



HARC

Building a Cross-Boundary Community of Practice to Increase Community Resilience

Upper Texas Gulf Coast Community Adaptation & Resilience Alliance (CARA)

Need for Community Adaptation

Extreme weather events are a part of the Upper Texas Gulf Coast Region’s history dating back to Racer’s Storm in 1837. Extreme weather events in the last twenty years include hurricanes and tropical storms (Allison in 2001, Rita in 2005, Ike in 2008 and Harvey in 2017), drought (2010- 2014), wildfires (2011), and inland floods (2001, 2015, 2016 and 2017). The flood losses and rebuilding costs associated with Hurricane Harvey are estimated to be \$180 billion, making Harvey one of the costliest natural disasters in U.S. history. In addition to financial losses, Harvey also resulted in significant upheaval in well-being and quality of life for residents.

These events place considerable pressure on existing infrastructure and require significant investment for recovery. This results in increasing pressure to develop new adaptive infrastructure and more resilient communities. Do we proceed forward business as usual or take a new approach?

Resilient communities are those that are able to prepare for, adapt to and withstand adverse events in ways that allow people, businesses, neighborhoods, and communities to maintain essential functions and bounce back relatively quickly. Resilience strategies have the added benefit of helping communities to move forward toward improved environmental, social and economic health and well-being.

Purpose Statement

We propose, therefore, to develop the Upper Texas Gulf Coast Community Adaptation & Resilience Alliance (CARA), a multi-stakeholder resilience collaborative employing sustainable and adaptive planning techniques that monitor and adapt to short and long- term climate and weather-related risks and hazards.

The **goal** of this collaborative is to increase capacity for long-term community resilience and reduce regional vulnerability by creating a network of coordinating private and public sector organizations that will develop and share data and information, identify regional vulnerabilities, and develop and propose strategies and best practices to address them. As the first resilience collaborative in Texas, CARA will serve as a model of resilience practice for other metropolitan regions along the U.S. Gulf Coast and will work to implement the following **objectives**:

- Create a **baseline assessment** of community resilience along the Texas Gulf Coast;
- Create a **science information network** providing common data and information for regional extreme weather and climate risk models, assessments and planning;
- Develop a regional **resilience and adaptation policy and strategy toolkit** to support coordinated decision-making by identifying regional goals for adaptation as well as policies and best practices for achieving them;
- Build a regional **community of practice** that shares technical expertise, leverages resources, and advances comprehensive and coordinated strategies to increase regional capacity for community adaptation and resilience.

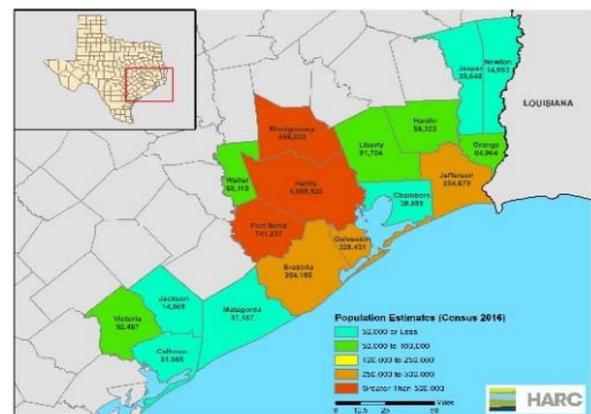
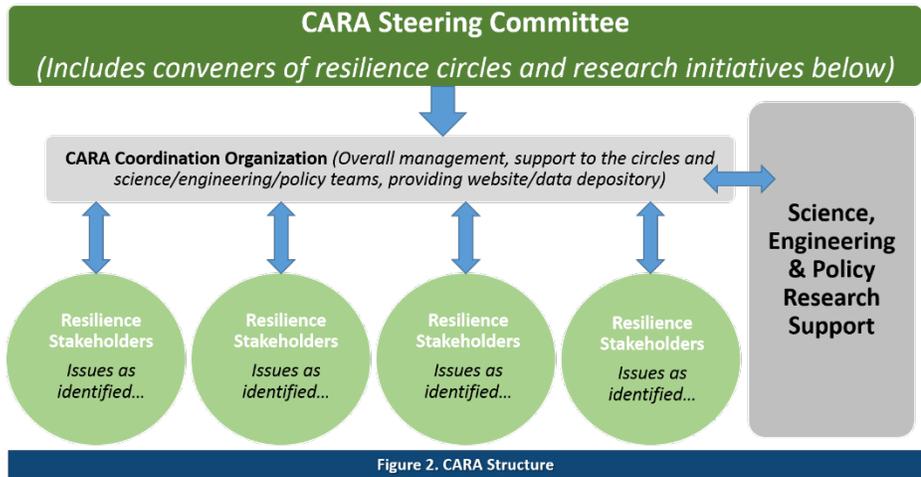


