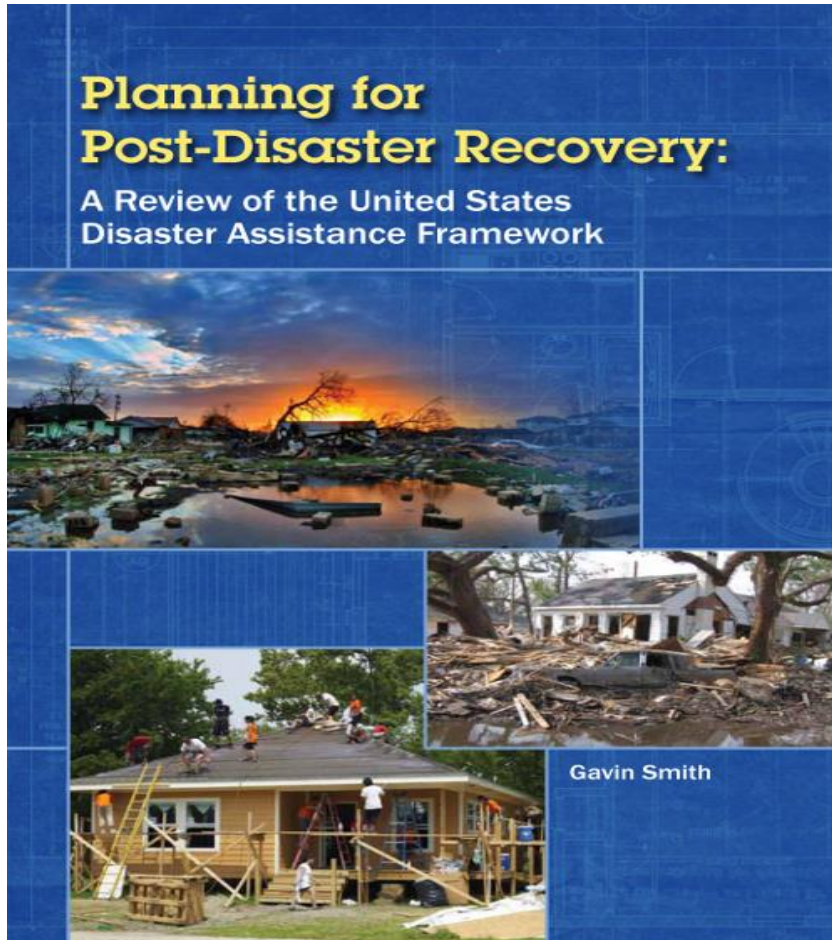


Role of States in Recovery: Lessons from Research And Practice

- **Role of States in Recovery, Including Agency Officials and Governors**
 - **Draws from 2011 book “Planning for Post-Disaster Recovery: A Review of the United States Disaster Assistance Network”**
 - **State Case Studies**
 - **Mississippi following Hurricane Katrina (2005)**
 - **North Carolina following Hurricanes Fran (1996) and Floyd (1999)**
 - **Assessment of State Disaster Recovery Plans (Smith and Sandler 2012)**
 - **Gubernatorial Leadership (Smith, Sabbag and Rohmer – ongoing research)**
 - **State Recovery Guide, Video**
- **Policy Implications and Recommendations for US and Australia**

