



# Building Economic Resilience in Your Community: Linking Economic Development and Hazard Mitigation Planning

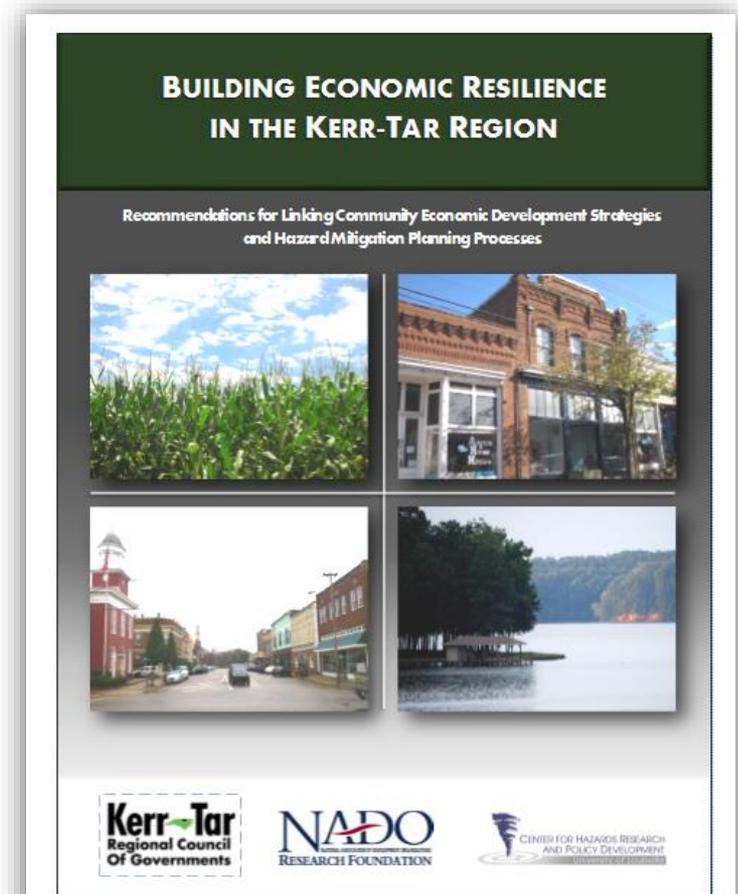
**March 17, 2015**  
**2:00—3:15 pm ET**



# Today's Presentation

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- Who we are
- Why link economic development and hazard mitigation planning?
- Overview of the CEDS
- Overview of Hazard Mitigation Planning
- Linking the Two Planning Processes
- Implementing the Recommendations
- Q & A



# About Us

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*Program Manager*



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*Project Manager*



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*Regional Planning Manager*

# NADO: Our Mission

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



# NADO: Our Membership



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 by other names.

They strengthen local governments, communities, and economies through regional strategies focusing on economic and workforce development, transportation, infrastructure, business lending, and more.

# NADO Research Foundation

Aligning Strategies to Maximize Impact:

Case Studies on Transportation and Economic Development



**Greater New Orleans: Building on Competitive Advantages to Strengthen Economic Resilience**

Hurricane Gustav and the Underpins the Gulf's Economic Vulnerability

In September 2005, just three years after Hurricane Katrina struck, the Gulf Coast was hit by two Category 2 hurricanes, Gustav and Ike. With the area once again in the crosshairs, officials and the private sector are looking for ways to build back better and stronger than before. This report examines the lessons learned from the storm and offers recommendations for building a more resilient and sustainable Gulf Coast economy.

These studies to the Gulf Coast's major employers and their employees. The report examines the impact of the storm on the region's economy and offers recommendations for building a more resilient and sustainable Gulf Coast economy.

