

Building Resilience through Collaboration: The Regional Development Organization's Role in Disaster Preparedness

**August 13, 2015
2:00 – 3:00 pm ET**

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**A NADO Research Foundation Webinar
Supported by the Economic Development
Administration (EDA)**



Our Mission

The National Association of Development Organizations (NADO)

To strengthen local governments, communities, and economies through the regional strategies, partnerships, and solutions of the nation's regional development organizations.



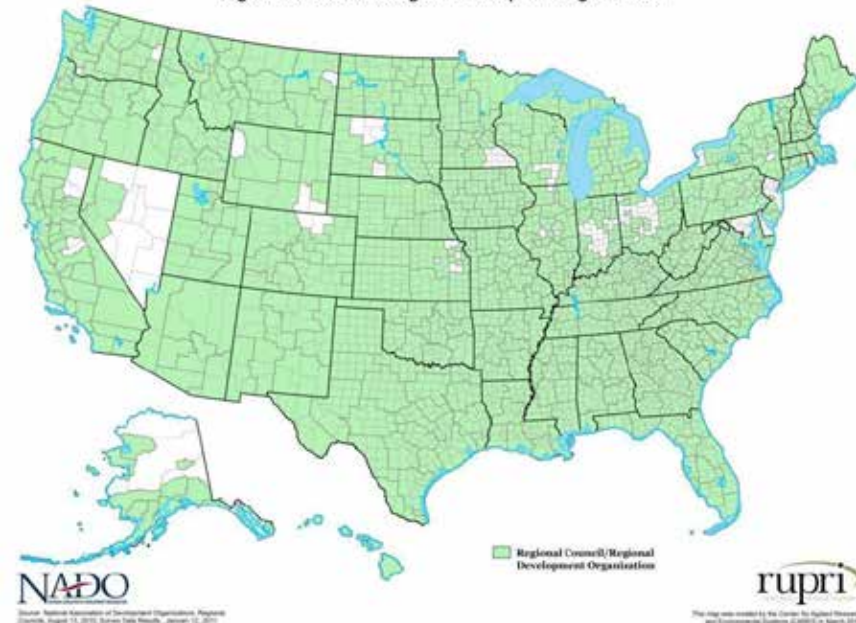
Our Members

National membership organization for the network of over 520 **regional development organizations** (RDOs) throughout the U.S.

RDOs are also known as Councils of Government, Regional Planning Commissions, Economic Development Districts, and other names.

They promote efforts that **strengthen local governments, communities, and economies through regional strategies** focusing on economic development, infrastructure, housing, transportation, and regional planning.

Regional Councils and Regional Development Organizations



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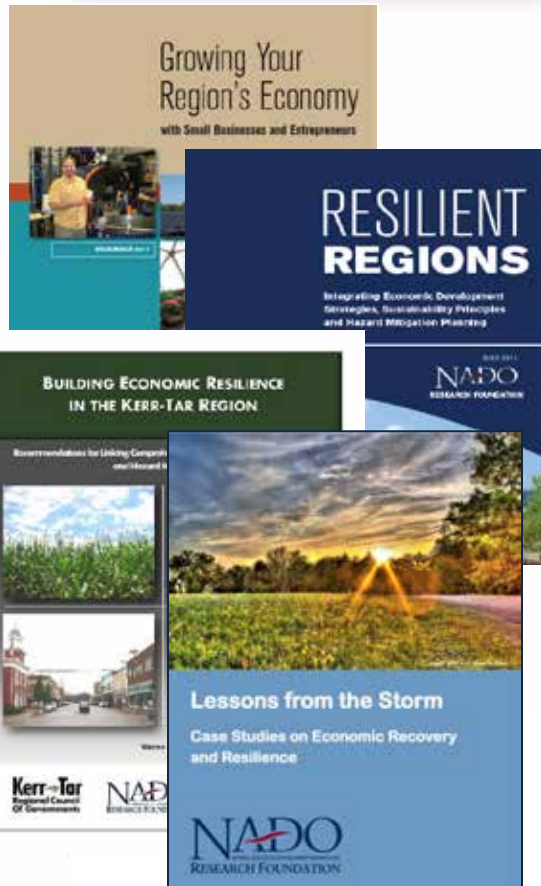
NADO Research Foundation

Founded in 1988, the **NADO Research Foundation** is the non-profit research affiliate of NADO.

