## EXECUTIVE SUMMARY - updated FEBRUARY 2019



## MEGAREGIONAL TRANSPORTATION SYSTEM RESILIENCE PLANNING

Natural disasters are occurring with increasing frequency and increased impacts to communities across the U.S and the world. Cities and regions can plan for disaster resiliency in numerous ways: carefully planned evacuation system plans, construction of barriers along seawalls, and changes in materials used to ensure lasting construction. Megaregion resilience planning is yet to be determined or outlined.

Primary questions include: should resilience planning be done at the megaregion level, or should this effort be led by the state? Do connected MPOs have a vested interest in the recovery or success of MPOs in typically geographically vulnerable locations? This study will include an evaluation of how MPOs have been affected by natural disasters to-date, and will identify opportunities to integrate resiliency planning into the MPO planning cycle.

This project will evaluate the economic impact of four natural disasters that occurredin different megaregions in the U.S within the last decade. It will assess economic and demographic impacts of regions connected to the region of greatest impact. When a severe natural disaster event displaces residents, this can cause unexpected high spikes in population growth in adjacent metropolitan areas and increasedstrain on the regional transport systems of receiving regions. The deterioration of existing infrastructure can set a region behind in achieving strategic objectives in the case of needing to rehabilitate existing infrastructure quicker than planned for. The project will develop a proof of concept for an economic analysis to be conducted at a megaregional scale. It will also synthesize best practices in transportation resilience planning and develop recommendations for the Texas Triangle megaregion. USDOT Tier-1 University Transportation Center



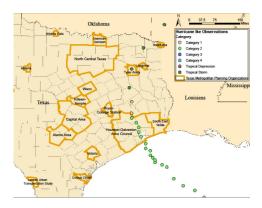
Inter-regional Resiliency: The Role of MPOs in Natural Disaster Planning and Response Preparation (#CM2-32)

> Lisa Loftus-Otway, University of Texas at Austin

> > 09/01/2018 - 05/31/2019

Project Information Form: http://sites.utexas.edu/cm2/ files/2018/06/Year-3-Lisa-Loftus-Otway-Inter-regional-Resiliency.pdf





Hurricane Ike Observations

This study was funded by the consortium of Cooperative Mobility for Competitive Megaregions (CM<sup>2</sup>). CM <sup>2</sup> is a USDOT Tier-1 University Transportation Center (UTC). CM <sup>2</sup>'s consortium partners include The University of Texas at Austin, Louisiana State University, Texas Southern University, and the University of Pennsylvania, with affiliates at Cornell University and Rutgers University.