Transportation Center Receives Additional \$1.4 Million Grant From Department of Transportation

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FAYETTEVILLE, Ark. – The Maritime Transportation Research and Education Center (MarTREC) at the University of Arkansas has received an additional \$1.4 million from the U.S. Department of Transportation.

Researchers at the center focus on maritime and multimodal logistics, construction of resilient and sustainable multimodal infrastructure and the creation and promotion of livable coastal and river-valley communities with effective emergency management systems. Multimodal transportation systems integrate trucking, rail and barge.

Heather Nachtmann, University of Arkansas

"We are proud of our work here at MarTREC, and we are grateful for the support we've been given to help the nation achieve its strategic goal of economic competitiveness through efficient, resilient and sustainable transportation systems on U.S. navigable waterways," said Heather Nachtmann, professor of industrial engineering and the center's director.

The center is a consortium of researchers at four institutions – the University of Arkansas, the grantee institution; Jackson State University; Louisiana State University; and the University of New Orleans, all of which have proximity to navigable waterways along the Mississippi River and the Gulf Coast. The consortium was formed based on nationally renowned expertise at each of these institutions.

The new grant will help one team of U of A researchers who are developing a rapid and nondestructive approach to assessing the condition of levees for strength and resistance to liquefaction. This group will coordinate with the U.S. Army Corps of Engineers to identify levees that are unacceptable or minimally acceptable based on current structural criteria.

Another U of A research team is working on a multimodal supply-chain system to support secure and resilient inland waterways. The objective of this project is to provide timely information on cargoes that should receive high priority rating for off-loading and alternative infrastructure if there is a disruption to normal waterway routes due to a natural disaster or an attack.

The center also added four new members to its advisory board – Rear Adm. Kevin Cook, commander with the U.S. Coast Guard; Jeff Lillycrop, technical director with the Corps of Engineers; Kenneth Ned Mitchell, research civil engineer with the Corps of Engineers; and Craig Philip, former chief executive officer of Ingram Barge Co. Nachtmann, associate dean of research for the College of Engineering, is the principal investigator on the grant.