Shares best practices from small metropolitan areas and rural America through **training, peer exchange, research, and other capacity-building activities.**

Focus Areas:

- Economic Development
- Organizational Support
- Rural Transportation
- Sustainable Communities
- Regional Resilience



NADO's Resilience Program

The NADO Research Foundation, with support from the Economic Development Administration (EDA), provides capacity-building services to RDOs and local governments to foster **regional resilience to natural disasters and other economic shocks and disruptions.**

These services include training workshops, peer exchanges, technical assistance, webinars, and research on best practices.

We make our resources and lessons learned available to the public—visit www.nado.org or contact sjames@nado.org.



Today's Webinar

- **Allison Beasley**, Planning Director, Southern Mississippi Planning and Development District (Gulfport, MS)
- **Margo Moehring**, Executive Director, Regional Community Institute of Northeast Florida, Inc. (Jacksonville, FL)



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Webinar Logistics

Please type any questions you have for the speakers in the question box on the side panel throughout the presentation.

The webinar is being recorded and will be posted along with the PowerPoint slides on the NADO website at www.nado.org.

This webinar has been approved for 1 AICP CM credit.

Please contact Sara James at sjames@nado.org if you have any questions after the presentation.

Integrating Hazard Mitigation into Local Planning to Support Community Resiliency on the Mississippi Gulf Coast

Presented to the National Association of
Development Organizations, Disaster
Preparedness Webinar, August 13, 2015

Project funding from the MS-AL Sea Grant Consortium



- 501(c)3, non-profit
- Serve 15 counties/38 municipalities in South Mississippi
- Services include Area Agency on Aging, workforce fiscal agent, small business loans and economic development and planning
- Planning activities include writing hazard mitigation plans and comprehensive plans



Focus Areas

1. Improve planning for, response to and recovery from coastal hazards and climate associated risks
2. Demonstrate the connections between planning decisions (e.g. land use, infrastructure siting) and hazard impacts



Problem Statement

Planning documents in most of the counties and cities in Coastal Mississippi are in two distinct categories --- those that plan for future growth and those that address hazards and emergency management.

Comp Plans v. HazMit Plans

Comp Plans

- Mississippi Code
- Plan for the future
- Planning Dept/Zoning Dept
- Legally binding and court-tested
- Goals and Objectives

HazMit Plans

- Stafford Act – Federal
- Address hazards and emergency management
- Emergency Mngt Agency
- Fed Mandate but lack legal status
- Goals and Objectives

Section 17-1-1- of the Mississippi Code of 1972

Annotated, as amended defines, the term
“comprehensive plan” as a “statement of public policy
for the physical development of the entire
municipality or county adopted by resolution of the
governing body, consisting of the following elements
at a minimum: (1)goals and objectives for the long-
range (twenty to twenty-five years) development of the
county or municipality---;(2)a land use plan---;(3)a
transportation plan---;and a community facilities plan-
--”

Disaster Mitigation Act

On October 30, 2000, Congress enacted *The Disaster Mitigation Act of 2000 [P.L. 106-390]*, which requires communities to develop hazard mitigation plans in order to reduce the risk to the community from hazards that may affect the community. Communities that develop hazard mitigation plans may also meet the requirements for the Hazard Mitigation Grant Program, under Federal Emergency Management Agency regulations subsequently outlined in *Federal Register 44 CFR, Part 201, Mitigation Planning, Interim Final Rule (the Rule)*, published February 26, 2002, and *Part 206, Federal Disaster Assistance for Disasters Declared on or after November 23, 1988*, and the Flood Mitigation Assistance Program.

Study Area – 16 jurisdictions



Participants/Collaborators

- County Boards of Supervisors
- Mayors and City Councils
- City and County Planners
- Emergency Managers
- Flood Plain Managers
- MASG, FEMA, MEMA and other partners

Study Process

- Informed cities and counties
- Collected and reviewed plans
- Selection of hazard mitigation principles/indicators (29)
- Developed matrix to identify connections and gaps between Comprehensive Plans and Hazard Mitigation Plans
- Analysis for each jurisdiction (16)
- Developed city/county profiles and recommendations for integration

Matrix

	HazMit Princ 1	HazMit Princ 2	HazMit Princ 3	HazMit Princ 4	Etc.
Comp Plan Goal 1					
Comp Plan Goal 2					
Comp Plan Goal 3					
Comp Plan Goal 4					
Etc.					

