

LAURIE JOHNSON CONSULTING

Urban Planning • Risk Management • Disaster Recovery

Opportunities for Regional Councils in a Post-Disaster Environment

NADO Webinar

December 16, 2010

Case Study Research on Disaster Recovery

- 1989 Loma Prieta, CA earthquake (Santa Cruz, Watsonville, Oakland, San Francisco)
- 1994 Northridge, CA earthquake (Los Angeles, Fillmore, Santa Monica)
- 1997 Grand Forks, ND flood
- 2001 World Trade Center disaster (New York)
- 2005 Hurricane Katrina (New Orleans, Louisiana)
- 1995 Kobe, Japan earthquake
- 2004 Banda Aceh, Indonesia earthquake/tsunami
- 2008 Wenchuan, China earthquake
- 2010 Port-au-Prince, Haiti earthquake
- 2010 Maule, Chile earthquake



Initial Response
Early Recovery

Short-term
Recovery

Long-term
Recovery

Restoration
Repair
Replacement

Rebuilding
Reconstruction
Redevelopment
Restructuring

Photos: davidmacd.com; nytimes.com

David MacDonald

First Weeks
to Months

Several Months
to Years

Many Years
to >Decade

Recovery has several phases and takes many years to complete.

Characteristics of Disaster Recovery

- It is real life at high speed and happens at different rates.
 - Normal planning and governance processes, in all their complexity, must now happen in compressed time.
 - But it is difficult to speed up planning, public involvement, exchanges of information
- Currencies of recovery are money and information

Characteristics of Disaster Recovery

- Inequities and pre-disaster problems and trends often exacerbated
- “Windows of opportunity” for change and betterment open and close in time
- Success measured by both speed and quality (which often conflict). Need to plan and act simultaneously
- Tradeoff between speed and deliberation best made by good communication, information provision, and active citizen involvement



Photos: guidrynews.com; nypost.com; www.daylife.com

Local governments have the primary responsibility for disaster response and recovery. State and national agencies are to provide support as requested.

(FEMA, 2005. *Disaster Assistance: A Guide to Recovery Programs*)

U.S. Programmatic Approach to Recovery

Evolved over time, with a mix of “clients” and “distribution channels”

	Stafford Act Programs				Other Federal Programs					Other				
	FEMA -IA	FEMA -PA	FEMA -HMGP	FEMA –Community Disaster Loans	FEMA -NFIP	HUD -CDBG grants	HUD -housing vouchers	SBA loans	EDA grants	DOT grants	State assistance	Local gov't assistance	Private Insurance	Non-profit assistance
* - Direct recipient ↓ - Indirect recipient														
State governments		*	*			*				*				
Local governments		↓	↓	*		*			*		*		*	
Business/Residents	*		↓		*	↓	*	*			*	*	*	*

Government's Role in Disaster Recovery

- Rebuild public infrastructure, facilities, and services
 - Set public budget priorities
 - Influence private investors
- Provide money, information, technical assistance
 - Support all the many actors in doing what they are good at (and don't impede them)
- Provide critical leadership in order to accomplish these functions

Limitations on Role of Government

- Post-disaster environment demands more than bureaucracies can provide
 - They lack flexibility to innovate, and they are not designed to act quickly
- New organizations always emerge, to fill the gaps
 - Such organizations are the keys to successful recovery
- Need to resist the urge to over-manage the process, grass roots and emergent organizations, as well as individual actors

Strengths of Regional Councils and Economic Development Organizations for Disaster Recovery

- One of few organizations to which a collection of region's communities and leadership belongs
- Holistic view of their region's communities and economies
- Expertise in planning, data collection and management, and GIS
- Expertise in federal funding management and distribution

Role for Regional Councils and Development Organizations in Disaster Recovery

- Post-disaster economic assessments
- Post-disaster recovery planning and implementation: standards and technical assistance
- Information management and sharing among disaster-impacted communities as they recover, including data standards and sustained promotion



Photos: Edstrom; latimes.com;www.ics.purdue.edu

Post-disaster economic assessments

The local economy of nearly every community studied “unraveled to a greater or lesser extent following the disaster”

(Alesch, Arendt, Holly. 2009. *Managing for Long-term Community Recovery in the Aftermath of Disaster*; www.riskinstitute.org)