**RESILIENT REGIONS**

Integrating Economic Development Strategies, Sustainability Principles and Hazard Mitigation Planning

JULY 2011  
NADO RESEARCH FOUNDATION

**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:

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



# Center for Hazards Research and Policy Development

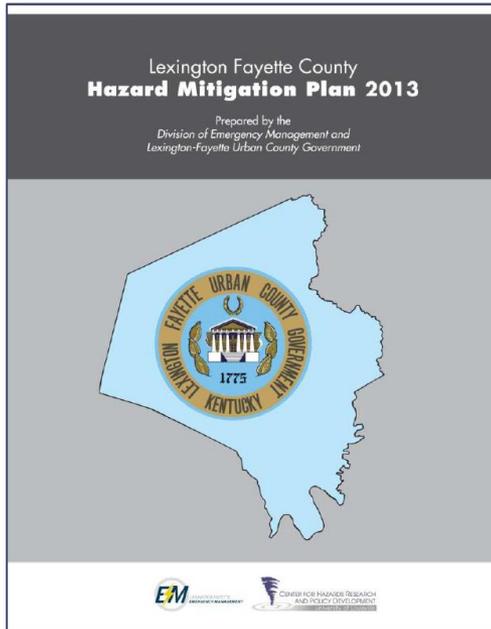
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## Projects we're involved in...

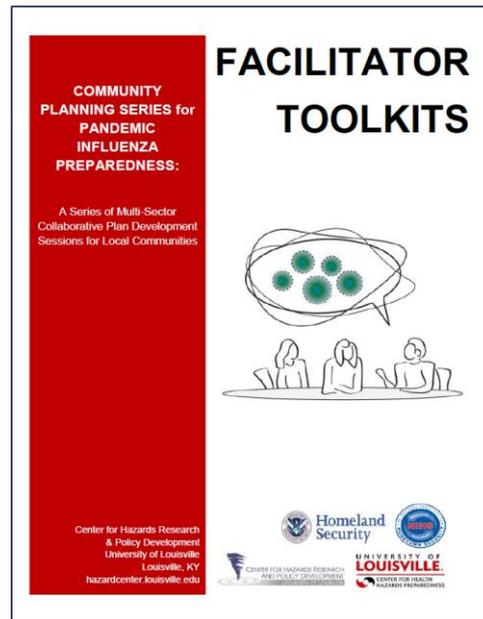
- **Sustainable Communities Capacity Building Program (EPA/HUD)**
- **Hazard Mitigation Plan Development (FEMA)**  
*Local, state, and university in accordance with DMA 2000*
- **Recovery/Resiliency Planning (KyEM/EDA/HUD)**
- **Statewide Disaster Planning System Development (KyEM/EDA/HUD)**  
*Community Hazard Assessment & Mitigation Planning System (CHAMPS)*
- **G.I.S. Based Vulnerability Assessments**
- **Community Planning Guidance for Pandemic (DHS)**

# Center for Hazards Research and Policy Development

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**Local Hazard Mitigation  
Plan Development**