Role of States in Recovery

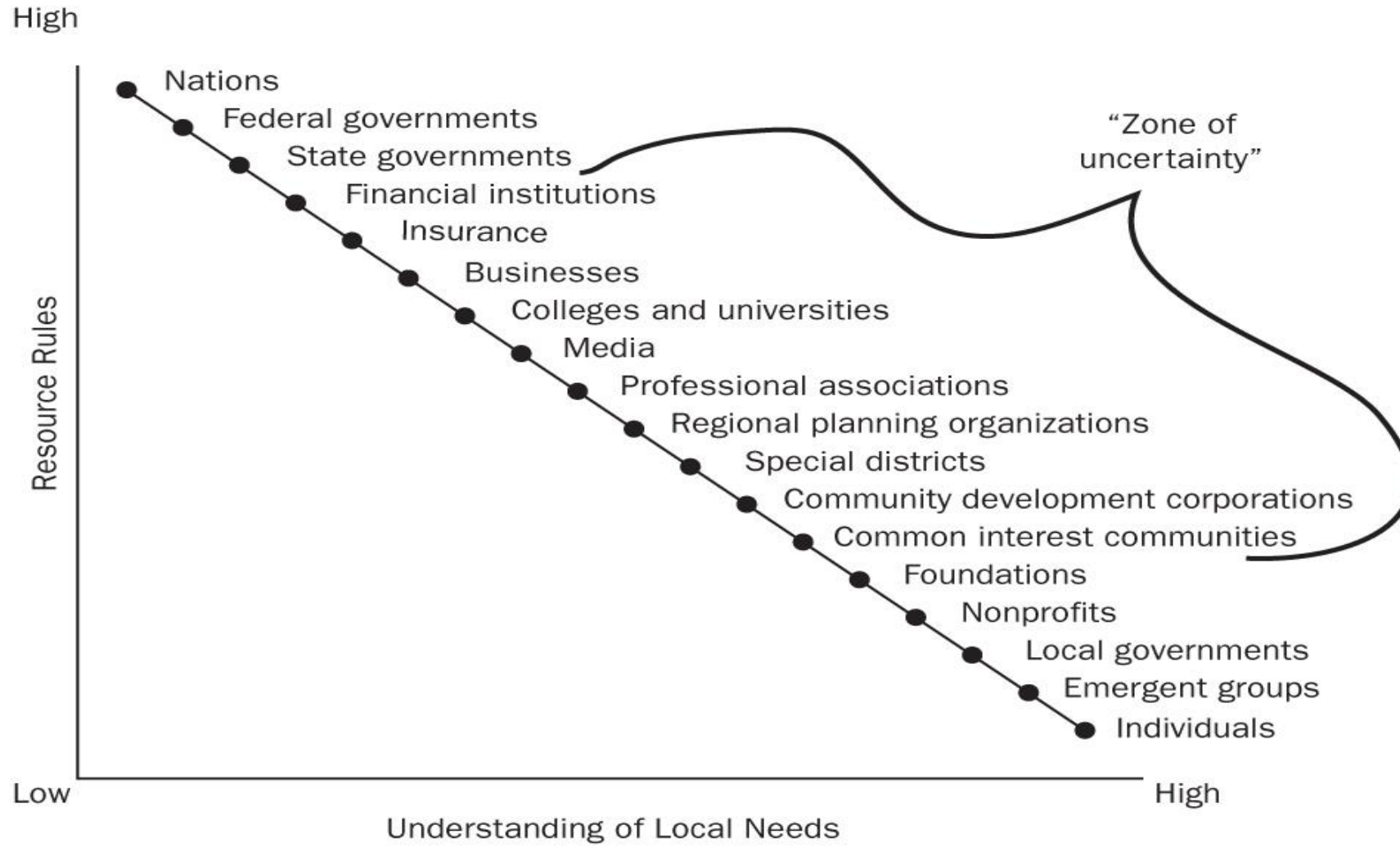
- **The Role of States in Recovery is Understudied and Less Understood relative to Federal and Local Roles**
- **States Perform a Number of Important Boundary-Spanning Roles:**
 - **Translator of Federal Policy**
 - **Administrator of State and Federal Funding**
 - **Local Capacity Builder (training, education and outreach)**
 - **Creator of State Programs Targeting Local Needs**
- **State Capacity Highly Variable and can be Disproportionately Focused on Administering Federal Grant Programs**
- **States Operate within a Larger Assistance Network**



- **Disaster Recovery Assistance Network**
- **Network loosely coupled, differs over time and space**
- **Network Resources**
 - **Funding**
 - **Policies**
 - **Technical Assistance**
- **Dimensions of Framework**
 - **Rules and Understanding of Local Needs**
 - **Timing of Assistance**
- **Focus on State Roles in Recovery**