Hazard Mitigation Principles/Indicators

- Minimize the loss of life and injury
- Protect critical facilities, infrastructure and systems
- Protect historic and cultural resources
- Improve and retrofit public buildings
- Explicitly identify hazards and hazard areas
- Encourage adoption, improvement and enforcement of local codes and ordinances

Hazard Mitigation Principles/Indicators

- Enhance public warning and information systems
- Provide and promote communication systems
- Consider vulnerable populations
- Improve emergency response operations
- Improve sheltering capabilities
- Development and improve outreach programs about risk and mitigation

Hazard Mitigation Principles/Indicators

- Develop and improve stormwater/drainage programs
- Preserve, create, and restore natural systems to serve natural mitigation functions
- Plan for continuity of local government operations
- Protect business continuity and economic vitality
- Identify and improve evacuation routes
- Address transportation functionality during disasters

Hazard Mitigation Principles/Indicators

- Reduce the number of at-risk properties and repetitive loss properties
- Increase property acquisitions
- Promote the National Flood Insurance Program
- Reduce potential damage to future building and infrastructure
- Direct growth away from hazard areas to safe areas
- Limit expenditures in hazard areas



Hazard Mitigation Principles/Indicators

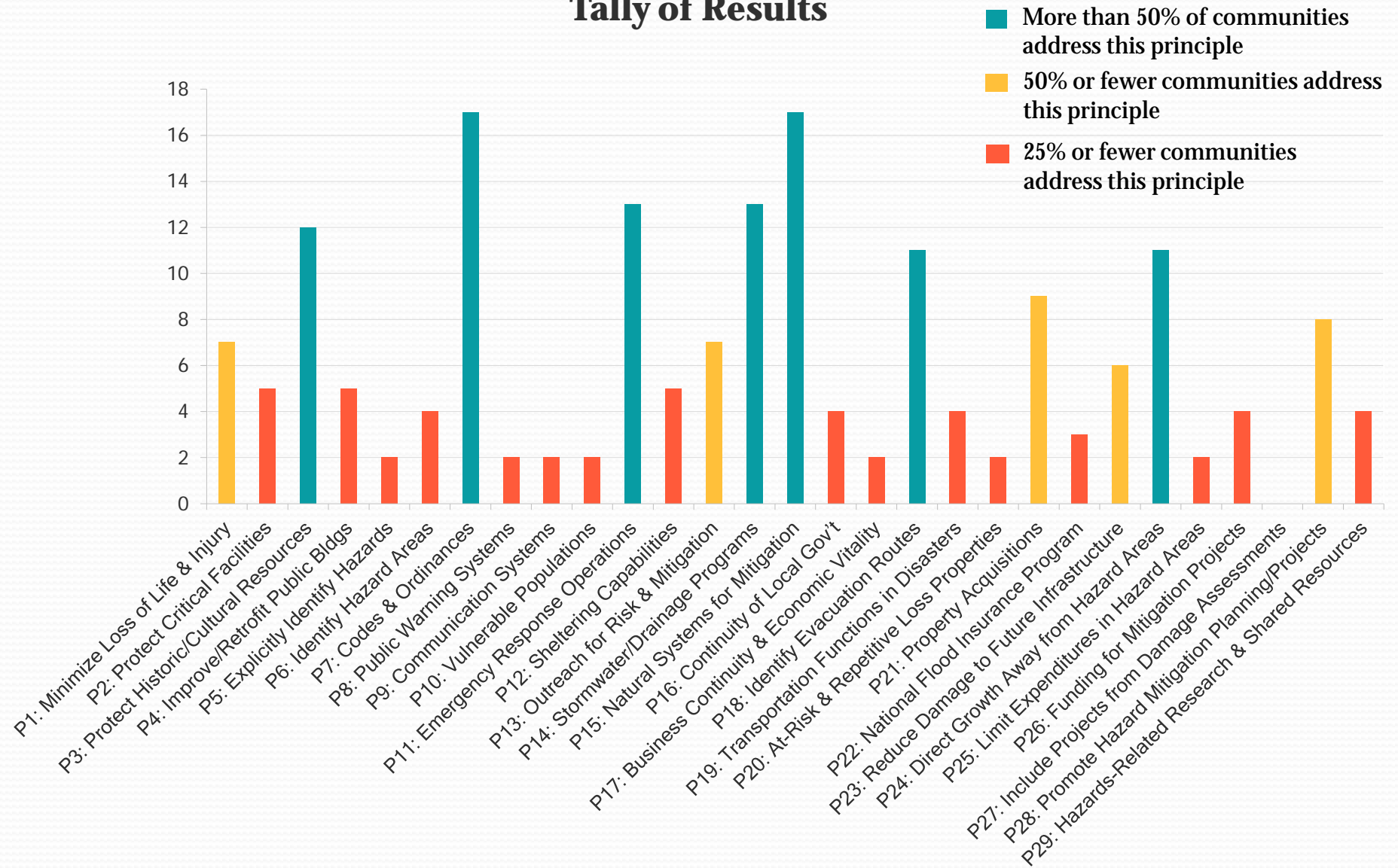
- Include funding for mitigation projects
- Identify needs and projects from post-disaster damage assessments
- Support or promote hazard mitigation planning and projects
- Develop and maintain hazards-related research and share resources



