HORNEY, TAMU DHS Coastal Resilience Center Research Project Work Plan 1/1/2016 – 12/31/2017

- 1. Project Title. Implementing the Disaster Recovery Tracking Tool
- 2. **Principal Investigator.** Jennifer Horney, Associate Professor, Texas A&M University Health Science Center School of Public Health, Department of Epidemiology and Biostatistics
- 3. Other Research Participants/Partner: Phil Berke, Professor, Texas A&M University, College of Architecture, Department of Landscape Architecture and Urban Planning
- 4. Short Project Description. Long-term, coordinated, systematically collected, and shared data on recovery is needed to effectively improve community resilience to future disasters. Tools are needed that can be used to measure disaster recovery at the local, regional, and state level so that best practices can be adopted. Valid and reliable quantitative and qualitative measures of community disaster recovery are needed in order to be able to track recovery in different geographic locations, from different types of disasters, and over time. The proposed research will transition the existing Disaster Recovery Tracking Tool into a widely adopted web-based tool for end users to track the progress and quality of post-disaster recovery by entering baseline and post-disaster data for up to 79 metrics with two pilot communities. Technical assistance and training will be provided for the two pilot communities. Lessons learned will be incorporated into final marketing materials, a training module, and a user guide for additional end users. Final materials will also be shared with appropriate Federal partners, including FEMA / EMI Emergency Management Higher Education Program as well as Texas A&M's Engineering Extension Service, which provides training in emergency management and homeland security.
- 5. Abstract. Without monitoring recovery and comparing post-recovery status with pre-disaster benchmarks, it is difficult for communities to assess whether or not they are achieving a quality recovery, improving disaster resilience, or building back better. The Disaster Recovery Tracking Tool provides a framework for end users (e.g., planners, emergency managers, long-term recovery committees) to track progress on 79 metrics of disaster recovery. The 79 metrics were identified and content validated through a literature review, recovery plan review, case studies, focus groups, key informant interviews, and pilot tests with communities impacted by Hurricane Sandy. The metrics include both quantitative and qualitative measures of recovery organized in four themes and ten focus areas. Practitioners using this tool can compare pre- and post-disaster status using baseline and current data. Reports generated by the tool can provide end users with a useful means of prioritizing recovery goals and activities and identifying elements important to include in recovery planning, potentially making recovery more effective and efficient and communities more resilient.