



MarTREC UTC Project Information Form
 USDOT Tier 1 University Transportation Center
 Agency ID or Contract Number 69A3551747130

Project Title: Towards integrating resilience into everyday transportation practices of coastal and river valley communities
Project Abstract (Brief Description): Coastal and river valley communities have become increasingly vulnerable to sea level rise, hurricanes and other natural disasters. In many cases, these events force the communities to evacuate in a relatively unpredictable way. Emergency evacuations require safe and effective mobilization of the public from hazardous areas while facing uncertainty, for example, unknown road conditions (e.g. road blockages, traffic incidents) and environmental conditions (e.g. implement weather). Therefore, the transportation system plays an integral role in the performance of the evacuation. However, the transportation system is also under the disaster threat and its performance during an evacuation is influenced by the magnitude of the threat, the community response, the resilience of the transportation system, etc. Despite many research has been conducted in the area of resilience, integrating this concept into everyday transportation practices to prepare for these disasters remains a challenge. The goal of this research is to advance the state-of-the-art in transportation activities to help integrate resilience into their everyday practices to assist coastal and river valley communities in their emergency planning. This research will leverage from new or existing low-cost technologies such as traffic simulation to help transportation agencies entities maximize their resilience practices within their budget constraints. It is also anticipated that this research will lead to future development of new or enhanced tools and methods that can be easily transferred to coastal and river valley communities.
Describe Implementation of Research Outcomes (or why not implemented) - Place any photos here <i>To be determined upon conclusion of the project:</i>
Impacts/Benefits of Implementation (actual, not anticipated) <i>To be determined upon conclusion of the project:</i>
Web Links: martrec.uark.edu
Budget (Funding) Amounts & Source(s) (US DOT +Match(s) =Total Costs): \$85,925 (USDOT) + \$44,742 (Match) = \$130,667 (total)
Project Start and End Dates: 08/01/18-03/31/21 Project complete
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