COASTAL RESILIENCE CENTER

A U.S. Department of Homeland Security Center of Excellence



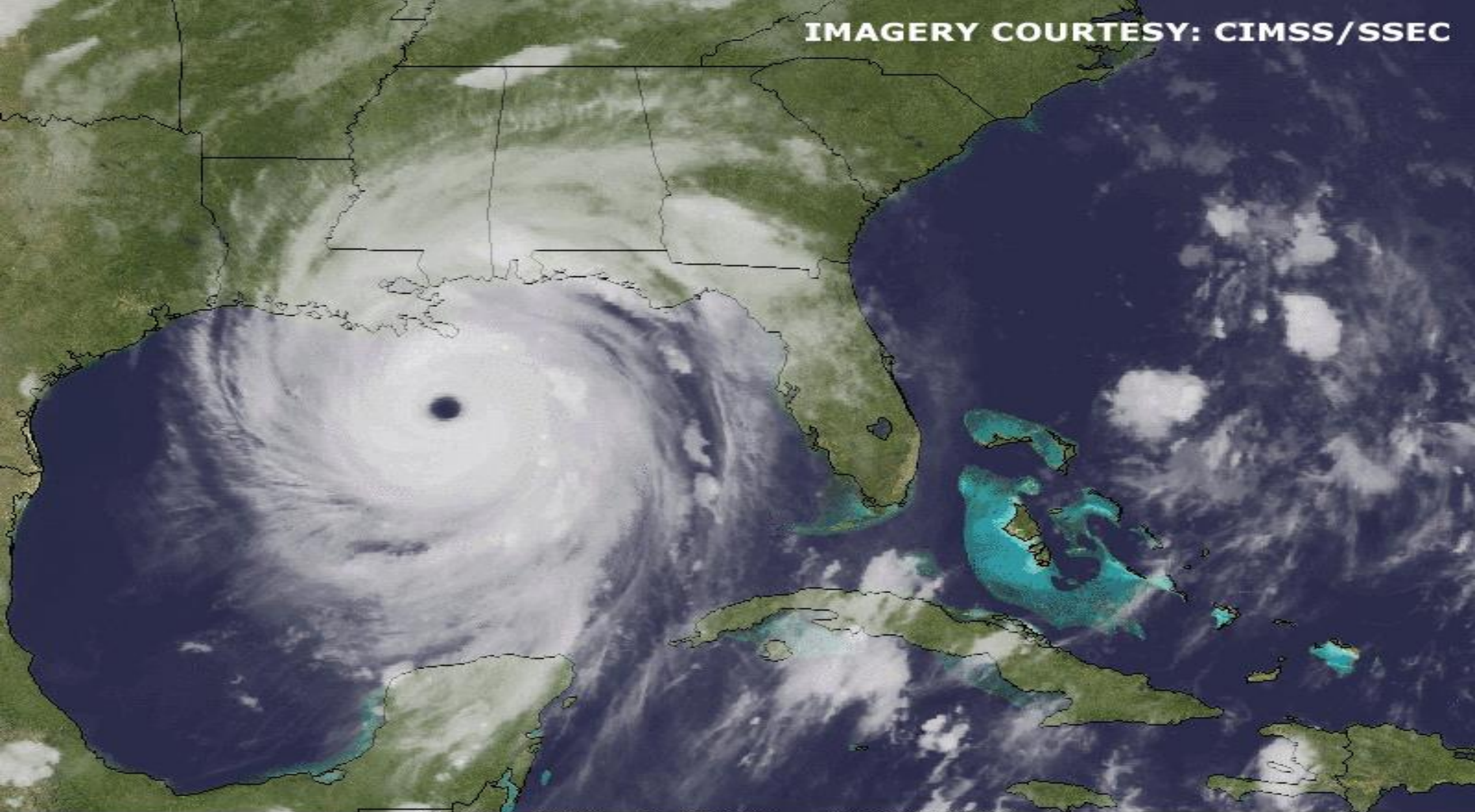
Timing of Resource Assistance

- **Pre- and Post-disaster Assistance**
 - **Complexity**
 - **Funding, Policy and Technical Assistance**
 - **Governance/Collaboration Across Network**
- **Pre-disaster**
 - **Limited Number of Pre-disaster Recovery Plans**
 - **Limited Investment in Pre-event Capacity Building Initiatives**
 - **Issue Salience**
- **Post-disaster**
 - **Speed versus Deliberation**
 - **Time Compression**
 - **Resilience or Return to Normalcy?**

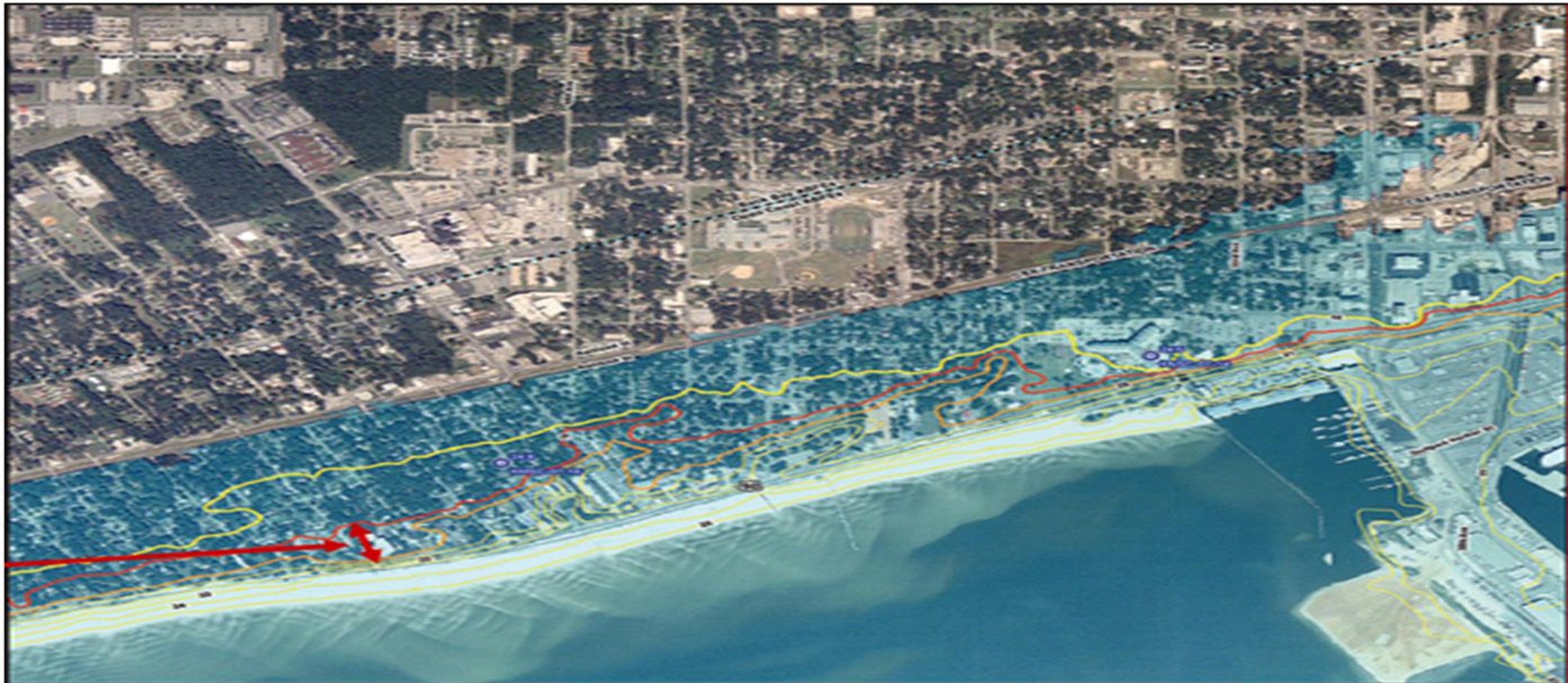
The Public Sector Context: Federal, State and Local Governments

- **Federal Rules (Disaster Relief) Disproportionately Shape Disaster Recovery Assistance Network**
- **Majority of Research Focused on the Role of Government (Federal and Local)**
- **Local Plans Uncommon**
 - **Lack of Pre-event Capacity Building at the Local Level**
- **State Recovery Plans Weak**
- **Federal Recovery Plan Non-Existent Prior to Hurricane Katrina**
 - **National Disaster Recovery Framework Still being Operationalized**

