MarTREC
Maritime Transportation Research & Education Center

BIL MarTREC Tier 1 UTC Project Request Form
Project 7015

Submission Date: 12/02/24
Lead Recipient/Grant Number: University of Arkansas / 69A3552348331
Principal Investigator Institution: University of Arkansas
Center Name: Maritime Transportation Research and Education Center
USDOT Research Priority: Preserving the Existing Transportation System
Primary USDOT Strategic Goal (*select drop down*): Economic Strength and Global Competitiveness
Principal Investigator(s) with ORCID(s) and Contact Information: Justin Chimka <jchimka@uark.edu https://orcid.org/0000-0002-2931-6450 (479) 575-7392
Project Partners: n/a
Project Type (*select drop down*): Applied Research
Project Research Topic Type (*select drop down*): Maritime and Multimodal Supply Chain Management
Transportation Modes Involved (*check all that apply*): ☒Waterway ☐Road ☐Rail ☐Pipeline ☐Other
Research Project Funding: Federal funding amount is $66,809
Non-Federal funding amount is $33,447
Total funding amount is $100,256
Amount of funding to be spent on planned Technology Transfer activities is $5013
Project Start and End Dates (Format month/day/year to month/day/year): 1/1/25 to 12/31/25
Project Title: Synthesis and Analysis of Maritime Supply Chain and Freight Indicators
Project Abstract (Brief Description): In August 2024, U.S. container imports increased almost 13% year-over-year and remain greater than the 2.4 million TEU mark which historically stresses maritime logistics infrastructure. After July 2024 saw a 26-month high in U.S. container imports, this second month of relatively great volume contributed to increased port transit time delays at 7 of the top 10 U.S. ports. Based on these freight trends and their effects on the supply chain we should be motivated to focus on the maritime side of port congestion (inside the gate) and its economic impact related to freight movement, transportation labor and capacity tightness. These supply chain and freight indicators are published by the Bureau of Transportation Statistics but require synthesis and analysis to greater benefit decision makers and the public.
USDOT Priorities: This project supports Economic Strength and Global Competitiveness by addressing Resilient Supply Chains with the Research Objective related to Freight Planning and Performance (see immediately below).
Outputs (results of the work performed): We aim to "Develop data and tools to assess freight system performance and support performance-based freight planning and policies."
Outcomes/Impacts: Insights into relationships among port congestion, freight movement, transportation costs, labor and demand should improve public and private investment decisions that benefit society at large.
Technology Transfer Activities: According to the U.S. DOT forms of technology transfer include scientific dissemination, "sharing information with interested parties in government, industry or academia."

Therefore, we have budgeted approximately five percent of the total budget toward domestic travel to present at an academic conference.
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: Heather Nachtmann 12.23.24