Post-Disaster Economic Assessments

- Federal Stafford Act requires damage assessments for Presidentially-declared disasters; many systems and procedures in place for their quick initiation
- Other assessments generally performed ad-hoc, often program driven (i.e. DOT, CDBG, EDA)
- Need to take a more holistic view – not programmatic view - of losses, resources, gaps, plans and desired outcomes to develop appropriate program and policy responses

Post-Disaster Economic Assessments

- Quantify:
 - Physical damages (total replacement costs)
 - Ripple effects (i.e. lost wages, tax revenue, and income)
 - Challenges of addressing long-term problems (i.e. economic revitalization, affordable housing)
- Identify “known” available resources
- Identify potential unmet needs, funding gaps and shortfalls
- Initiate process quickly and provide regular and ongoing updates and distribution

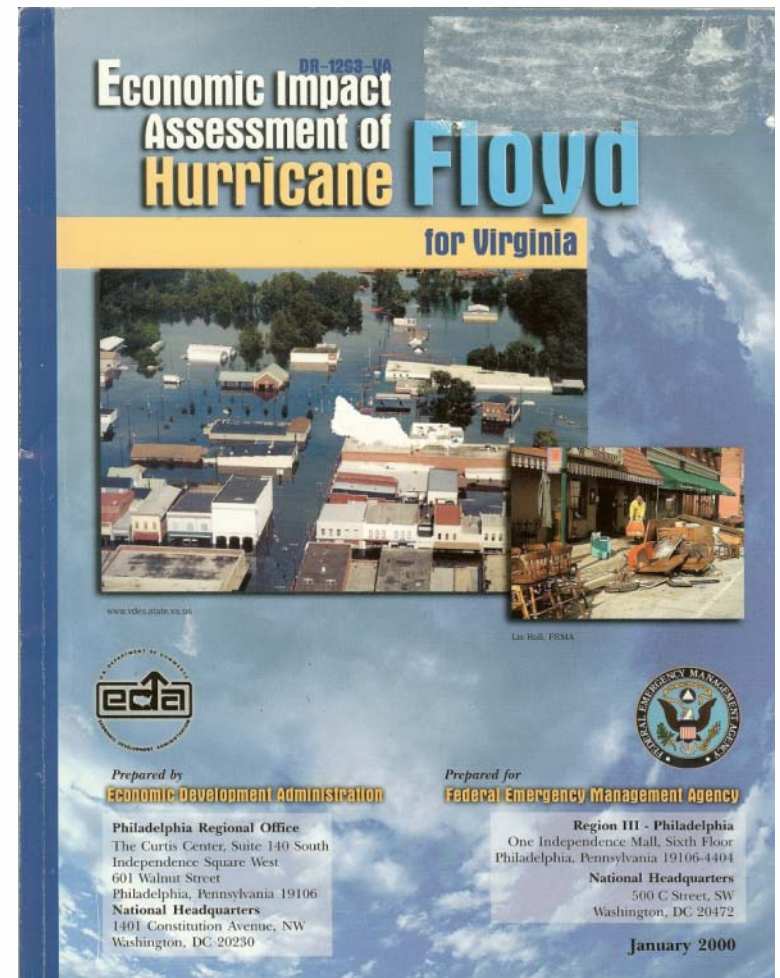
Example: Los Angeles' Economic Assessment after the 1994 Earthquake

- In December 1994 (nearly 1 year after the earthquake), the City created an integrated view of the status of City-led recovery programs
 - City emergency response and facility repair
 - City revenue loans
 - Hazard mitigation – City facilities
 - Housing Rehabilitation – single-family, multi-family and condominiums
 - Economic Recovery and Business Revitalization
 - Human Services
- Identified needs (total replacement costs and/or other costs), available resources, and funding shortfalls
 - Estimated a \$460 million gap in recovery resources out of a ~\$1.7 billion city-led program

(City of Los Angeles. 1995. *In the Wake of the Quake: A Prepared City Responds*)

Example: Virginia's Economic Assessment after 1999 Hurricane Floyd

- Pre-disaster Economy (economic trends and outlook, major businesses, tax revenue sources)
- Post-disaster Economy (businesses affected, damage, lost revenue and taxes, recovery strategies)
- Multi-level (federal, state, and local) recommendations for economic recovery