Hazard Mitigation Principles/Indicators

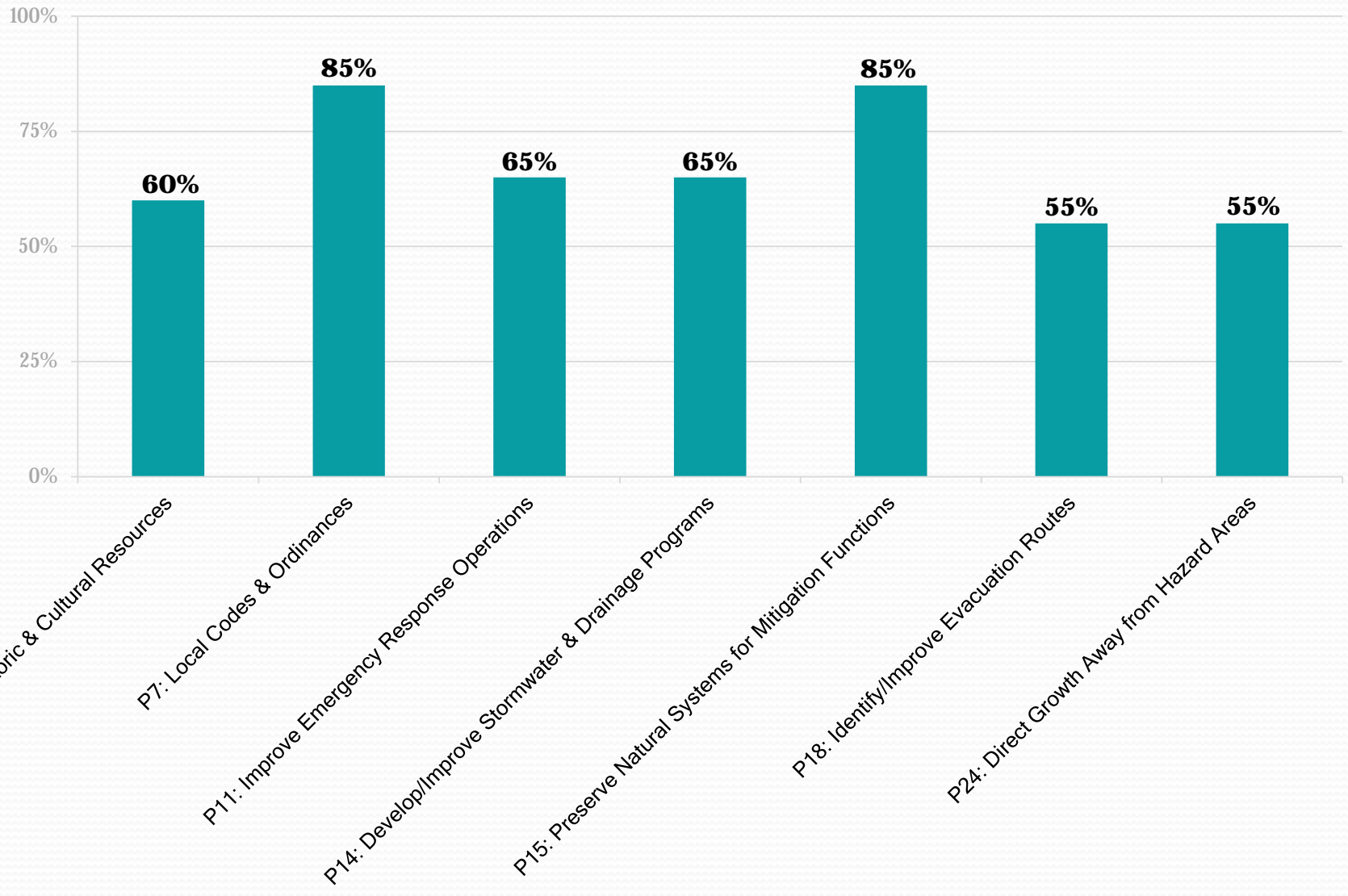
- Explicitly identify hazards
- Limit expenditures in hazard areas
- Include funding for mitigation projects

