD Headquarters after acceptance of the final report.

- F. The proposal should include travel to meet with the Project Review Committee for a “kick off” meeting, presentation of interim report, and presentation of the final report at a minimum. Funds budgeted for travel shall be limited to what is necessary for the conduct of the research. Funds shall not be budgeted for conference travel. Funding for technology transfer of research results are available upon request subject to LTRC approval and available funds.
- G. LTRC’s mission includes the support of higher education in Louisiana. Consultant and out-of-state institutions submitting proposals are encouraged to cooperate and collaborate with Louisiana universities for the purpose of sharing of knowledge and increasing transportation expertise in the academic community.
- H. Graduate assistance stipends are allowed. Tuition reimbursement or tuition remission rates applied to stipends are not allowed.
- I. To equitably answer any questions regarding this Request for Proposals, the Louisiana Department of Transportation and Development (LA DOTD) website will be updated with questions and answers and related documents regarding the project. <http://webmail.dotd.louisiana.gov/agrestat.nsf/WebAdvertisements?OpenPage>
LA DOTD makes these documents available for informational purposes only to aid in the efficient dissemination of information to interested parties. LA DOTD does not warrant the documents against deficiencies of any kind. The data contained within this web site will be periodically updated. Interested parties are responsible to be aware of any updates. Questions regarding this RFP should be submitted in writing to the LTRC contact person. Questions must be received by close of business seven calendar days prior to deadline date.
- J. Consultants and business entities shall be registered with the Secretary of State in order to be able to work in Louisiana prior to award of contract. <http://www.sos.la.gov/tabid/1011/Default.aspx>
- K. If Sub-Consultants/Entities are used, the Prime Consultant/Entity must perform a minimum of 51% of the work for the overall project.
- L. LTRC reserves the right to withhold invoice payments for delinquent deliverables as defined in the proposal.

ESTIMATED COST OF RESEARCH

\$125,000

ESTIMATED COMPLETION TIME

15 Months (*includes 3 months for review and approval of final report - i.e. draft final report due in 12 months*)

LTRC PRIMARY CONTACT

Kirk Zeringue, P.E.
LTRC, Special Studies Research Administrator
225-767-9169
kirk.zeringue@la.gov

AUTHORIZATION TO BEGIN WORK:

January 1, 2017 (estimated)

PROPOSAL FORMAT

All proposals are required to be formatted according to LTRC Manual of Research Procedures. Section 3.3 provides guidance on proposal development. A copy of the Manual may be downloaded from our website

http://www.ltrc.lsu.edu/pdf/2016/LTRC_RESEARCH_MANUAL_FINAL.pdf).

PROPOSAL SELECTION

The Project Review Committee selected for this project will review, evaluate and rank all proposals received using the criteria established on the attached proposal review form.

DEADLINE FOR RECEIPT OF PROPOSALS

Ten copies of the proposal must be received by LTRC by the close of business day of December 2, 2016.

Proposals should be submitted to:

Samuel Cooper, Jr. Ph.D., P.E.

Director

Louisiana Transportation Research Center

4101 Gourrier Ave.

Baton Rouge, LA 70808