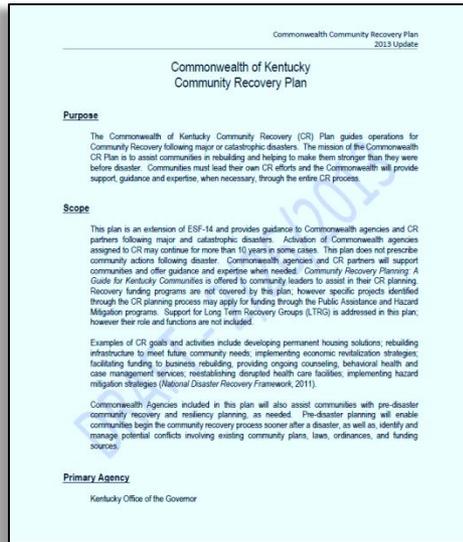


**Community Guidance  
for Multi-Sector  
Pandemic Flu  
Preparedness**

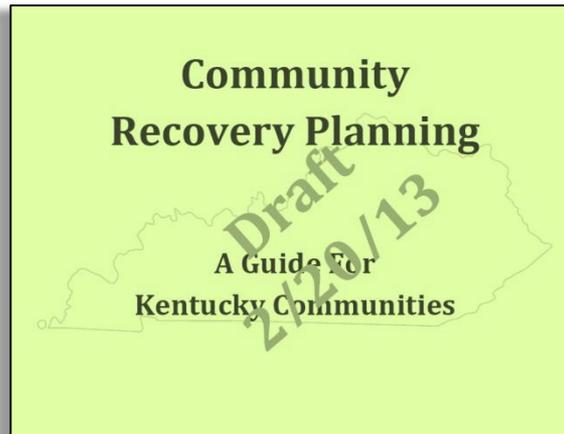


**Resilience System  
Planning**

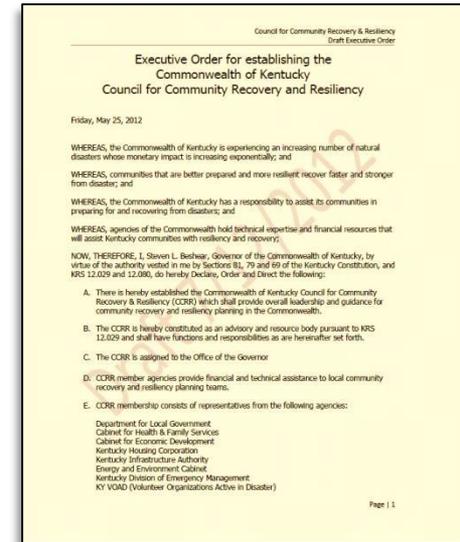
# Center for Hazards Research and Policy Development



State-level Community Recovery Plan



Community Recovery Planning Guide



Executive Order for Council for Community Resiliency & Recovery

# The Sustainable Communities Learning Network

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- UofL Center for Environmental Policy and Management (CEPM) leads a team comprised of:
  - Members of the Environmental Finance Network including:
    - New England Environmental Finance Center
    - Environmental Finance Center at the University of Maryland
    - Southwest Environmental Finance Center
    - University of Louisville Center for Hazards Research and Policy Development
    - University of Louisville Center for Infrastructure Research
  - Our team's technical assistance focuses on:
    - Building capacity of nearly 400 Sustainable Communities and EPA grantees
    - Fostering peer-sharing to encourage coordination of sustainability practices
    - Helping grantees integrate best practices into their planning efforts

# Webinar Logistics

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- 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 ([www.nado.org](http://www.nado.org)) and the Sustainable Communities Learning Network ([www.sclearningnetwork.org](http://www.sclearningnetwork.org)).
- Please contact Megan McConville ([mmcconville@nado.org](mailto:mmcconville@nado.org)) or Andrea Pompei Lacy ([andrea.pompei@louisville.edu](mailto:andrea.pompei@louisville.edu)) if you have any questions after the presentation.



Why link economic development and hazard mitigation planning?



# Our Definition of Economic Resilience

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The ability of a region or community to anticipate, withstand, and bounce back from any shocks to its businesses and overall economy, including:

- Natural disasters or hazards (i.e. flooding)
- The closure of a large employer (i.e. a factory, power plant)
- The decline of an important industry (i.e. textiles)
- Changes in the workforce (i.e. youth outmigration, skill specialization)
- Climate change (i.e. increasing temperatures, decreasing water availability)

# One Approach to Building Economic Resilience: Coordinating CEDS and Hazard Mitigation Plans

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## ***CEDS***

*Contributes to effective economic development through locally-based planning process.*