Tally of Results



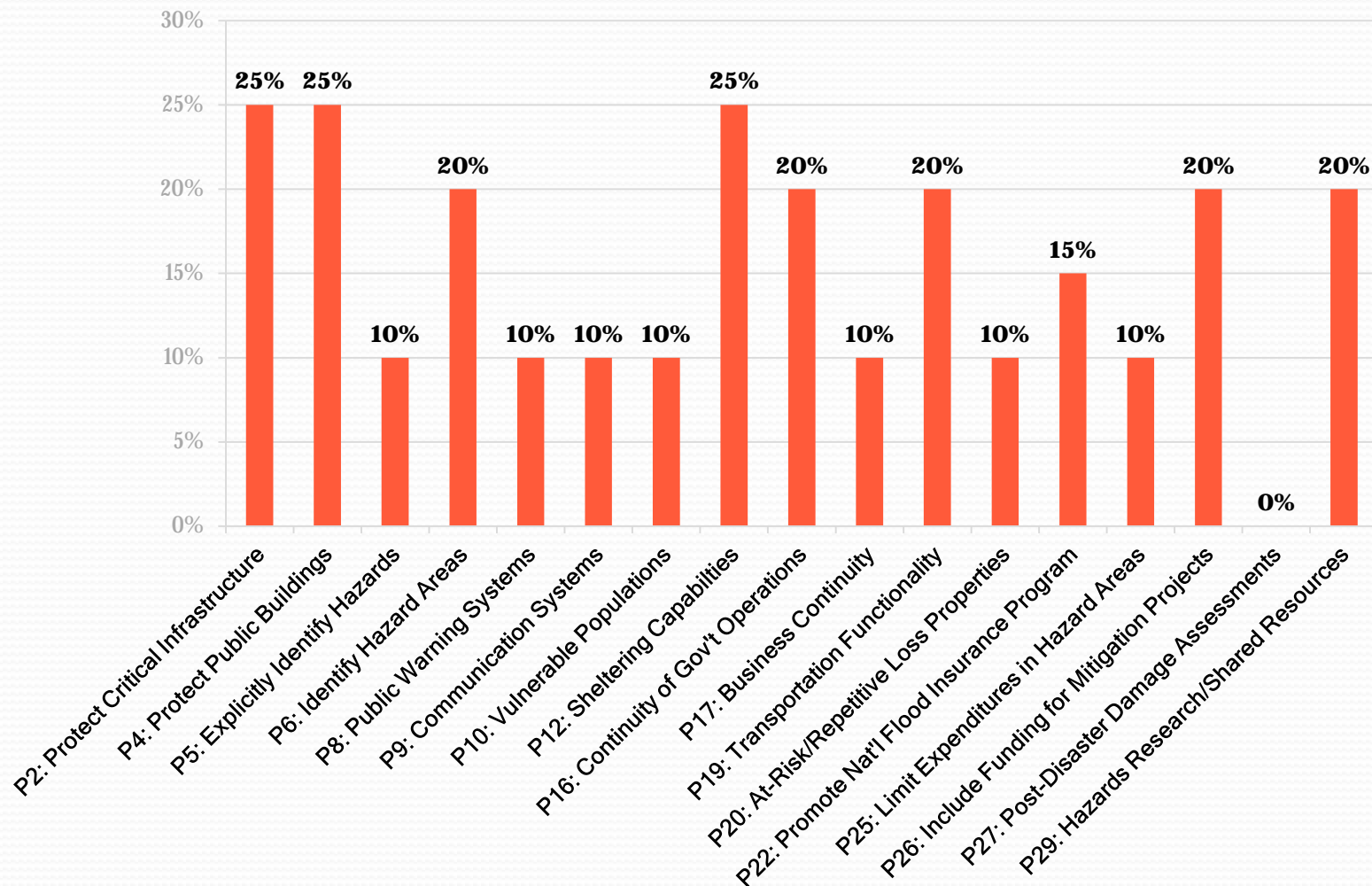
Connections Identified from Matrix Tally

Percentages of communities that **include** these hazard mitigation principles in their Comprehensive Plans.



Gaps Identified from Matrix Tally

Percentages of communities that **include** these hazard mitigation principles in their Comprehensive Plans.