Figure 1. Upper Texas Gulf Coast Region

Who will be Involved

The Texas Gulf Coast CARA will initially include the upper Texas Gulf Coast counties: Brazoria, Calhoun, Chambers, Fort Bend, Galveston, Hardin, Harris, Jackson, Jasper, Jefferson, Liberty, Matagorda, Montgomery, Newton, Orange, Victoria, and Waller (Figure 1). A successful collaborative requires active participation from multiple stakeholders and organizations; currently more than 40 organizations have expressed interest in participating in CARA.



As seen in Figure 2, CARA will be managed by a steering committee and a nonprofit research **management organization** with a history of managing large, collaborative projects in Texas. CARA will also include sector-specific stakeholder groups called *Resilience Circles* and science, engineering, economic and policy research teams. *Resilience Circles* will be based on sector specific focus areas made up of key experts and stakeholders, with the resilience circle leaders selected from private and public sector organizations with appropriate expertise and a reputation for leading independent collaborative research and outreach initiatives. The **CARA Steering Committee** members will be comprised of the resilience circle leaders and will help to synthesize information and develop best practices and strategies devised by the resilience circles. A key component of CARA will be its ability to collect and analyze resilience data shared with all CARA stakeholders. **Science, Engineering, Economic and Policy Research Teams** will be comprised of organizations recognized as experts in key resiliency topics. These organizations will collaborate to develop data, policy and modeling products as requested by stakeholders participating in CARA.

Extreme storm events such as Hurricane Harvey have a significant influence on the economic and social well-being of residents. CARA will go beyond traditional disaster recovery efforts that focus recovery on large infrastructure projects. CARA will address the Upper Texas Gulf Coast region’s vulnerability in a comprehensive and coordinated manner, utilizing scientific principals so that all can work together to more effectively implement policies that promote novel adaptation strategies recover in support of increasing community resilience.

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Organizations Expressing Interest in and/or Support for the Texas Gulf Coast Community Adaptation & Resilience Alliance (CARA)

1. Adaptation International
2. American Institute of Architects
3. Air Alliance Houston
4. American Planning Association
5. American Society of Adaptation Professionals
6. American Society of Civil Engineers
7. Brazoria County
8. Catholic Charities
9. Center for Houston's Future
10. Chambers County
11. Citizens Environmental Coalition
12. City of Houston
13. City of Galveston
14. Center for Climate and Energy Solutions (C2ES)
15. Episcopal Health Foundation
16. Fort Bend County
17. Galveston County
18. Galveston Recovery Fund
19. Harris County
20. Harte Research Institute
21. Houston Baptist University
22. Houston Community College
23. Houston Endowment, Inc.
24. Houston-Galveston Area Council
25. Institute for Sustainable Communities
26. Jefferson County
27. Katy Prairie Conservancy
28. Kinder Foundation
29. Liberty County
30. Local Initiatives Support Corporation
31. Regional Management Districts/Business Improvement Districts
32. Houston METRO
33. Mary Moody Northern Foundation
34. Mitchell Foundation
35. Montgomery County
36. NAACP
37. Port of Houston
38. Public Citizen
39. Rice University
40. Sam Houston State University
41. Sketch City
42. Texas Environment Justice Advocacy Services (TEJAS)
43. Texas A&M University
44. Texas Southern University
45. Texas Tech University
46. U.S. Green Building Council
47. United Way of Greater Houston
48. United Way of Galveston
49. University of Houston
50. University of Texas
51. Urban Land Institute
52. Vision Galveston
53. West Houston Association