## ***Mitigation***

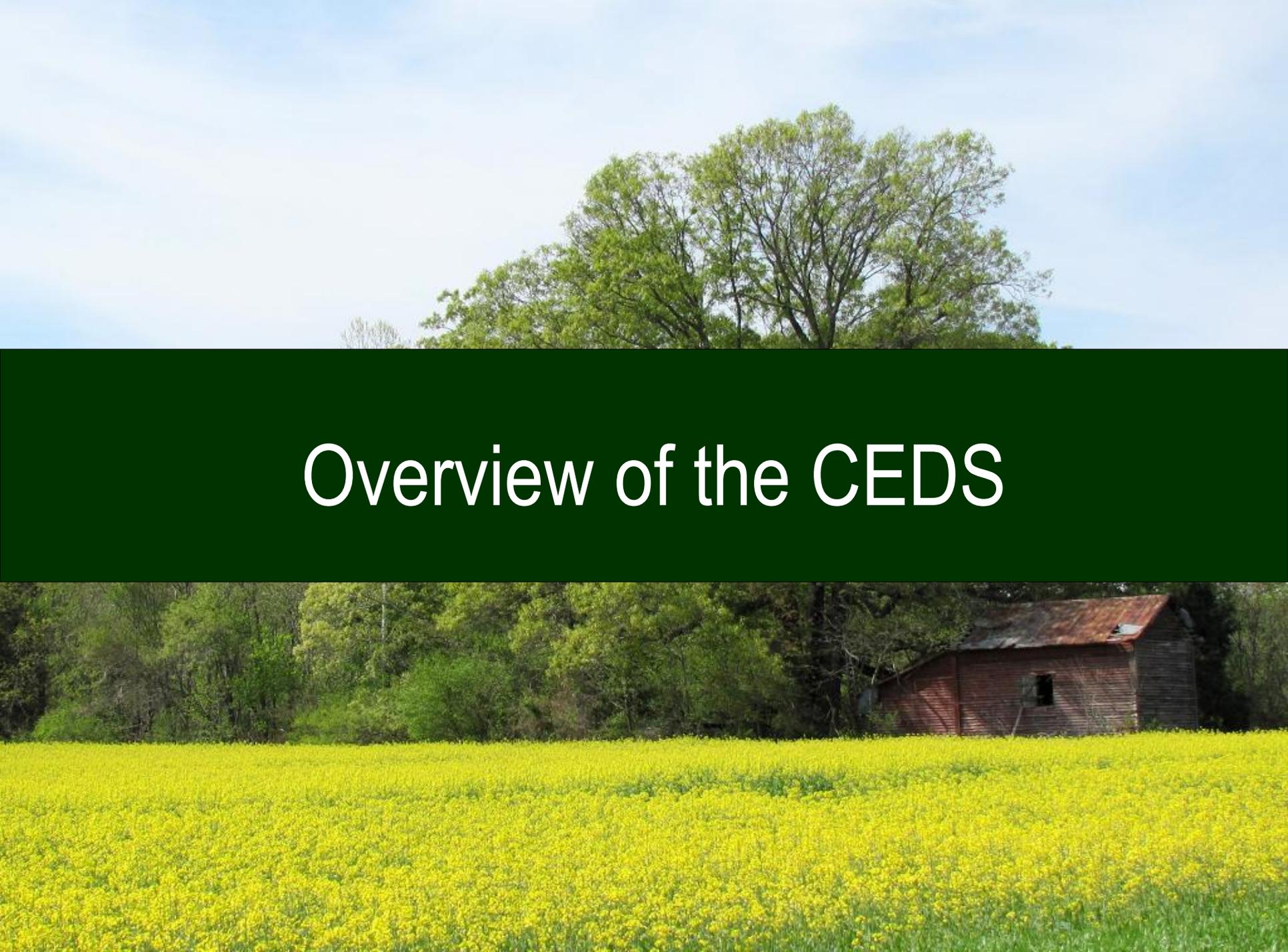
*Effort to reduce loss of life and property by lessening the impacts of hazards.*

***Economic Resilience***

# Benefits of Plan Coordination

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- Supports business and economic development that is safe and resilient to known hazards.
- Builds capacity and relationships that can lead to a quicker, stronger recovery in the event of a disaster.
- Makes each plan more effective and likely to achieve its objectives.
- Promotes creative thinking about new funding sources for programs and projects.
- Allows leaders to market the region to businesses as safe and prepared for future disasters.



# Overview of the CEDS

# What is a CEDS?

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CEDS

“Simply put, a CEDS [Comprehensive Economic Development Strategy] is a strategy-driven plan for regional economic development. A CEDS is the result of a regionally-owned planning process designed to build capacity and guide the economic prosperity and resiliency of an area or region.”