Application of Results

- ID connections and gaps for each jurisdiction
- Profiles and recommendations for integration for each jurisdiction
- Analysis tool (template) for other communities
- Integration became a recommendation in the *Gulf Coast Plan for Opportunity* (HUD Sustainable Communities project)
- **CREATE MORE RESILIENT COMMUNITIES**



FEMA Guidance...

The most effective way to promote resilience at the community level is to integrate the consideration of risk, and ways to reduce or eliminate risk, into all decisions.



Final Report

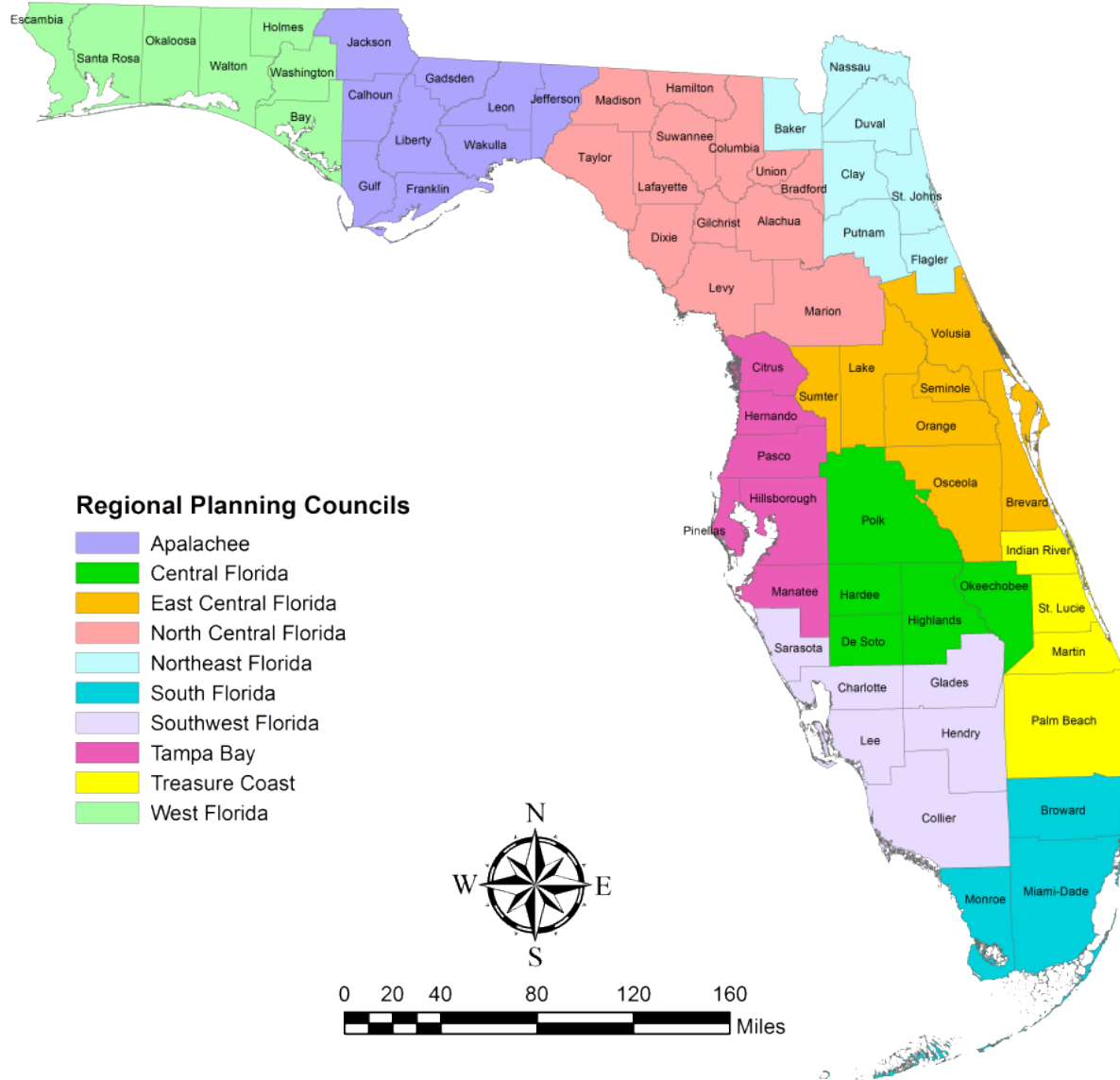
**Request full report and matrix tool by emailing
abeasley@smpdd.com**

