

# **Building Community Resilience: Four Case Studies From Post- Katrina Mississippi**

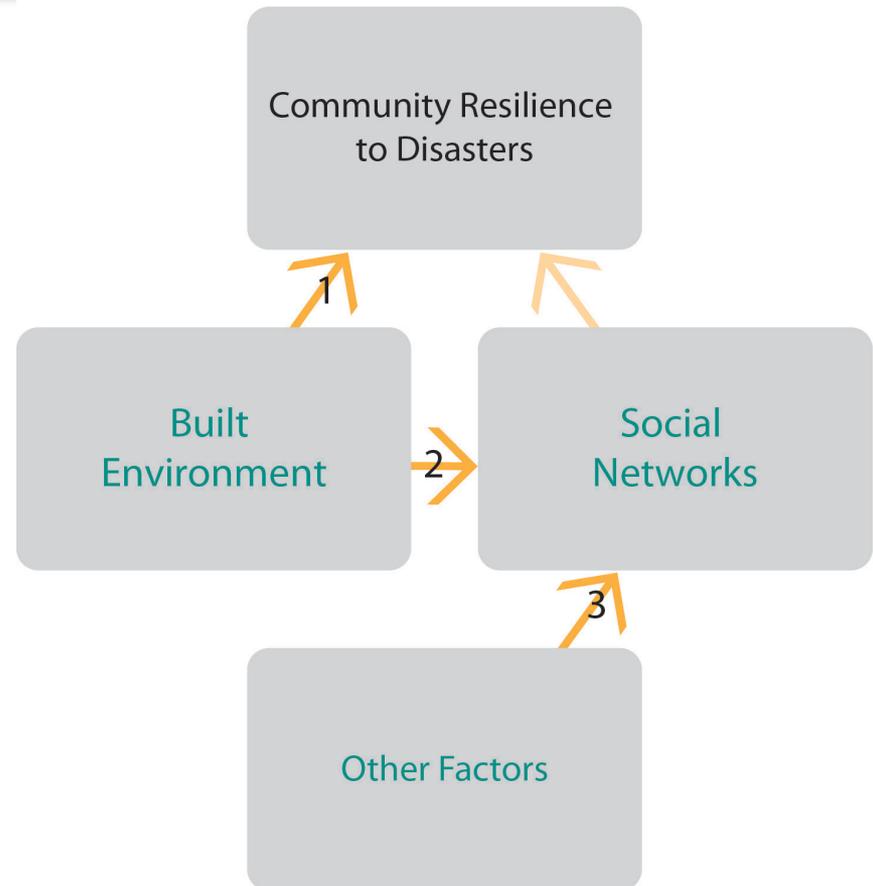
**April 2013**

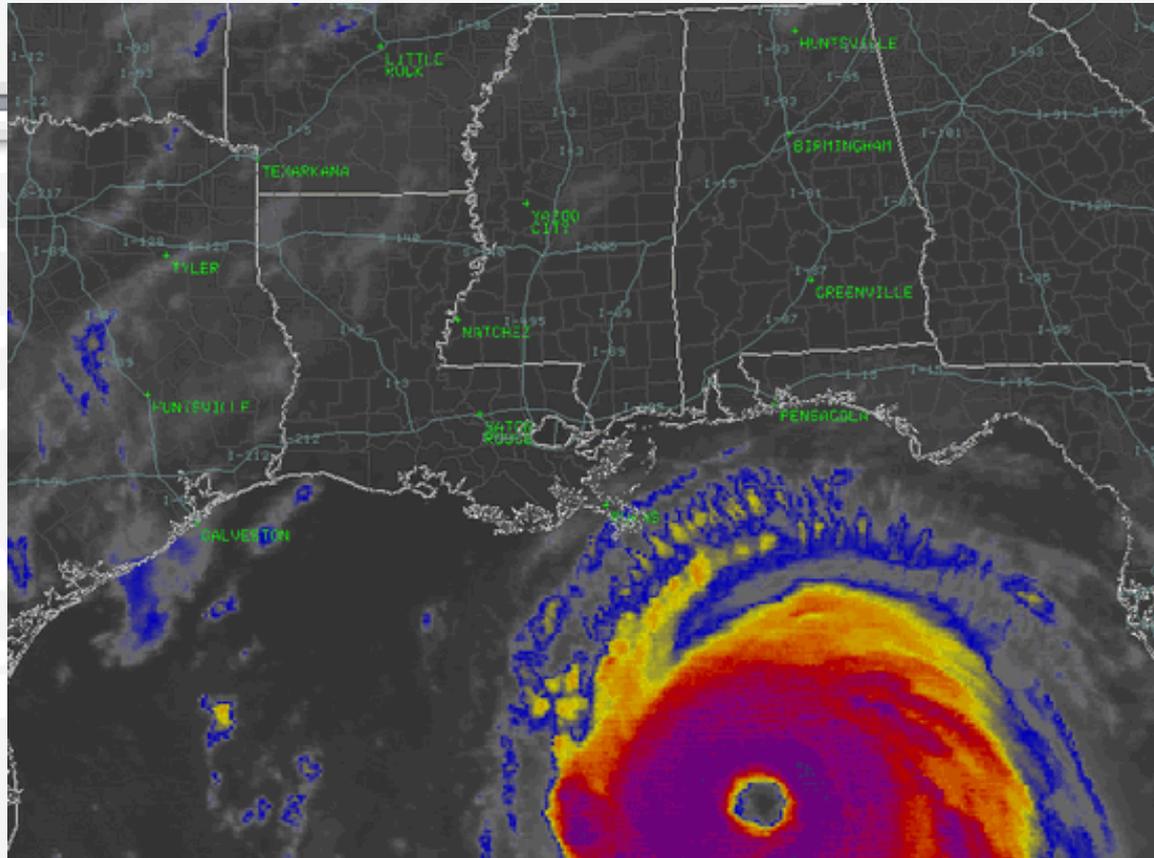
**Ann Carpenter**



# Resilience

- **Resiliency is the ability to rebound after a disturbance**
- **Study set out to examine three related hypotheses:**
  - Social networks are important factors for resilience
  - Social networks interact with and are influenced by the physical environment
  - Communities with the strongest resilience include both strong social networks and varied and integrated physical environments