-EDA CEDS Content Guidelines,  
[www.eda.gov/ceds](http://www.eda.gov/ceds)

## CEDS CONTENT GUIDELINES

### IN THIS SECTION:

#### Overview

#### Content

Summary Background

SWOT Analysis

Strategic Direction/  
Action Plan

Evaluation Framework

Economic Resilience

#### Format

#### Preparation

#### Equivalent/Alternative Plans

 Full Report (PDF)

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## OVERVIEW

The Comprehensive Economic Development Strategy (CEDS) contributes to effective economic development in America's communities and regions through a locally-based, regionally-driven economic development planning process. Economic development planning – as implemented through the CEDS – is not only a cornerstone of the U.S. Economic Development Administration's (EDA) programs, but successfully serves as a means to engage community leaders, leverage the involvement of the private sector, and establish a strategic blueprint for regional collaboration. The CEDS provides the capacity-building foundation by which the public sector, working in conjunction with other economic actors (individuals, firms, industries), creates the environment for regional economic prosperity.

Simply put, a CEDS is a strategy-driven plan for regional economic development. A CEDS is the result of a regionally-owned planning process designed to build capacity and guide the economic prosperity and resiliency of an area or region.<sup>2</sup> It is a key component in establishing and maintaining a robust economic ecosystem by helping to build regional capacity (through hard and soft infrastructure) that contributes to individual, firm, and community success. The CEDS provides a vehicle for individuals, organizations, local governments, institutes of learning, and private industry to engage in a meaningful conversation and debate about what capacity building efforts would best serve economic development in the region. The CEDS should take into account and, where appropriate, integrate or leverage other regional planning efforts, including the use of other available federal funds, private sector resources, and state support which can advance a region's CEDS goals and objectives. Regions must update their CEDS at least every five years to qualify for EDA assistance under its Public Works and Economic Adjustment Assistance programs. In addition, a CEDS is a prerequisite for designation by EDA as an Economic Development District (EDD).

This guide is primarily intended to assist in efforts to develop the content of a CEDS document. It suggests how to develop the document's format and substance to make the strongest, most useful and effective CEDS possible. The focus on content in these guidelines does not diminish the importance of the process used to develop a CEDS. A well-led, broadly inclusive process is vital to the creation of a relevant and effective document. It also serves to build leadership, enhance cooperation, and foster public ownership and enthusiasm. While the high-level steps required to prepare a CEDS can be found in the Preparation section of this document, EDA suggests contacting the appropriate EDA regional office (specific points of contact can be found on EDA's website at [www.eda.gov](http://www.eda.gov)) to learn more about the overall CEDS process and additional resources and guidance available.

From the regulations governing the CEDS (see 13 C.F.R. § 303.7), the following sections *must* be included in the CEDS document:

- *Summary Background.* A summary background of the economic conditions of the region;
- *SWOT Analysis:* An in-depth analysis of regional strengths, weaknesses, opportunities and threats (commonly known as a "SWOT" analysis);
- *Strategic Direction/Action Plan.* The strategic direction and action plan should build on

- Content Guidelines: [www.eda.gov/ceds](http://www.eda.gov/ceds)

- NADO webinar: [www.nado.org/recording-now-available-for-ceds-content-guidelines-webinar/](http://www.nado.org/recording-now-available-for-ceds-content-guidelines-webinar/)

# Required Sections of the CEDS

CEDS

SUMMARY BACKGROUND

SWOT ANALYSIS

STRATEGY

EVALUATION FRAMEWORK

- A **summary background** explaining the current economic condition of the region and potential for future development activities;
- A **SWOT analysis** that identifies and analyzes the region's strengths, weaknesses, opportunities, and threats;
- A **strategic direction** and **action plan** with detailed goals, objectives, and proposed projects built off of the summary background and SWOT analysis; and
- An **evaluation framework** guiding the implementation of the strategy.