IMAGERY COURTESY: CIMSS/SSEC



29 AUG 2005 - G-12 IMG - 01:15:00UTC



Estimated Katrina Surge Elevations

24-25 ft

Advisory Base Flood Elevations

Open Coast: 18-27 ft


Back Bay: N/A


Effective Base Flood Elevations

VE Zone: 14-18 ft

AE Zone: 12-13 ft


Legend

 State Boundary

 County Boundary

Hurricane Katrina-Related Data

 Preliminary Indoor High Water Mark

 Preliminary Outdoor High Water Mark


 Preliminary Debris High Water Mark

 Limit of Katrina Surge Inundation


Flood Advisory-Related Data


 ABFE Contours (1-foot intervals)

 ABFE Inland Limit

 Approx. Limit of 1.5-foot Wave Zone

 Approx. Limit of 3-foot Wave Zone

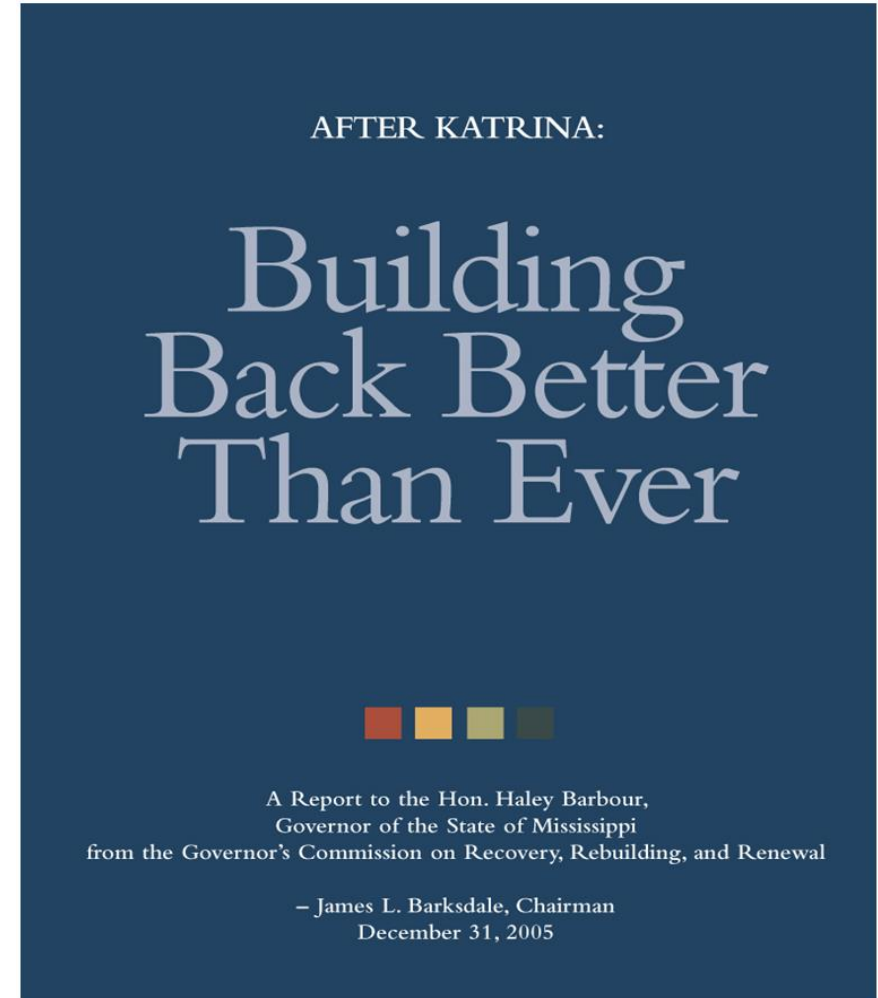
 Open Coast/Back Bay Boundary

 Limit of ABFEs

Governor's Commission on Recovery, Rebuilding and Renewal



- **Identifying Local Needs**
- **Timing of Assistance (Mississippi Renewal Forum)**
- **Assistance Network**
 - **Business Leadership**
 - **Functional and Location-Based Committees**
 - **Coordination with other Stakeholders**



Mississippi Governor's Office of Recovery and Renewal

- Implementation Focus
- Institutionalizing State and Local Capability
- Three Objectives (resources)
 - Identification of Funding
 - Policy Counsel
 - Education, Outreach, and Training
- Boundary Spanning Organization (e.g., emergency housing)



Department of Homeland Security
Federal Emergency Management Agency
Disaster Recovery Program