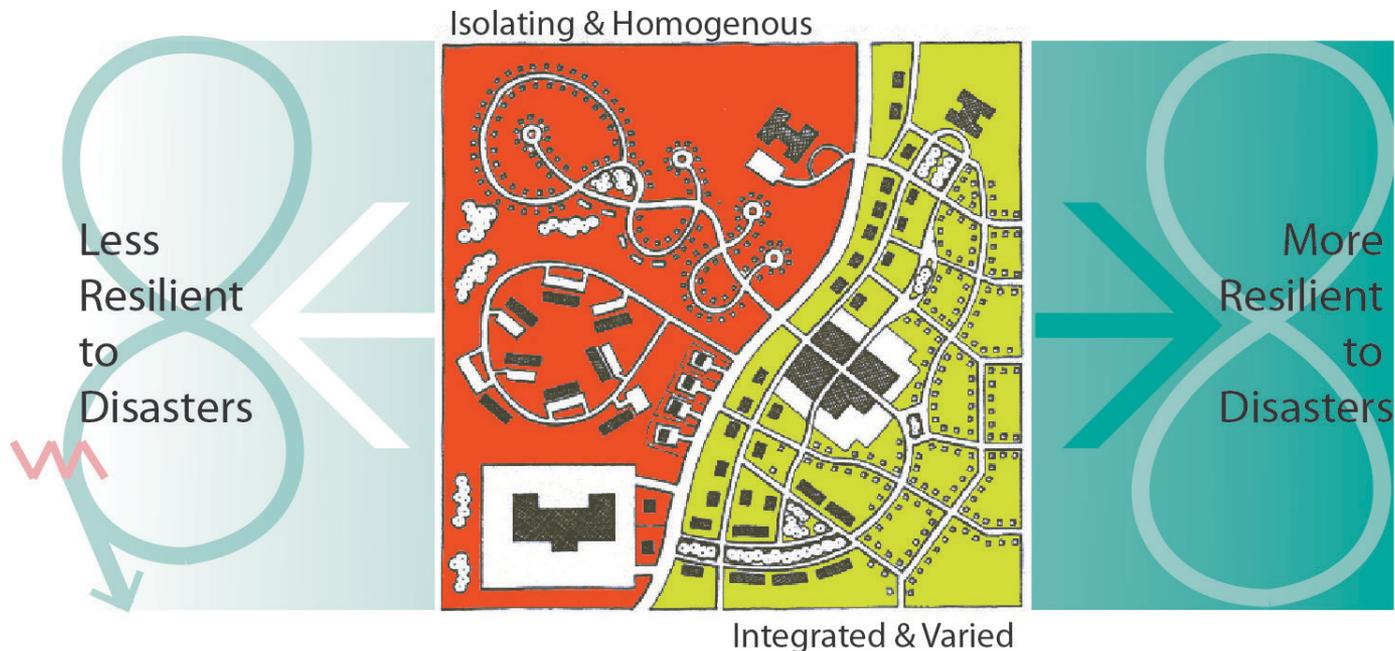


# Hurricane Katrina

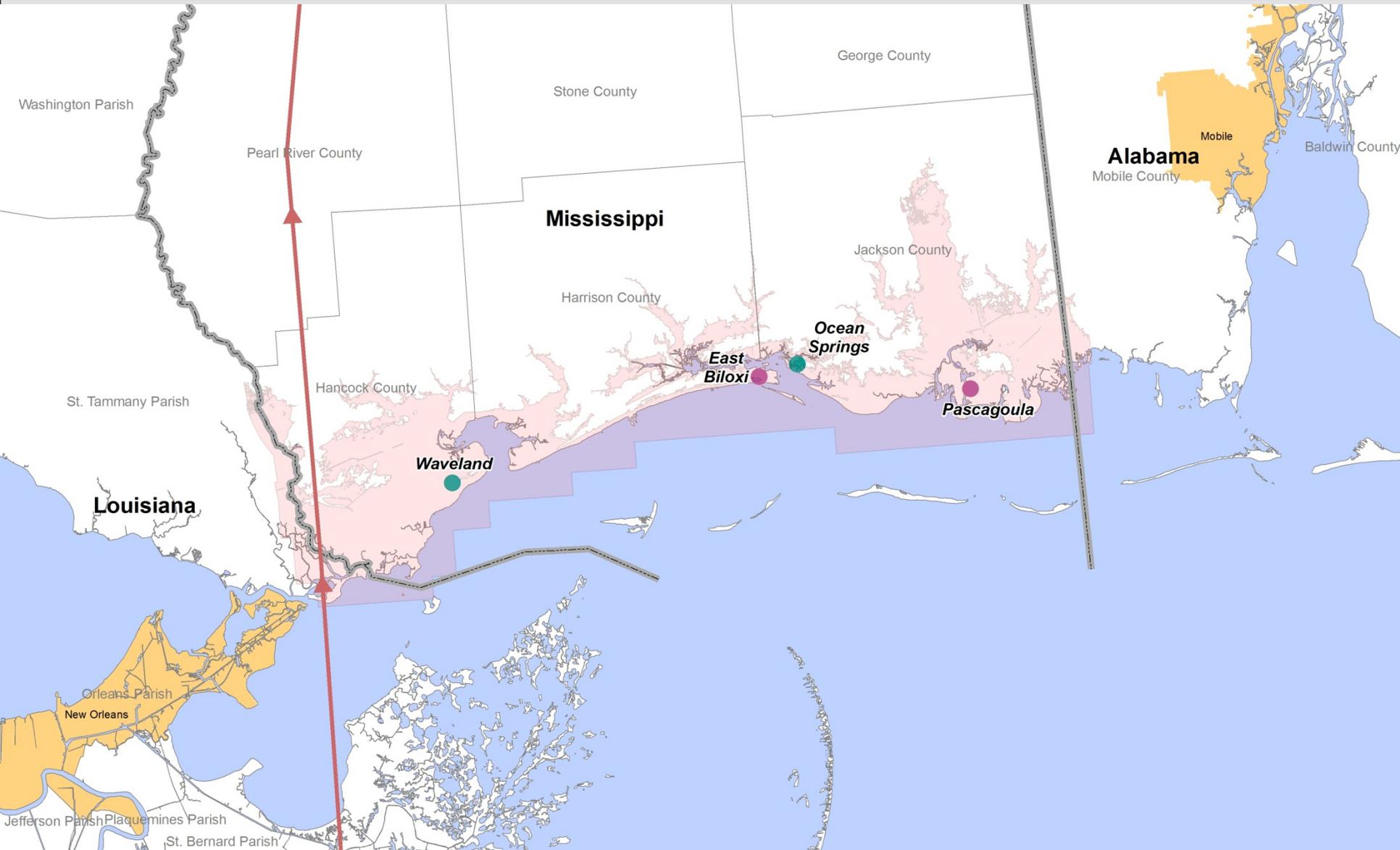
August 2005

# Case Study Approach

- Based on return of pre-Katrina population, 2 high- and 2 low-resilience communities selected for analysis
- Communities selected with similar built environment factors
- Interviews conducted in each location with a cross-section of residents