The First Season of Recovery

Grand Forks' Flood Recovery Action Plan

Action Plan Period:
June 1 through November 1, 1997

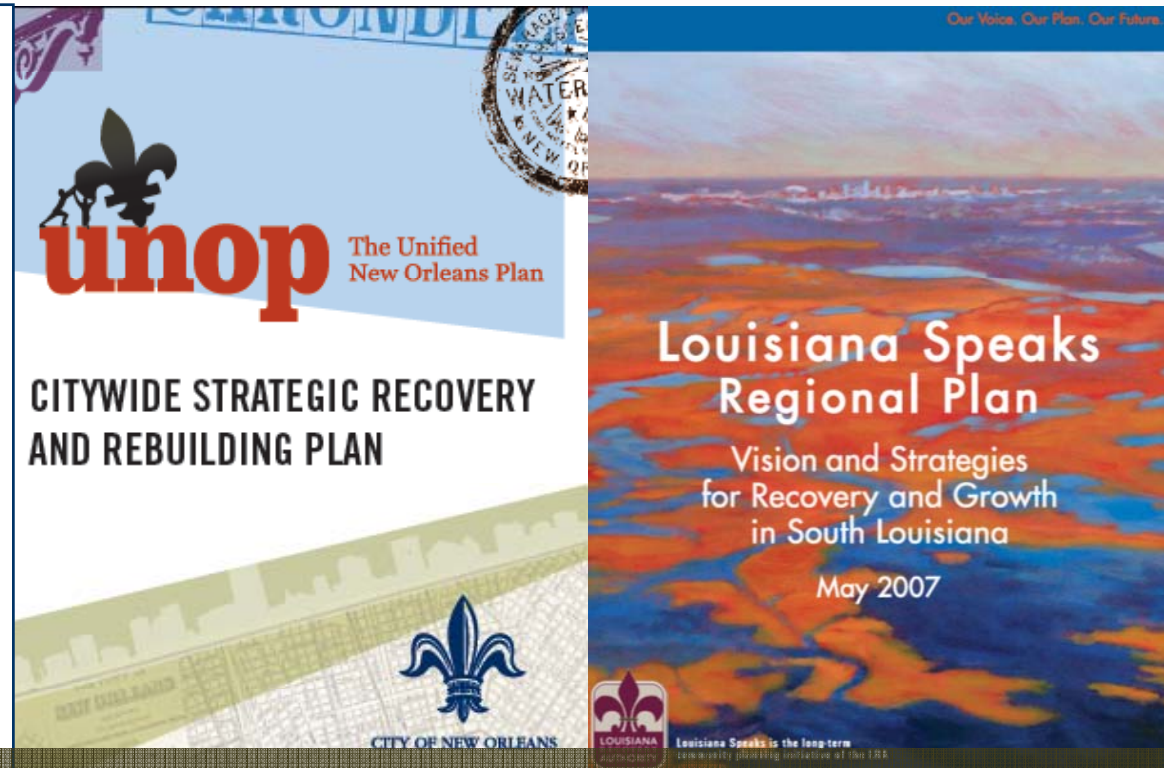
(City Council adopted on July 7, 1997)

Prepared for:

The City Council for the
Citizens of Grand Forks, North Dakota

Prepared by:

Patricia Owens, Mayor
and the Grand Forks' Tri-Chairs for Recovery:
John O'Leary, Director of Housing and Urban Development
John Schmisek, Director of Finance and Administration
Ken Vein, City Engineer and Director of Public Works