Park Model & Mississippi Cottage
Attachments to Proposal 1

ONE YEAR AFTER KATRINA



Progress Report on Recovery, Rebuilding and Renewal

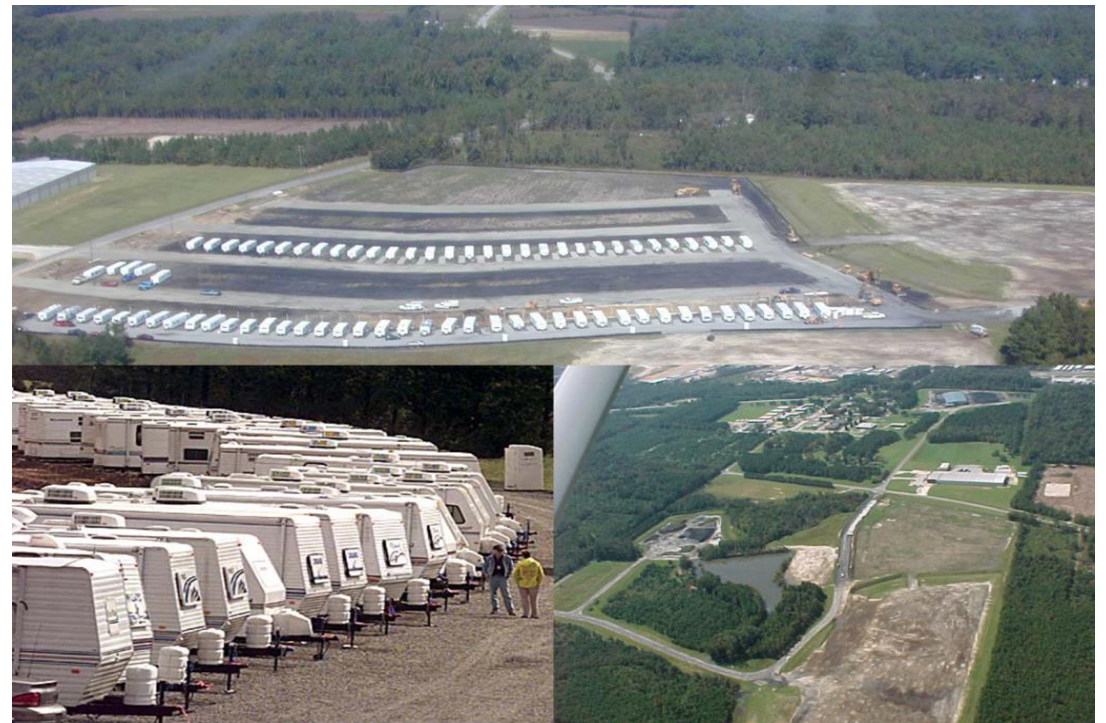
AUGUST 29, 2006



OFFICE OF GOVERNOR HALEY BARBOUR

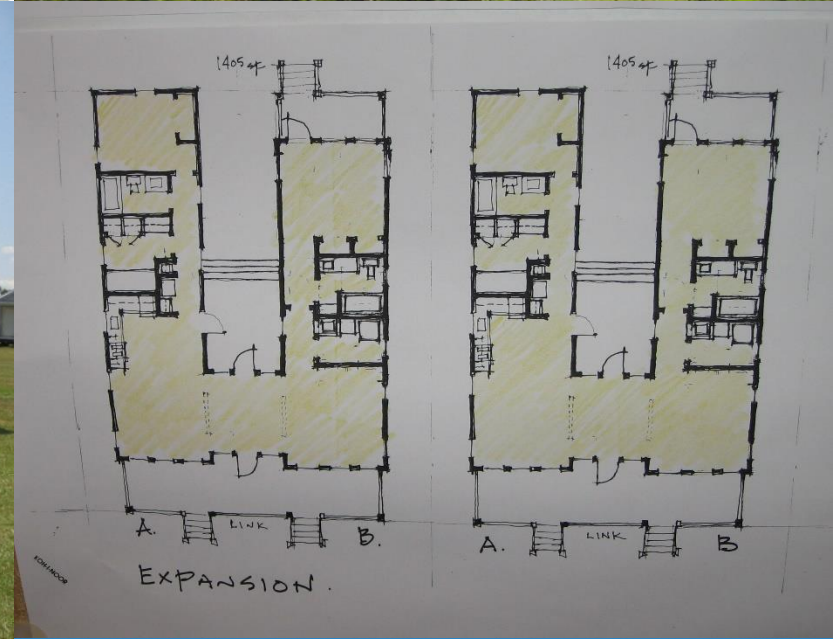
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Mississippi Alternative Housing Program (local needs, timing of assistance, horizontal and vertical integration)

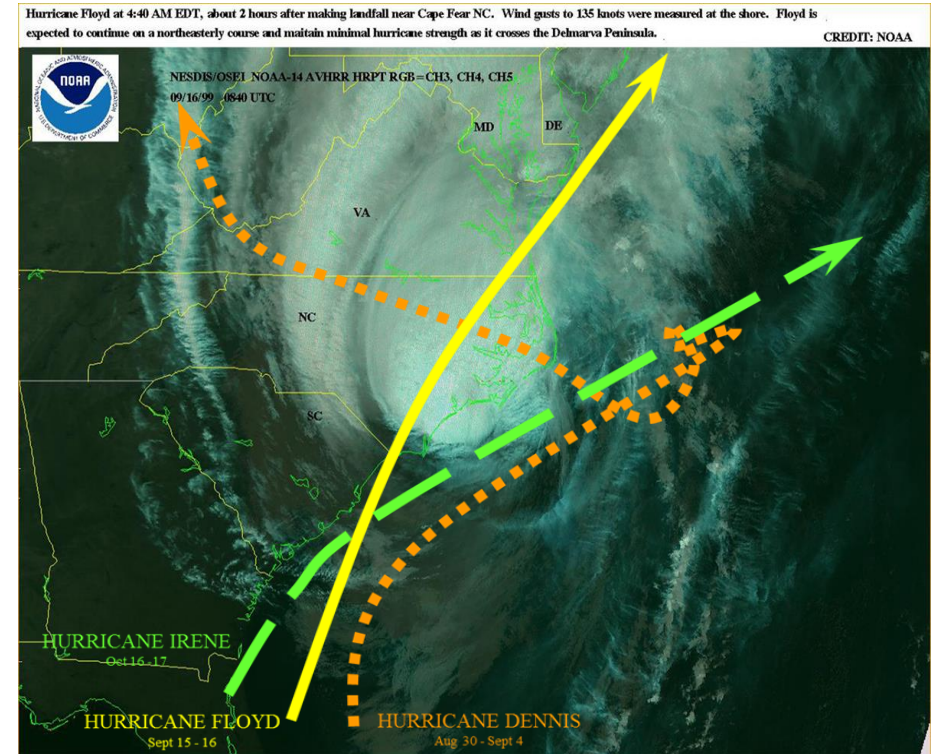
- **400 Million Dollar Congressional Appropriation**
- **State Pilot to Develop Improved Emergency Housing Alternatives**
 - **MS, LA, AL**
- **Mississippi Cottage, Green Mobile and Park model**
- **Transitional/Permanent Housing/Adaptive Re-use**





