

Submission Date: 2/8/24
Lead Recipient/Grant Number: University of Arkansas / 69A3552348331
Principal Investigator Institution: University of New Orleans
Center Name: Maritime Transportation Research and Education Center
USDOT Research Priority: Preserving the Existing Transportation System
Primary USDOT Strategic Goal (<i>select drop down</i>): Economic Strength and Global Competitiveness
Principal Investigator(s) with ORCID(s) and Contact Information: Bethany Stich, 0000-0003-2534-3248, bstich@uno.edu
Project Partners: Big River Coalition, Port of South Louisiana, National Oceanic and Atmospheric Administration
Project Type (<i>select drop down</i>): Applied Research
Project Research Topic Type (<i>select drop down</i>): Maritime Sustainable and Resilient Infrastructure
Transportation Modes Involved (<i>check all that apply</i>): <input checked="" type="checkbox"/> Waterway <input type="checkbox"/> Road <input type="checkbox"/> Rail <input type="checkbox"/> Pipeline <input type="checkbox"/> Other
Research Project Funding: Federal Funding - \$123,474, Non-Federal - \$ 61,736 Total Funding \$185,210 Technology Transfer - \$18,521
Project Start and End Dates 10/15/23 to 5/31/25
Project Title: Economic Impact Analysis of Artificial Draft Restriction on the Lower Mississippi River Port Complex
Project Abstract (Brief Description): The purpose of this research project is to conduct a comprehensive economic impact analysis to assess the effects of artificial draft restrictions on the Lower Mississippi River Port Complex. Artificial draft restrictions involve intentional depth limitations imposed on vessels for navigational safety or environmental reasons. Understanding the economic implications of such restrictions is crucial for stakeholders, including port authorities, shipping companies, and policymakers, to make informed decisions about infrastructure investments and operational policies.
USDOT Priorities: This project supports USDOT Strategic Goals: Safety, Economic Strength and Global Competitiveness and Transformational. Artificial draft restrictions make traversing the LMR hazardous for mariners. This research will highlight where these restrictions are, what the risks associated with them may be, and how they negatively impact the economic and trade benefits that were to be achieved by deepening the Mississippi River Channel. Additionally, this research will be transformational if it aids in policy makers making decisions that ultimately will lead to the LMR reaching its full potential.
Outputs (results of the work performed): This research will evaluate the economic consequences of artificial draft restrictions on the Lower Mississippi River (LMR) Port Complex. It will analyze the impact on shipping costs, transportation efficiency, and overall competitiveness of the complex. It will examine the effects the artificial draft restrictions have on employment, trade volumes, and regional economic growth. Ultimately, this research will provide actionable insights and recommendations for mitigating negative impacts and optimizing economic performance. UNO will work with Es2 and the Port of South Louisiana for assistance with data collection and mapping.
Outcomes/Impacts: The research outcomes will provide valuable insights for port authorities, shipping companies, and policy makers. They will support evidence-based decision-making regarding port

infrastructure investments as well as contribute to the broader understanding of the economic implications of navigational restrictions on major riverine transportation routes.

Technology Transfer Activities: The US Army Corps of Engineers, HIS Markit, the Maritime Administration, Louisiana Office of Economic Development, the Port of New Orleans, the National Academy of Sciences, Jones Walker, and the Louisiana Department of Environmental Quality all predicted that the deepening of the Mississippi River channel to 50 feet would have significant economic benefits and would increase trade. However, these benefits have not been realized, in part due to the artificial draft restrictions still in place. This research will provide data to the above organizations to assist in making their original predictions a reality. This will be done via presentations and publications as well as direct in-person meetings.

Final Research Report: Upon completion of the project, provide a URL link to final report will be provided

Project Deliverables: PI agrees to submit all deliverables within 4 weeks after the project end date.

Data Management Plan (DMP): PI has reviewed and agrees to adhere to MarTREC DMP. Proposed project DMP must be attached to the submission email along with this form.

Center Director Approval Signature and Date:



03.05.24