Post-Disaster Recovery Planning and Implementation

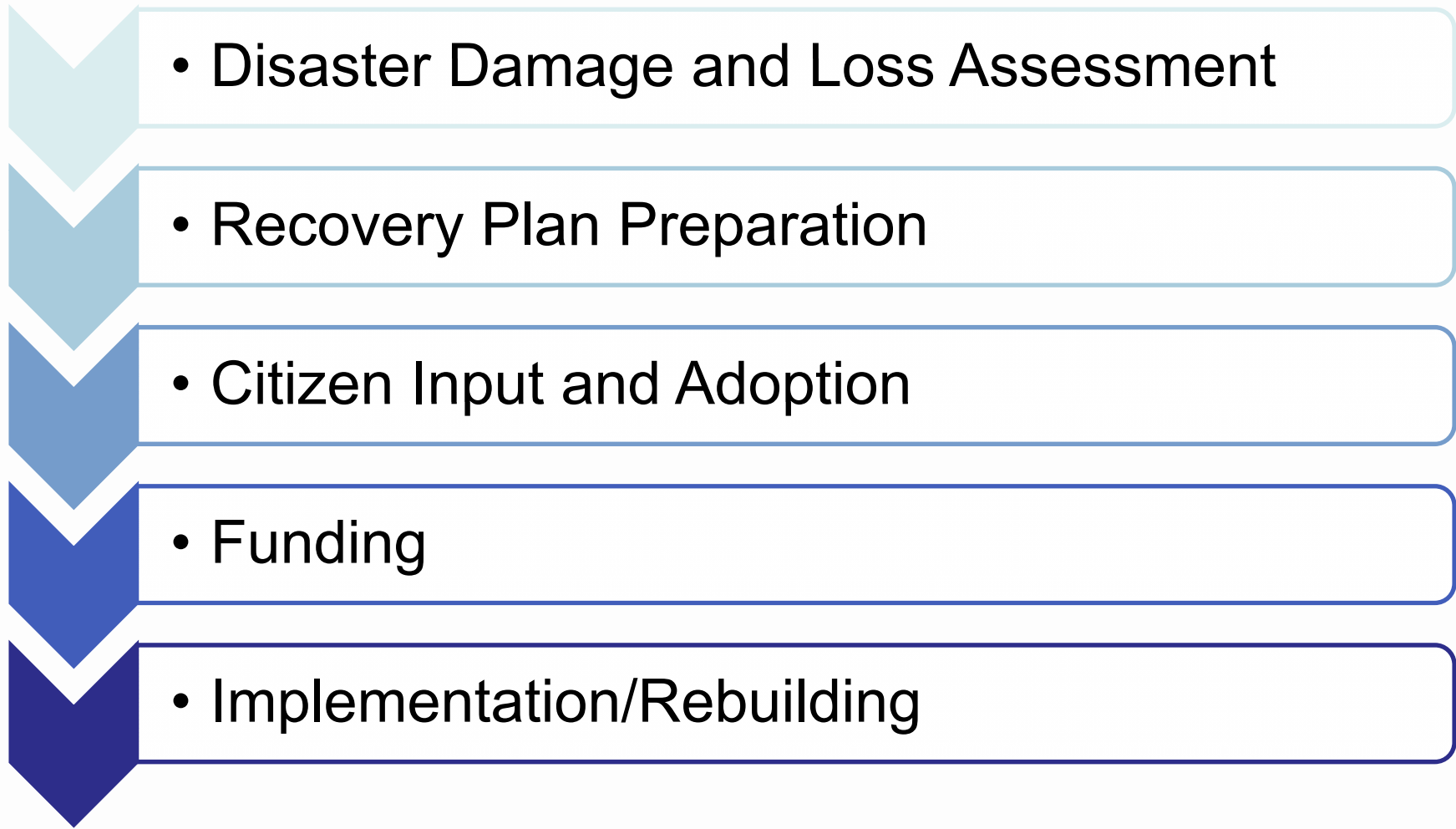
Post-disaster Recovery Planning and Implementation

- Culture of planning, state planning requirements, and local planning capacity can vary significantly in a region
- Post-disaster environment of competing demands for speed and deliberation makes planning difficult
 - Planning needs time for participants to acquire and comprehend information, build trust, consider alternatives, and feel confidence in the decision
- Post-disaster recovery plans:
 - Generate information and provide public discussion of the future
 - Improve the disaster impacted region's image
 - Set a vision and leadership for recovery
 - Help make the case for funding