# Background



# Background



Photo: Flickr user twdbth

# Background



Photo: MDAH MS Archives

# Background

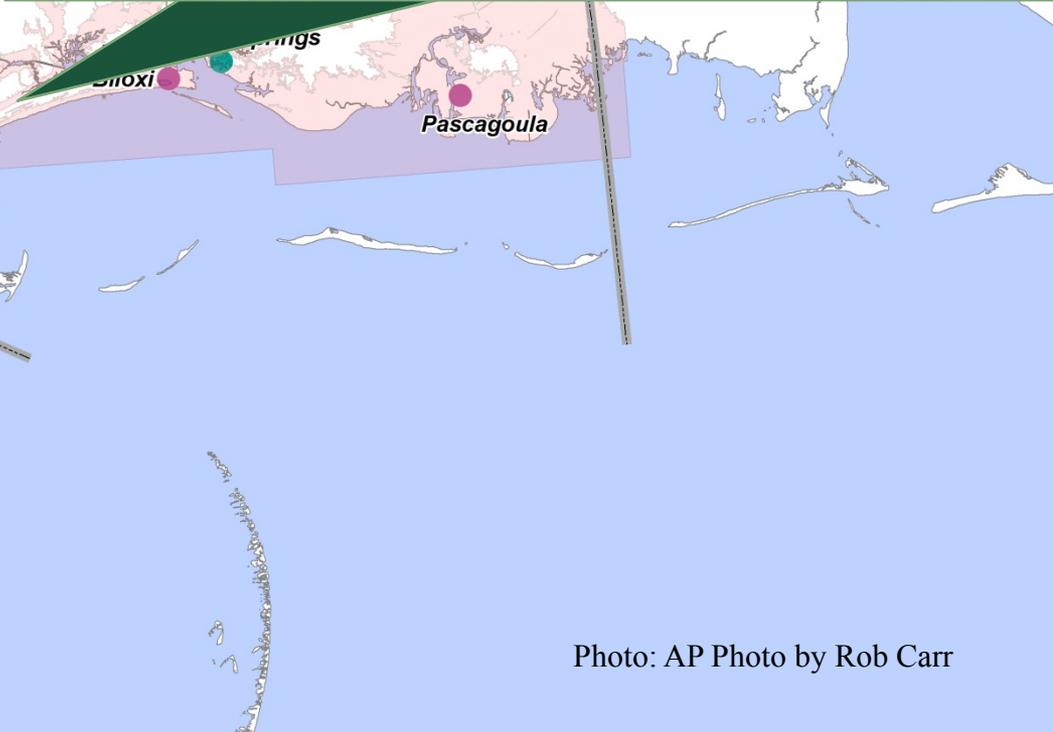