Disaster Preparedness and Climate Change in Northeast Florida: Resiliency is Good Business

Margo Moehring, AICP
Regional Community Institute
Northeast Florida Regional Council
NADO Webinar, August 13, 2015



Florida Regional Planning Councils



Regional Community Institute

- Non-profit “Think Tank”
- Policy work for NEFRC
- Members are graduates of the Regional Leadership Academy, and the NEFRC Board
- Tasked by NEFRC with creating a vision for growth and development in the region for the next 50 years (First Coast Vision)
- First Coast Vision (2011) action item: Bring together leadership and experts from the region to determine climate change impact, and, if indicated, mitigation and adaptation plans
- The region identified sea level rise as 1st priority

Policy Work: RCI Emergency Preparedness Committee on Sea Level Rise

- Determine if we are we vulnerable
- If so, assumptions for level of rise and timeframes
- Community Resiliency Assessments of interested coastal and waterfront communities
- Use what was learned to provide policy recommendations to NEFRC Board (October 2013)
- NEFRC Board Approval (November 2013)
- Regional Action Plan is a Resource on www.nefrc.org homepage

Historic Relative Sea Level Change - **Florida Atlantic Coast**

Relative Sea Level Change = Estimated Global Sea Level Trend (1.7 mm/yr) + local Vertical Land Motion

Reference: NOAA Technical Report NOS CO-OPS 065, *Estimating Vertical Land Motion from Long-Term Tide Gauge Records*, May 2013

Tide Station (# and Name)	mm/yr
8720030 Fernandina Beach	2.30
8720218 Mayport	2.29
8721120 Daytona Beach *(Inactive)	2.32*
8723170 Miami Beach *(Inactive)	2.39*
8723970 Vaca Key **(<40 years)	2.90**
8724580 Key West	2.20

Relative Sea Level Change Scenarios for Mayport, FL (feet)

Year	USACE NOAA Low	USACE Int. NOAA Int-Low (Mod. NRC Curve I)	NOAA Intermediate High	USACE High (Mod. NRC Curve III)	NOAA High	National Climate Assessment Draft Jan. 2013
SLR Scenario	Local Historic SLR	Global SLR +0.5m by 2100	Global SLR +1.2m by 2100	Global SLR +1.5m by 2100	Global SLR +2.0m by 2100	Global SLR +0.3m to +1.2m
1992	0.0	0.0	0.0	0.0	0.0	
2010	0.2	0.2	0.2	0.3	0.3	
2060	0.5	0.9	1.8	2.2	2.9	
2100	0.8	1.8	4.1	5.1	6.8	1.0 to 4.1
2110	0.9	2.1	5.6	6.0	8.0	

Notes: USACE projections are for historic, modified NRC Curve I and modified NRC Curve III rates of sea level change developed for Northeast Florida per USACE Engineering Circular (EC) 1165-2-212. This EC is based on guidance in the National Research Council (NRC) report, *Responding to Changes in Sea Level; Engineering Implications* dated September, 1987. The projections are developed using the historic rate of sea level rise at Mayport as reported by NOAA (2.29 mm/yr). NOAA projections use the same EC equations modified for different global SLR scenarios. The NRC, USACE and NOAA guidance documents do not address dates beyond 2100. All projections start from 1992 control for the national survey datum per EC 1165-2-212. NOAA guidance:

<http://cpo.noaa.gov/Home/Home/AllNews/TabId/315/ArtMID/668/ArticleID/80/Global-Sea-Level-Rise-Scenarios-for-the-United-States-National-Climate-Assessment.aspx>

National Climate Assessment, Draft Report for Public Review, Jan 2013: <http://ncadac.globalchange.gov/>

We are vulnerable: Assumptions

- 1'-3' by 2060 (3' to match GTM NERR Study of Matanzas Basin)
- 3'-6' by 2110
- Using the most simple NOAA coverage
- Start the conversation
- Use vulnerability review and input from Community Resiliency Assessments to identify policies for consideration (Committee Compilation) and DOABLE **Regional Action Plan**

Regional Action Plan Highlights

- Create a Clearinghouse on Understanding Risk
- Engage the Community
- Save Money (CRS and Adaptation)
- Collaborate and Leverage Success
- Engage the Business Sector in Long Term Resiliency
 - This is where leadership will be most effective in Northeast Florida

Action: Engage the Business Sector in Long Term Resiliency

- NEFRC creates Public/Private Regional Resiliency (P2R2) to develop a regional strategy that will incentivize population and private development to locate outside of vulnerable areas
- Metrics: tax base, property values and private ownership in areas vulnerable to sea level rise and major flood
- Committee makeup recommended: Homebuilder, Mortgage Banker, Risk Manager, Lawyer, Engineer, ULI NF rep, Jax USA rep, Realtor, Economist, Planner, Natural Resource Planner, RCI rep, NEFRC rep, County Govt. rep, Muni Govt. rep

Why is regional resiliency good business?