- **Integrating resilience into the CEDS can take multiple forms.**
  - Analysis of regional vulnerabilities in SWOT assessment;
  - Inclusion of regional disaster preparedness and recovery efforts;
  - Strategies to diversify the economy and/or realign the workforce to support emerging industries;
  - Resilience objectives built off of statewide initiatives or related regional planning efforts;
  - Or, all of the above.

# Overview of Hazard Mitigation Planning



# Why mitigation?



FEMA

## Mandates a Plan

Communities must have an approved plan in order to be eligible for Post-Disaster HMGP funding (projects and planning).

## Establishes a process

What hazards affect our community?

What can we do to reduce losses from events?

## Enables multi-sector participation

Encourages stakeholder involvement at all levels from initial planning to implementation of hazard mitigation activities

## Enables community representation

Encourages equitable planning processes by including stakeholder involvement of vulnerable populations.

***Mitigation contributes to more resilient communities***

# Benefits of Hazard Mitigation Planning

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To allow the community to commit to  
a planning framework  
that leads to development patterns  
that do not increase risks  
from known hazards OR  
leads to redevelopment that reduces risk  
from known hazards.

# Elements of a Hazard Mitigation Plan

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PLANNING PROCESS

RISK ASSESSMENT

MITIGATION STRATEGY

PLAN MAINTENANCE

## A well-constructed HMP should include the following elements:

- An inclusive **Planning Process** that allows for equitable representation by diverse community groups;
- A **Risk Assessment** conducted to determine the potential impacts of hazard to the people, economy, built, and natural environments of the community;
- A **Mitigation Strategy** that contains an action plan for how the community will reduce potential losses as identified in the risk assessment; and
- A **Plan Maintenance** process that establishes an approach to track the plan's implementation progress.

# Elements of a Hazard Mitigation Plan



## Sample Planning Process Steps:

| Planning Process Steps  | Jun-13 | Jul-13 | Aug-13 | Sep-13 | Oct-13 | Nov-13 | Dec-13 | Jan-14 | Feb-14 | Mar-14 | Apr-14 | May-14 | Jun-14 |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Planning Process</b>   |        |        |        |        |        |        |        |        |        |        |        |        |        |
| Steering Committee Meeting #1<br><i>Purpose: Kick-off and data collection</i>           | 06/25  |        |        |        |        |        |        |        |        |        |        |        |        |
| Steering Committee Meeting #2<br><i>Purpose: Risk assessment data collection</i>        |        |        |        |        | 10/29  |        |        |        |        |        |        |        |        |
| Steering Committee Meeting #3<br><i>Purpose: Risk Assessment Results, mit. strategy</i> |        |        |        |        |        |        |        |        |        | 03/27  |        |        |        |
| Steering Committee Meeting #4<br><i>Purpose: Mitigation strategy development</i>        |        |        |        |        |        |        |        |        |        |        | 04/23  |        |        |
| Steering Committee Meeting #5<br><i>Purpose: Draft plan review, plan maintenance</i>    |        |        |        |        |        |        |        |        |        |        |        |        | 06/26  |
| Individual Stakeholder Meetings<br><i>Purpose: Data collection, mitigation strategy</i> | 06/03  |        |        | 09/10  |        |        |        | 01/31  |        |        |        |        |        |

Table Source: Local Mitigation Plan Development Timeline, CHR.