Photo: AP Photo by Rob Carr

# Background

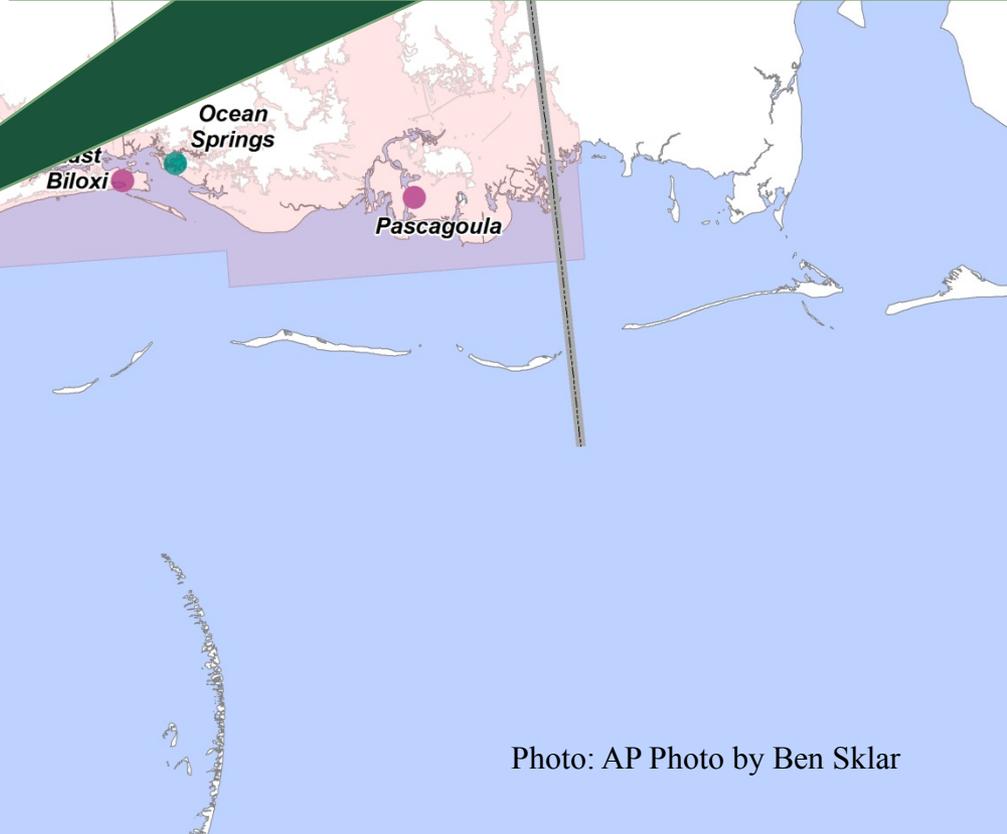
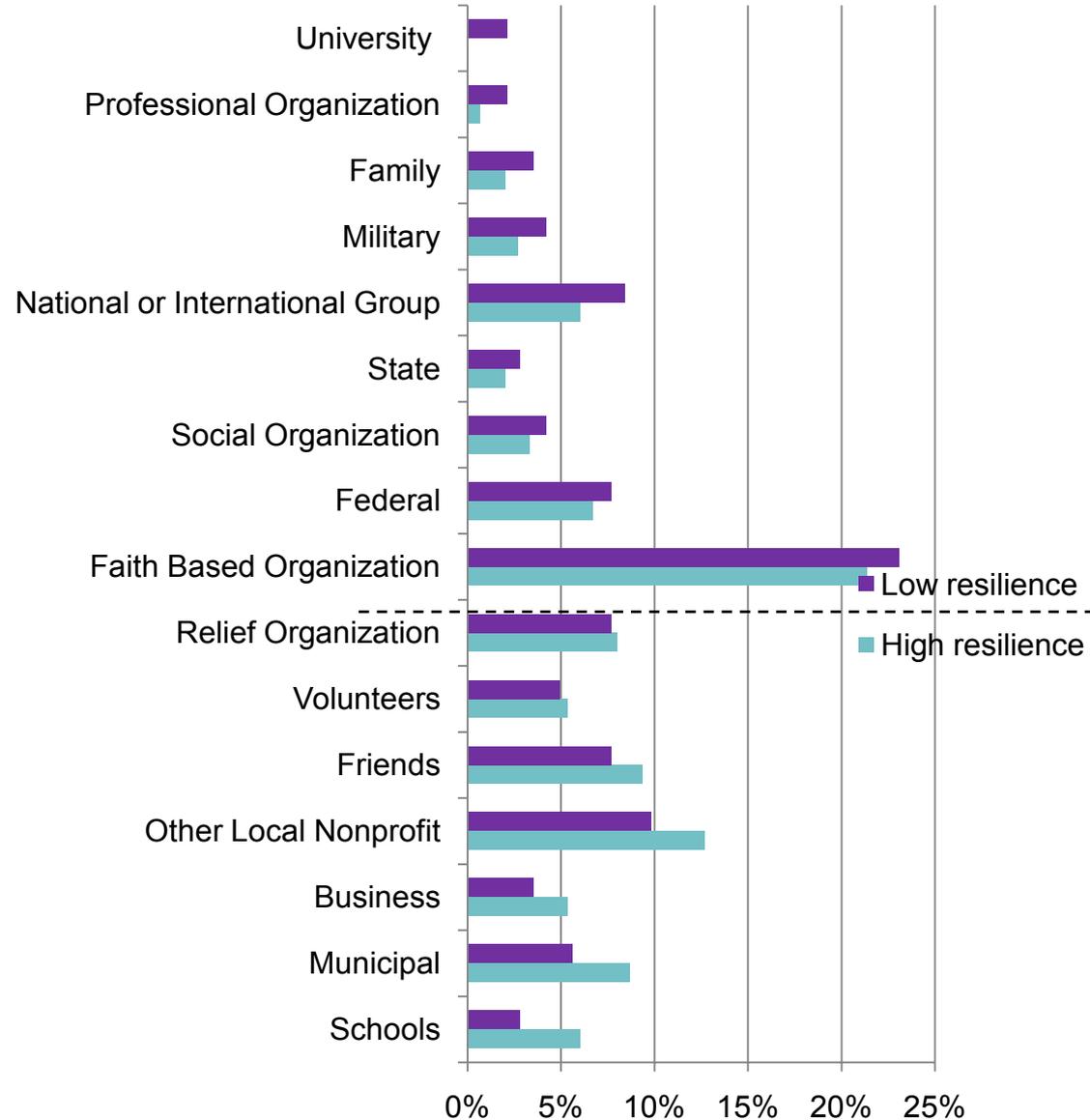