- There will be migration from South Florida and Northeast Florida has undeveloped higher ground
- Coastal communities remain attractive (and they have been mindful to date)
- We are not afraid of what we understand
- We can be the region that knows where water will come from long term- beyond water supply planning

Why is regional resiliency good business (cont.)?

- Businesses want information before they invest. Homeowners will too, someday.
- Adaptation can address flooding now and sea level rise later
- Starting now means we can incentivize movement from vulnerable areas. Starting later means we may not have options
- Market strategy: We are ready!

P2R2 Highlights

- “The world is changing. We work to position Northeast Florida to thrive in that change.”
- Doable actions only
- Use 1’-3’ by 2060 and 3’-6’ by 2110, to get started
- Align with Jacksonville 100 Resilient Cities
- Establish a baseline- what is already being done?
- It is not just sea level rise, it is a changing climate
- Op Ed May 2015
- Regions Resiliency Night July 2015: Action Launch
- Action Teams meet September 2015- Summer 2016
- P2R2 icon on NEFRC.org webpage



Health and Wellbeing

Are We Ready?

- We will work with those who serve vulnerable populations to see if we are ready for a major event and will try to learn from the experiences of others. First up? Health care providers.

Building Resiliently in Northeast Florida

- We will convene local folks to choose the resilient building techniques that work here, so when builders build or residents renovate, their choices are local, durable and clear. We will share what we find.

Regional Resiliency Rebuild

- We will engage with the arts and education communities and others to help us imagine the future through a design and ideas competition that asks how we might rebuild to thrive after a disaster.



Infrastructure and Environment

Vulnerable Areas

- Our vulnerabilities page contains examples of ways to look at our vulnerabilities. We will assemble better data specific to our region as it becomes available so that businesses and communities can assess their risk when considering investment.

Less Vulnerable Areas

- Northeast Florida has an assessment of the vulnerability to sea level rise of lands that provide ecosystem services. We will determine what lands may be less vulnerable and where new development might be encouraged. What we mean by “less vulnerable” will be an open discussion.

Infrastructure Checklist and Adaptation Cost Benefit

- We will develop a checklist for communities to use to ensure resiliency is fully considered before infrastructure investments are made, and will provide regional assumptions to use in considering the costs and benefits of adaptation approaches.



Economy and Society

Business Risk Survey

- We will encourage participation in a quick on-line survey that businesses can take to get them started thinking about resiliency, and provide links to the resources that can help them plan.

Resiliency and Financial Literacy

- We will encourage financial institutions to add resiliency to the topics they cover in financial literacy programs, and to include the topic in discussions preceding mortgage pre-qualification.

Incentivize Development in Less Vulnerable Areas

- We will convene land use attorneys and experts to identify ways to incentivize investment to go to less vulnerable areas and to fund resiliency in renovation so that communities know their options.

Leadership and Strategy

Leadership Training

- We will advocate for training for elected officials, and will seek sponsors from the business community to offset costs if required, so they can better understand, champion and communicate resilience and the challenges we face.

Metrics

- We have established a baseline for property and tax base at risk from a major hurricane and 1', 3', and 6' of sea level rise. We will track metrics we feel can help us evaluate how we are doing at addressing resiliency.

We Can Dream: Vulnerability Assessment

- We should have data specific to our region that models what coastal/waterfront changes we can expect as the sea rises and climate changes. We should use this as an input to a robust assessment of the vulnerability of our people, our economy, our natural and our manmade assets to that change. This can be done in observation of best practices used elsewhere. Unlike the rest of our actions, which we can advance with our determination and work, this one may require significant funding.

Questions?

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Questions?

Please type your questions in the question box on the side panel of your screen.

Speakers:

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- **Margo Moehring**, Executive Director, Regional Community Institute of Northeast Florida, Inc. (Jacksonville, FL)

The recording of this webinar, along with the PowerPoint slides, will be made available at www.nado.org.



With questions or comments, please contact:

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