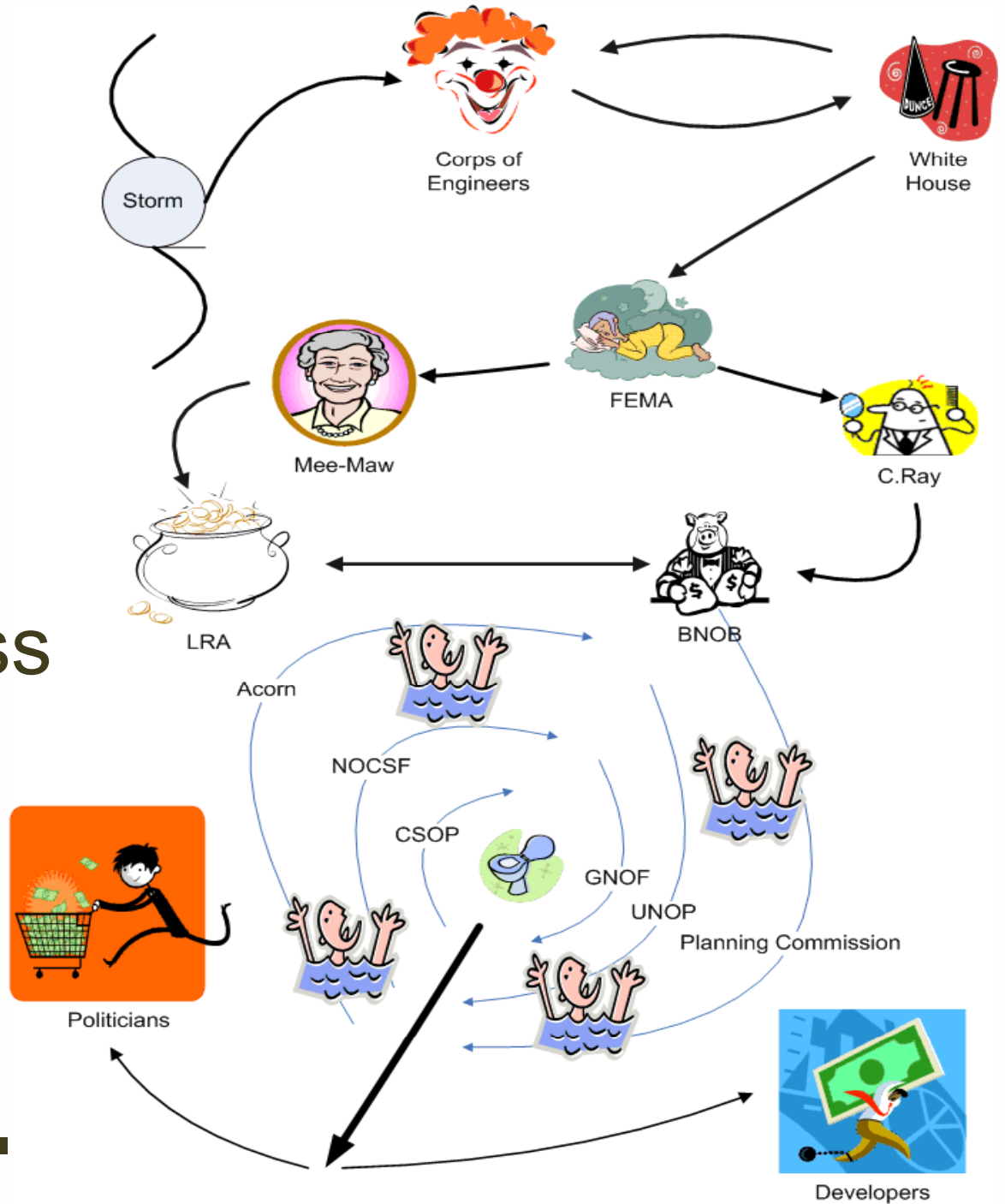
Post-disaster Recovery Planning and Implementation

- Planning standards: content should be holistic, both “physical plans” and recovery management plans
- Plan process management:
 - Set the timeline and manage the pace, submissions, review process, etc.
 - Promote collaboration and opportunities to share methods, best practices, and solve challenges
- Technical assistance:
 - Identify where assistance is needed
 - Develop financing plan (i.e. needs and recruit resources)
 - Manage cadre of planners (land use planning, housing, economic analysis, disaster recovery management, hazard mitigation)