Photo: AP Photo by Ben Sklar

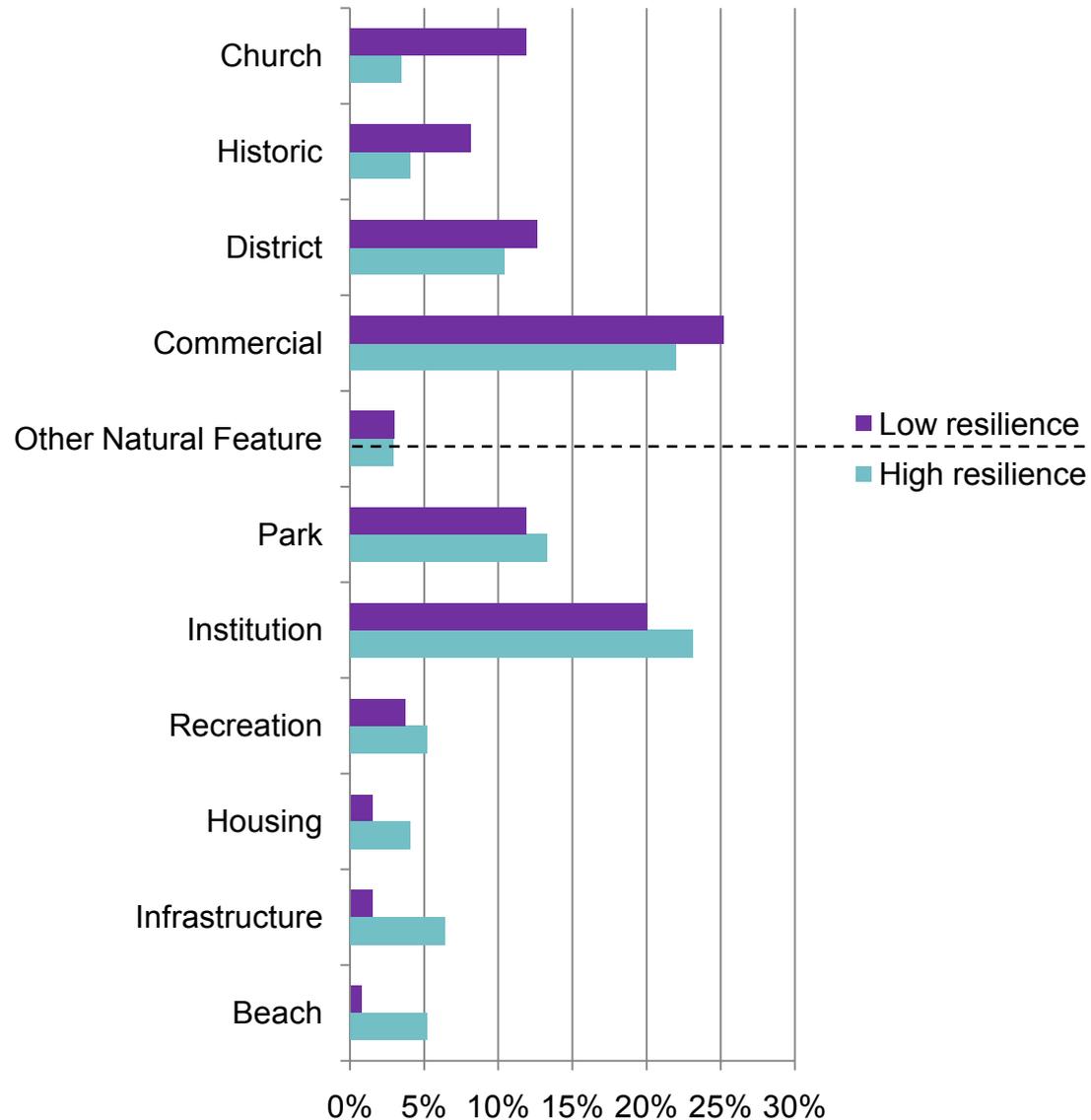
# Results

- **294 networks were identified by 28 interview subjects**
- **High resilience communities relied on local networks, low resilience communities turned to federal aid and the support of national organizations**