# Elements of a Hazard Mitigation Plan

HMP

PLANNING PROCESS

RISK ASSESSMENT

MITIGATION STRATEGY

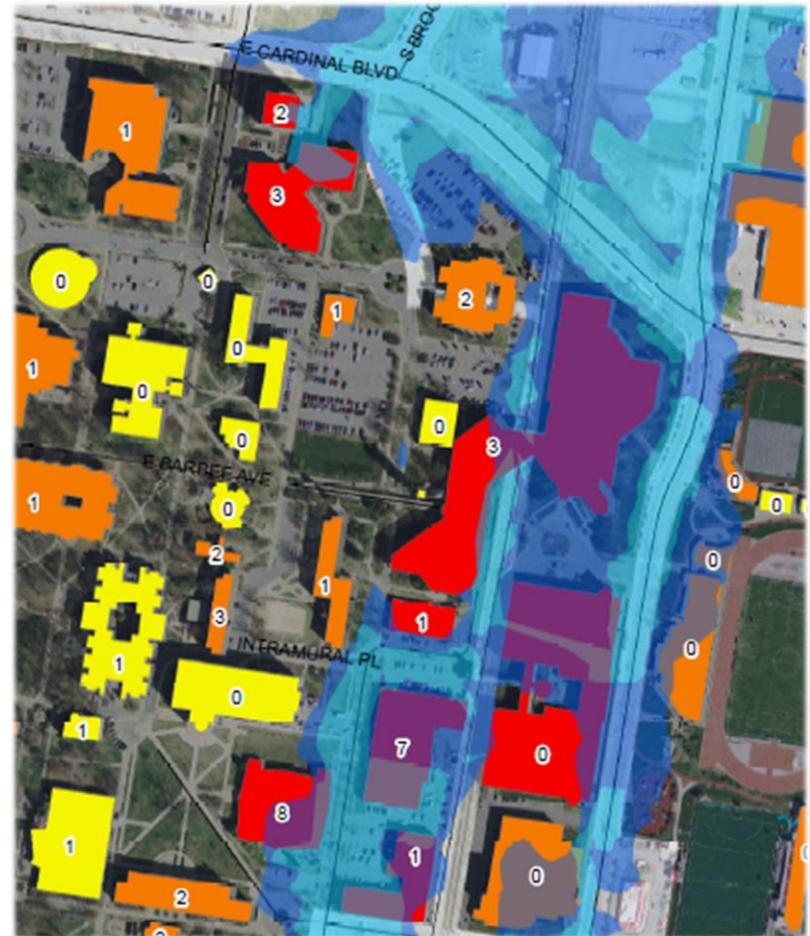
PLAN MAINTENANCE

Use assessment results to drive other planning initiatives.