“Ideal” Recovery Planning Process Flowchart



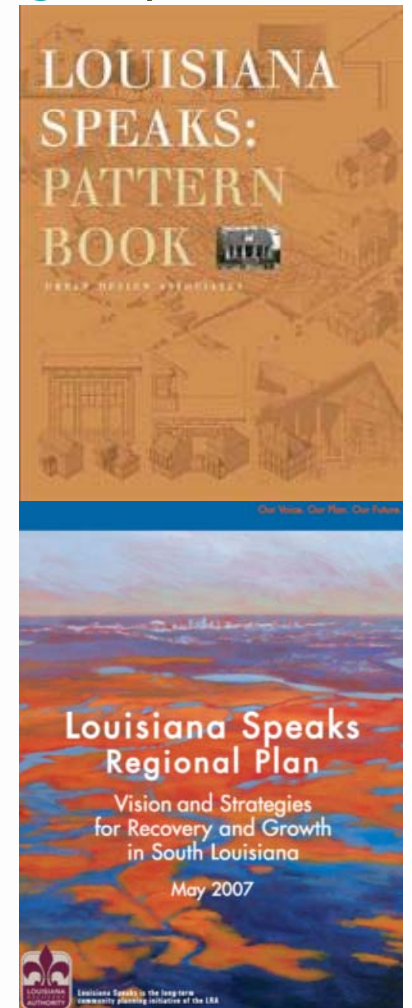
Blogger's "Flowchart" of New Orleans' Post-Katrina Planning Process

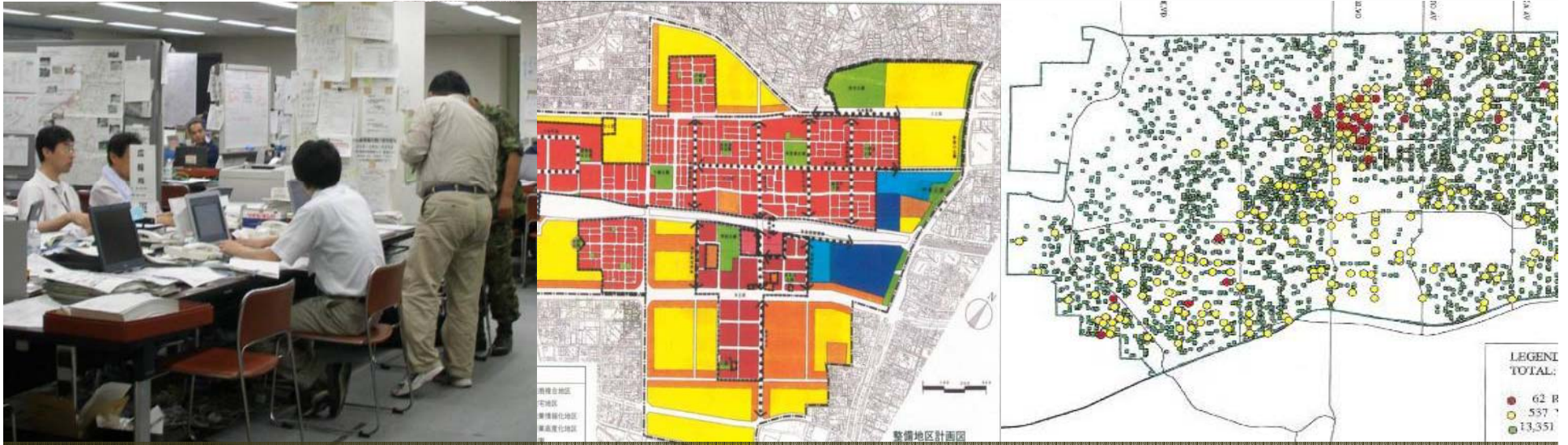


(Source: thinknola.com, 2006)

Example: Louisiana's Regional Planning Process (www.lra.louisiana.gov)

- New statewide entity (Louisiana Recovery Authority) created to lead long-term community and regional planning efforts and make funding recommendations
- Multi-level planning standards and assistance:
 - Pattern books to assist home and business owners to rebuild commercial and residential buildings
 - Local design workshop guide and neighborhood planning consultation
 - Parish-level planning requirements to set funding priorities, and technical assistance through Louisiana Recovery Planning Day(s), consultants and FEMA.ESF-14 long-term community recovery planning
 - South Louisiana Regional Plan to provide framework for state policy and spending over 50 years





