

Project Title: Inland Waterway Travel Time Prediction

Project Abstract (Brief Description): This project will build an inland waterways travel time prediction model that builds on and improves existing work at the Corps of Engineers Engineer Research and Development Center (ERDC). The model will be developed in steps. In the first iteration the team will forecast and analyze travel times in one of the simplest river segments. The resulting forecast model will then be applied to a more complex river segment involving locks and possibly bridges. In every case, explanatory variables will be explored and incorporated as appropriate.

Describe Implementation of Research Outcomes (or why not implemented) - Place any photos here *To be determined upon conclusion of the project*: This project will be closely coordinated with ERDC. Because of that coordination, we expect ERDC to take our work and incorporate it into their ongoing modeling effort. Additionally, the Corps has a contractor helping it develop the River Information Systems Enterprise. We will be sharing data between us that will enable both of us to move quicker toward our project objectives.

Impacts/Benefits of Implementation (actual, not anticipated)

To be determined upon conclusion of the project: ERDC will be able to accelerate its work and model development by at least one year. We will also be able to provide modeling inputs that ERDC may not have the budget to explore. Additionally, our coordination with the contractor will enable the RISE effort to expand and hasten the development of its methodologies

Web Links: martrec.uark.edu

Budget (Funding) Amounts & Source(s) (US DOT +Match(s) =Total Costs): Federal: \$155,000, Matching: \$77,500.

Project Start and End Dates: November 2020 to March 2022. Complete

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Principal Investigator Institution (University): Texas A&M Technical Institute