North Carolina's Disaster Recovery Assistance Programs After Hurricane Floyd

- **Hurricanes Fran (1996) and Floyd (1999)**
- **State Recovery Programs (Sustainable Development)**
- **Hazard Mitigation in North Carolina: the Relocation and Elevation of Flood-Prone Housing**
- **Reassessment of Flood Hazard Risk**
 - **Floodplain Mapping Program**



Hurricane Floyd North Carolina Recovery Programs (local needs, timing of assistance, horizontal and vertical Integration)

- **836 million dollars (22 state programs)**
 - **Floodplain Mapping Program**
 - **State Acquisition and Relocation Fund**
 - **Acquisition of Hog Farms and Junkyards**
 - **State Match to Federal Grant Programs**
- **Redevelopment Center**
- **No State Recovery Plan / State as Local Capacity Builder?**

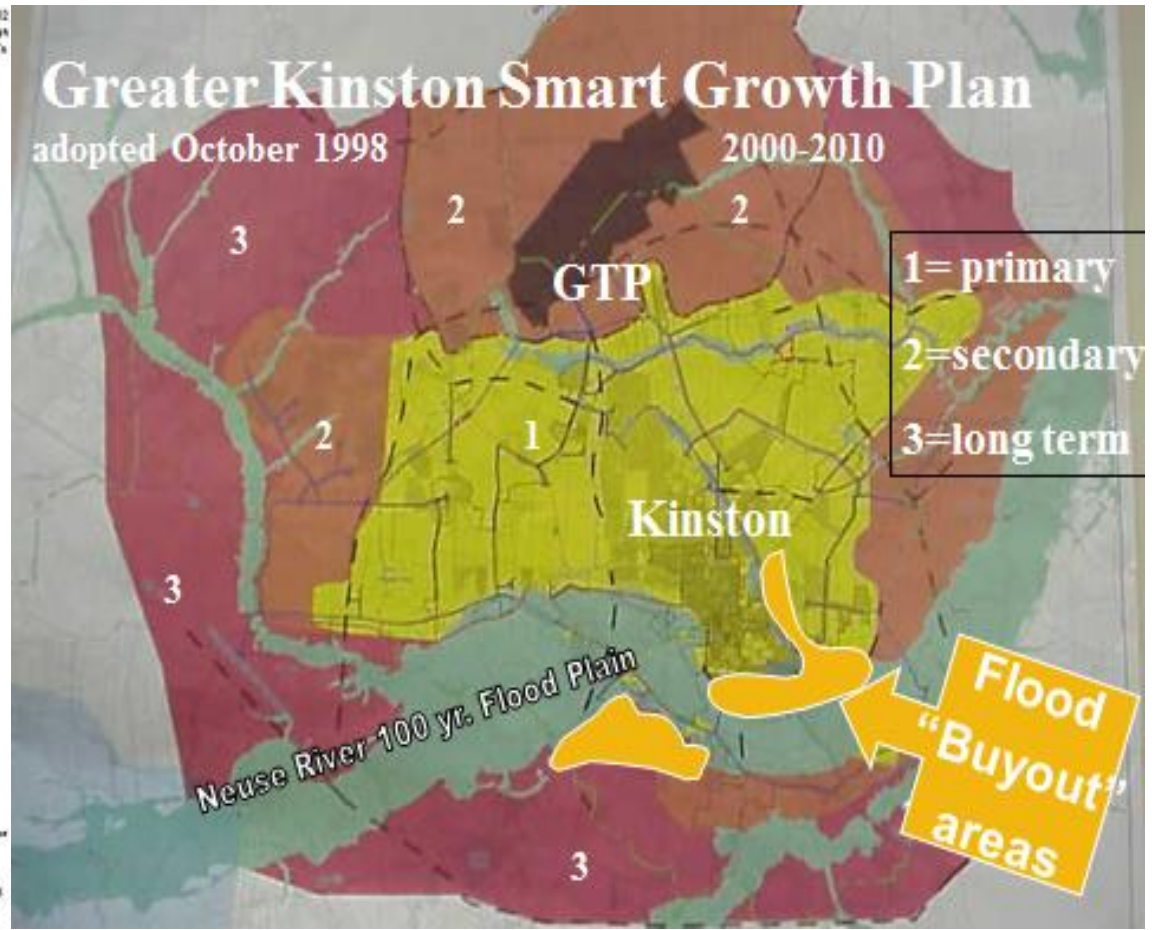
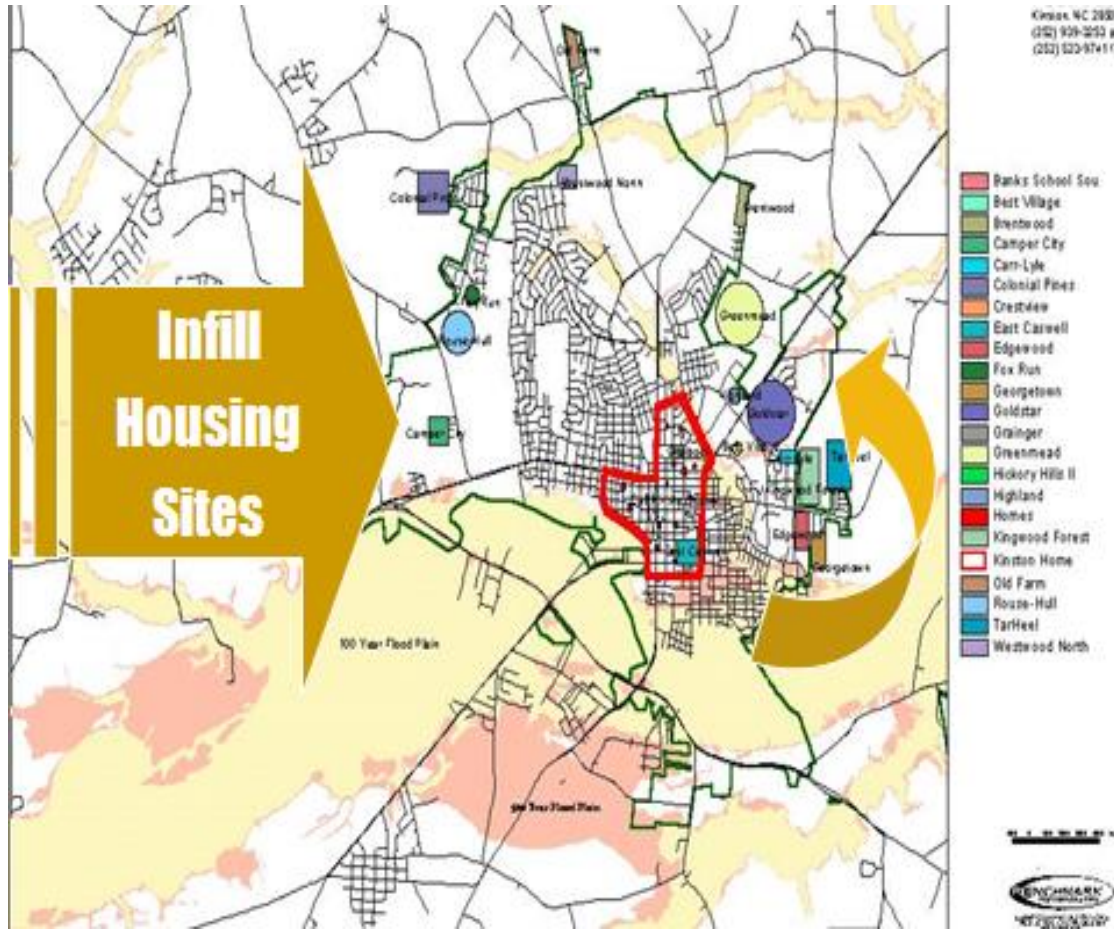


Hazard Mitigation: Acquisition and Elevation of Flood-Prone Housing and Infrastructure

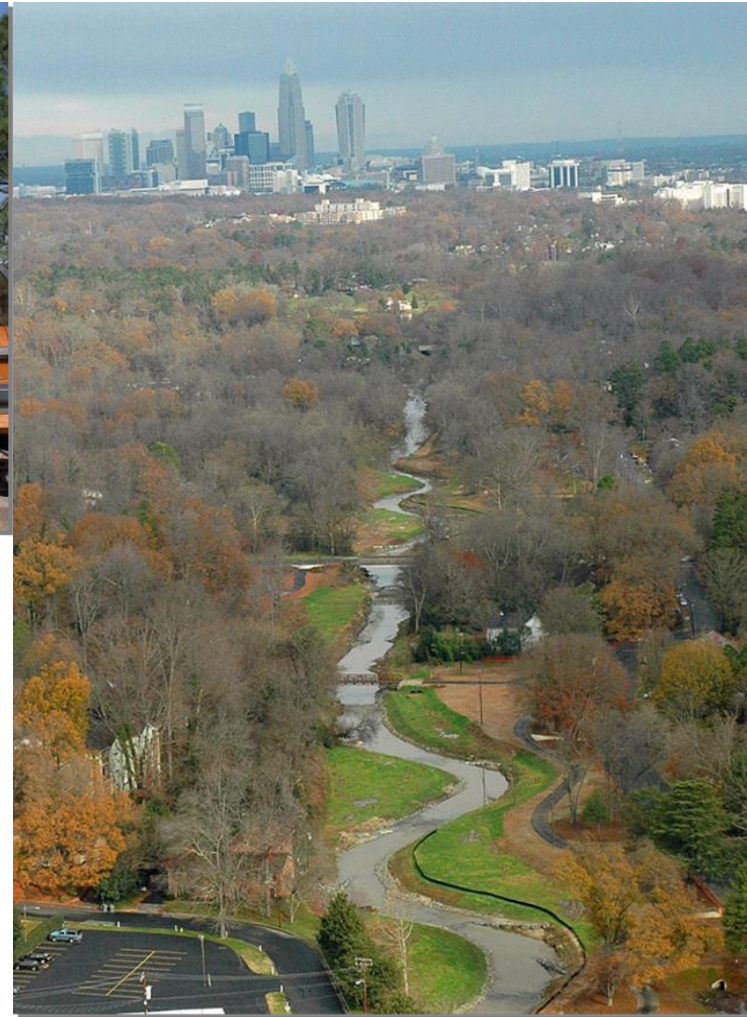
- **Hurricane Fran and Floyd**
 - **Over 5,000 Homes Acquired**
 - **800 Homes Elevated**
 - **Negotiated Agreement with FEMA**
- **State Acquisition and Relocation Fund**
- **Infrastructure Relocation**
 - **Wastewater Treatment Plants**
 - **Schools**
 - **Critical Public Facilities**
- **Land Use Integration in Recovery Varied at the Local Level**