Information Management and Sharing

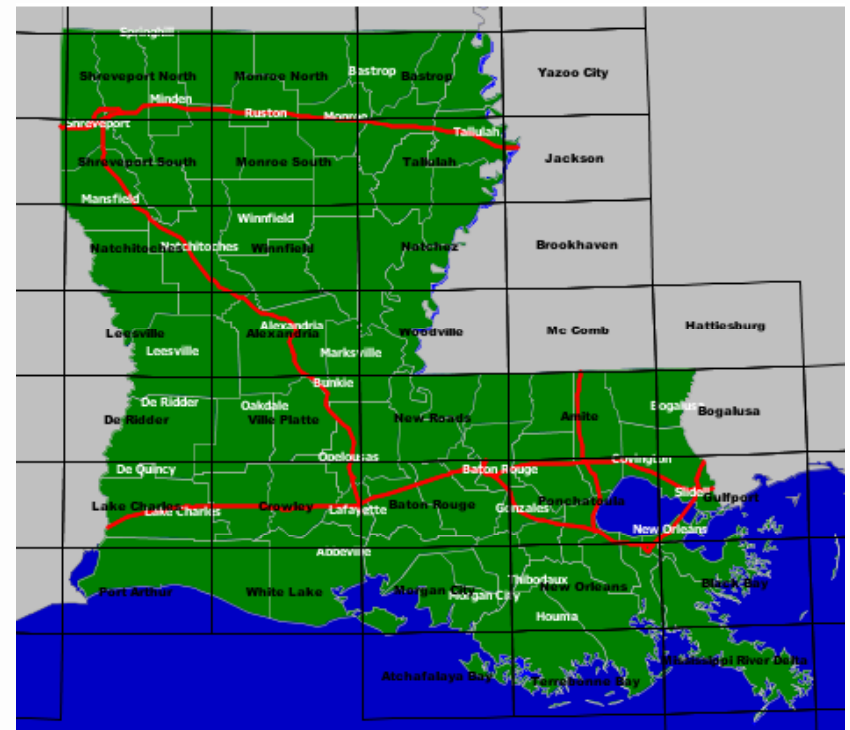
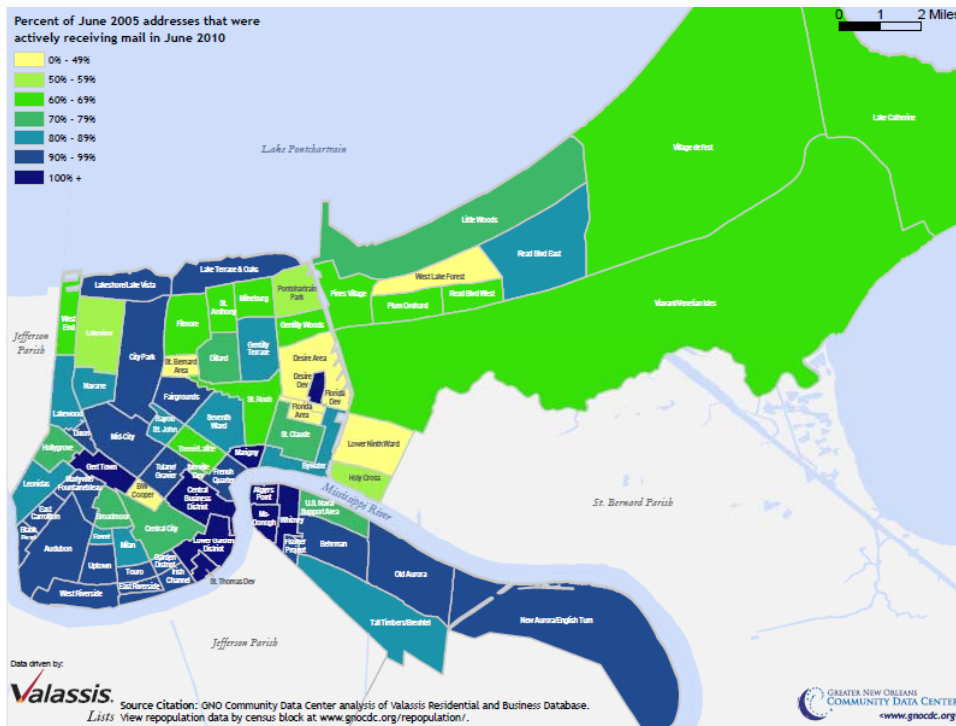
Greatest increases in local government output have generally resulted from investments in, and adoption and use of, information systems and technology.
(Newell. 2004. *The Effective Local Government Manager.*)

