

<p>Project Title: Mississippi Multimodal Freight Analysis Model</p>
<p>Project Abstract (Brief Description): Commodity flows is a defining aspect of the Mississippi regional economics' viability and livability. Mississippi's regional and local economy substantially benefits from increased intra-, inter-and through regional freight activities between different trading partners and intermodal facilities. Implementation of state-level strategies that support efficient freight movement is therefore essential not only for attracting new industries to move freight within, into, out and through of the region but also for addressing the needs of existing businesses. The Mississippi Department of Transportation strives to facilitate the safe and efficient movement of freight on the Mississippi transportation system. Mississippi Freight Networks diagram from the Mississippi 2016 State Freight Rail Plan is presented in the Figure below. The objective of this project is to develop a multimodal freight transportation analysis model for Mississippi. The Mississippi multimodal freight analysis model enables policy makers, transportation planners and logistic analysts in various federal, state, and local agencies for assessing the demand for transportation facilities and services, energy use, and safety risk and environmental concerns. The development of the Mississippi multimodal freight transportation analysis model shall be based on the 2017 Commodity Flow Survey (CFS) conducted by United States Census Bureau and released September 15, 2020 . There are several CFS datasets released by United States Census Bureau . Specifically, data from the 2017 CFS Public Use File (PUF) is used for the development of the Mississippi multimodal freight transportation analysis model. Project Objective(s): The objective of the proposal is to investigate the effect of the vetiver grassroots to stabilize levee slopes in the maritime and multimodal transportation infrastructures at Mississippi</p>
<p>Describe Implementation of Research Outcomes - The Mississippi Department of Transportation strives to facilitate the safe and efficient movement of freight on the Mississippi transportation system to promote the following goals: a. Improve reliability and reduce congestion on the primary freight corridors. b. Maintain the freight network infrastructure in a state of good repair. c. Improve economic benefits of the statewide freight network. d. Protect the safety and security of the freight infrastructure. e. Protect the environment while enhancing the freight network performance. The objective of this project is to develop a multimodal freight transportation analysis model for Mississippi. The Mississippi multimodal freight analysis model enables policy makers, transportation planners and logistic analysts in various federal, state, and local agencies for assessing the demand for transportation facilities and services, energy use, and safety risk and environmental concerns. Additionally, business owners, academic institutes, private researchers, and analysts use the model associated and generated information for analyzing trends in the movement of goods, mapping spatial patterns of commodity and vehicle flows, forecasting demands for the movement of goods, and determining needs for associated infrastructure and equipment.</p>
<p>Impacts/Benefits of Implementation - The Mississippi multimodal freight analysis model enables policy makers, transportation planners and logistic analysts in various federal, state, and local agencies for assessing the demand for transportation facilities and services, energy use, and safety risk and environmental concerns. Additionally, business owners, academic institutes, private researchers, and analysts use the model associated and generated information for analyzing trends in the movement of goods, mapping spatial patterns of commodity and vehicle flows, forecasting demands for the movement of goods, and determining needs for associated infrastructure and equipment.</p>
<p>Web Links: martrec.uark.edu</p>

Budget (Funding) Amounts & Source(s) (US DOT +Match(s) =Total Costs): MarTREC 55,000 + JSU 27,500 = 82,500.

Project Start and End Dates: 11/01/2021 to 12/31/2023 Complete

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