Kinston, NC: Sustainable Disaster Recovery Achieved in Partnership with the State of North Carolina



Charlotte/Mecklenburg County, North Carolina: The Power of Local/State Relationships



State Disaster Recovery Plan Evaluation (Smith, Flatt and Sandler 2011)

- **Study Approach**
 - **No Clear Understanding of the Existence and Quality of Disaster Recovery Plans**
 - **Review of 4 State Recovery Plans (Florida, California, Mississippi, North Carolina)**
- **Findings**
 - **Poor Quality Across Most Dimensions (no plan scored higher than a 5 out of 10 point scale)**
 - **Focus on State Authority to Engage in Recovery**
 - **Focus on Federal Grant Programs and Not Vision, Goals, or Policies**
- **Recommendations**
 - **Recovery as Decision-Making Tool Across Network (direction-setting)**
 - **Improve Navigation, Usability, Clarity**

Plan Quality Principles

- **Issue Identification**
 - **Vision**
 - **Goals**
- **Fact Base**
- **Policies**
- **Implementation**
- **Monitoring and Evaluation**
- **Inter-organizational Coordination (horizontal and vertical integration)**
- **Organizational Clarity**

Findings: State Disaster Recovery Plan Evaluation Study

- **Limited Articulation of a Vision or Define Goals** (focus on articulation of authority/grants management, responsibility of state agencies, disaster declaration process) – 1/10 scale
- **Recovery Plans were Largely Devoid of Policies** designed to balance competing interests, guide the coordinated actions of the assistance network, and serve as a larger decision-making tool before and after a disaster. – 2/10 scale
- **Plans Did Not Identify an Underlying Fact Base** or describe how data was driving the development of policies 2/10 scale
- **Very Weak Implementation Element** (focus on grants administration, not local capacity-building). – 1/10 scale.

Findings: State Disaster Recovery Plan Evaluation Study

- **Evaluation and Monitoring Focused on Grants Administration, not the development and tracking of policies across the larger network – 2/10 scale**
- **Interdependent Actions (horizontal and vertical integration) Modest – 5/10 scale**
- **Participation (describing the process or adopting participatory procedures) – 3/10 scale**
- **Organizational Clarity Recovery “plans” are best described as a loosely coupled compendium of documents, guides, and program-specific administrative rules.**

The Role of the State in Disaster Recovery: A Comparative Analysis of Gubernatorial Leadership and State Agency Official Engagement, Collaboration and Capacity Building

- **Comparative Case Study Analysis: States of North Carolina and Mississippi**
 - **Review of documents, direct and participant observation, and personal interviews**
 - **Research design is framed by three key dimensions of disaster recovery: resources and local needs, the timing of assistance, horizontal and vertical integration**
- **Findings**
 - **Pre-event federal, state, and local capacity is inadequate to deal with recovery issues following major disasters**
 - **NC and MS developed and sustained post-disaster ad hoc recovery organizations**
 - **Governors and Leadership: Governor Hunt and Barbour assumed an activist stance driven by their own political views**
 - **Coupling of political insights and power with the use of best available data**

The Role of the State in Disaster Recovery: A Comparative Analysis of Gubernatorial Leadership and State Agency Official Engagement, Collaboration and Capacity Building

- **Recommendations**
 - **Improve Federal Policy to Reflect the Input Provided by Governors in Pre- and Post-disaster Settings**
 - **Improve State Capacity and Commitment through Pre-event Planning for Post-disaster Recovery**
 - **Transfer Lessons through a Gubernatorial Exchange Program; International Learning Laboratory**
- **Next Steps and Future Research**
 - **Governors who assume a more passive role in recovery and were less successful in addressing local needs by modifying federal programs or creating new state initiatives.**
 - **Creation of a translational infrastructure capable of collecting, archiving, and transferring this information across governors and their staffs.**
 - **Interviewing other governors that have experienced disasters of varying sizes and types that are geographically distributed across the United States, thereby capturing the influence of differing interpretations of federal rules spanning FEMA regions as well as the quality and experience of state staff.**

Role of States in Disaster Recovery Video

- **Purpose: Improve understanding of the roles that states play in disaster recovery; Develop training and educational materials for Governors and state officials/university degree and certificate programs**
- <https://vimeo.com/159109437>
- <http://coastalresiliencecenter.unc.edu/crc-projects/the-role-of-states-in-disaster-recovery/>

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