Information Management and Sharing

- Data standards: mapping scales and formats, base data and meta-data requirements, thematic map sets
- Data warehousing:
 - Base data layers (shapefiles and original files)
 - FTP site, mapping technology, DVD production
 - Pre-disaster data (population, land use, housing, economic indicators)
 - Aerial imagery (pre- and post-disaster)
 - Post-disaster recovery indicators (repopulation, housing repair, utility restoration)
- Sustained promotion (i.e. personnel and funding, product development, outreach and distribution)

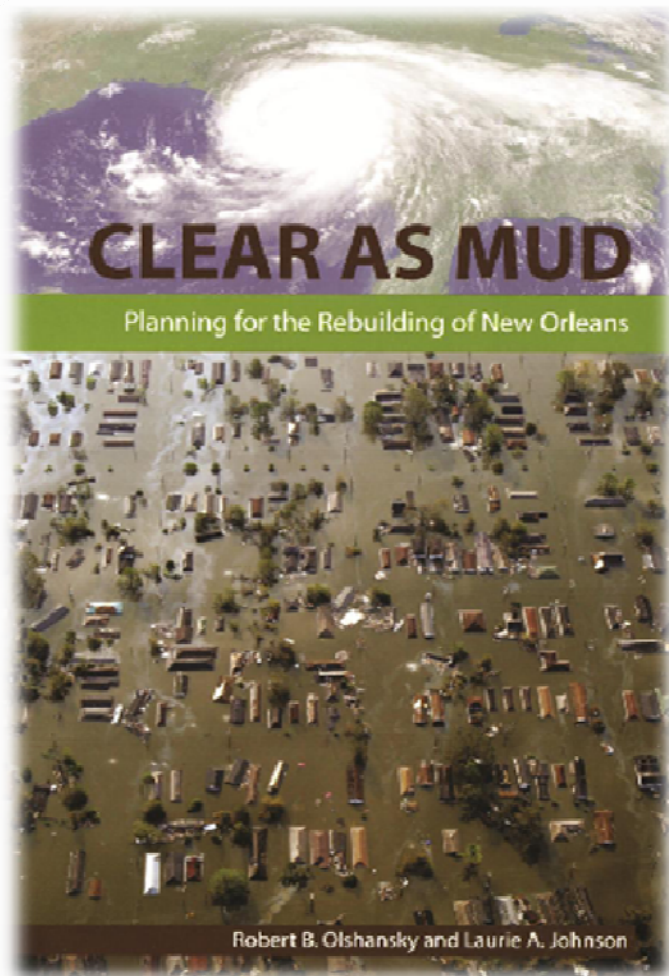
Examples: Greater New Orleans Community Data Center www.gnocdc.org

Atlas: The Louisiana Statewide GIS <http://atlas.lsu.edu/>



National/State Policy Changes/Actions to Consider

- Grants and funding to support state and local governments in Emergency Support Function (ESF)-14 – Long-term community recovery - to complete loss and resource assessment, develop recovery vision and plans, and manage information
- Reference to role of regional entities in NIMS, National Response Framework, and National Disaster Recovery Framework
- Legal framework for states, regional, and local governments to form recovery authorities and plans in advance of disasters
- Encourage pre-disaster recovery planning as well as state and local hazard mitigation planning (Disaster Mitigation Act of 200)
- Better linkages/requirements between recovery, mitigation, and local and state general plans



1. Hurricane Katrina Catastrophe
2. Order from Chaos: Planning at the State and Federal Levels
3. Planning for New Orleans: October 2005-March 2006
4. Return to Chaos: Spring 2006
5. New Orleans Neighborhoods Rebuilding Plan
6. Unified New Orleans Plan
7. Passing the Planning Baton
8. Conclusions

Thank You!

- Laurie Johnson

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- *Clear As Mud: Planning for the Rebuilding of New Orleans:*

- www.planning.org/apastore

- www.amazon.com