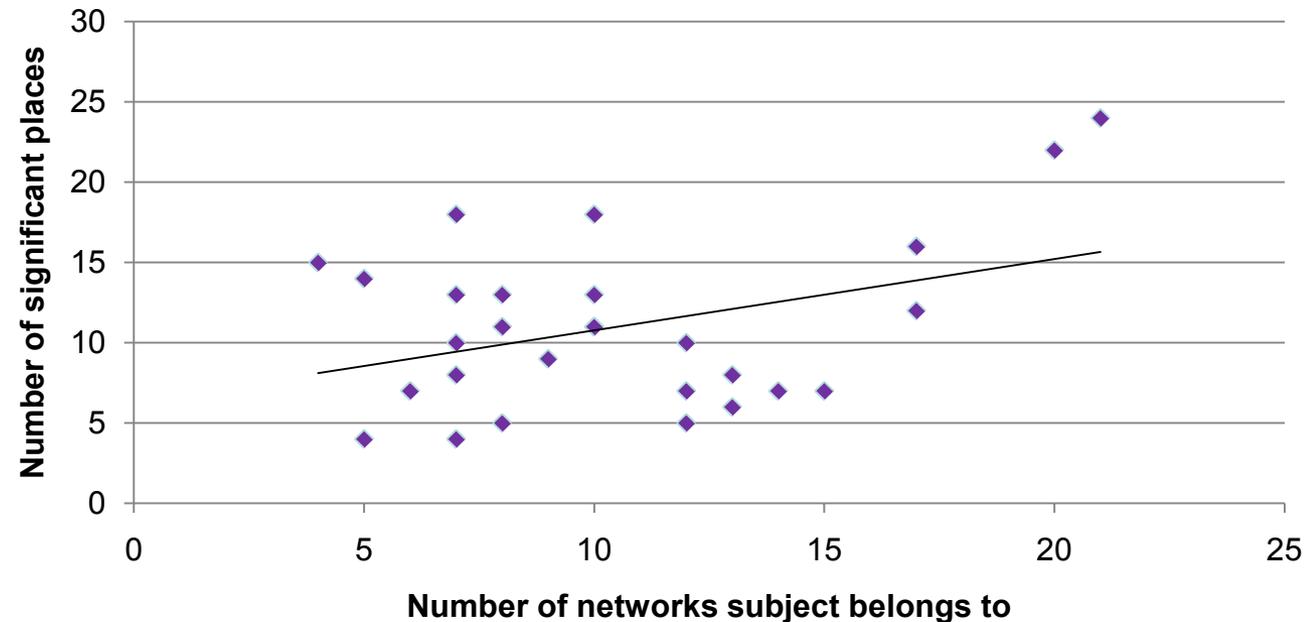
# Results

- **High resilience communities averaged 12.36 sites per person; low resilience communities only 9.64**
- **More even distribution and place attachment to community in more resilient communities**



# Results

- **Weak positive relationship between social networks and significant places identified**
- **Tendency toward highly socially connected people having a greater connection to the built environment?**



# Results

- **According to interviews subjects, factors thought to increase resilience included:**
  - Relatively small damage to the central business district
  - Political will and leadership
  - Public participation in rebuilding
  - Role of major industries and employers (shipbuilding, casinos)
  - Culture and spirit of people
  - Strong faith of population and strong faith-based organizations
  - Established multi-generational roots in the Mississippi Gulf Coast
  - Tradition of coping with hurricanes

# Results

- **According to interviews subjects, factors thought to decrease resilience included:**
  - Large level of damage to entire community
  - Geographic isolation
  - Large number of part-time residents
  - Cost of rebuilding and insurance
  - Depleted property values, foreclosures
  - Restrictive regulations that complicate rebuilding
  - Emotional impact of storm
  - Lack of media attention compared to New Orleans
  - Loss of traditions

# Summary

- **Study highlighted the importance of local, diverse, and redundant social networks**
- **Attachment to and reliance on the built environment was a general issue for resilience**
- **Social networks' reliance on the built environment was traceable to certain types of features**
- **A community is only as strong as its weakest link – vulnerable populations are a particular concern**