Identifying vulnerable areas



Target action areas



# Elements of a Hazard Mitigation Plan

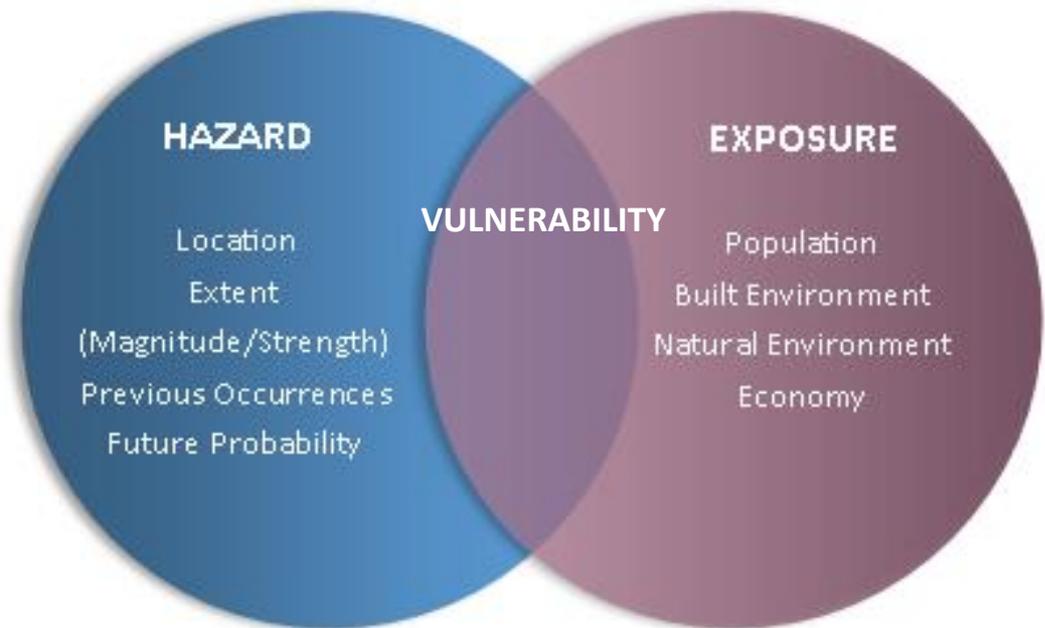
HMP



**Natural Hazard** - source of harm or difficulty created by a meteorological, environmental, or geological event.

**Exposure** - the people, structures, facilities, and systems that have value to the community.

**Vulnerability** - characteristics of community assets that make them susceptible to damage from a given hazard.



*Figure Source: Modified from FEMA Local Mitigation Planning Handbook as adapted from U.S. Geological Survey and Oregon Partnership for Disaster Resilience Models.*

# Elements of a Hazard Mitigation Plan



The below table is an example of a format used to organize mitigation action items.

| Action | Timeframe | Hazards Addressed | Description  | Offices Responsible  |
|--------|-----------|-------------------|--|--|
| 1.2.1  | Ongoing   | Flood             | Conduct outreach with the land use planning and development community for the purpose of incorporating mitigative building and development best practices into existing plans, policies, and procedures. | Emergency Management<br>Code Enforcement<br>Planning<br>Building Inspection<br>Homebuilder's Association |

Table Source: Lexington-Fayette Urban County Government Hazard Mitigation Plan, 2011.

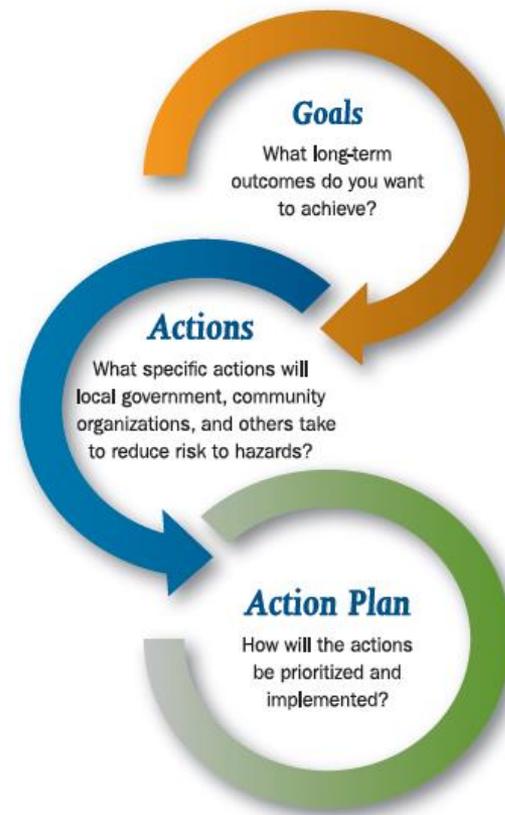


Figure Source: FEMA Local Mitigation Planning Handbook, page 6-10

# Elements of a Hazard Mitigation Plan

HMP

PLANNING PROCESS

RISK ASSESSMENT

MITIGATION STRATEGY

PLAN MAINTENANCE

- **Monitoring:** Tracking the implementation of the plan over time.
- **Evaluating:** Assessing the effectiveness of the plan at achieving its stated purpose and goals.
- **Updating:** Reviewing and revising the plan at least once every 5 years.



Convening a steering committee to ensure plan implementation and identify areas of continued collaboration will be helpful for maintaining the HMP.

*Photo Source: CHR*



# Linking the Two Planning Processes



# Comparing Plan Components

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## ***CEDS***

*Contributes to effective economic development through locally-based planning process.*

## ***Mitigation***

*Effort to reduce loss of life and property by lessening the impacts of hazards.*

***Economic Resilience***

# Comparing Plan Components

---

## ***CEDS***

*Contributes to effective economic development through locally-based planning process.*

- **Summary Background**
- **SWOT Analysis**
- **Strategic Direction/Action Plan**
- **Evaluation Framework**

***Economic Resilience***

# Comparing Plan Components

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- **Planning Process**
- **Risk Assessment**
- **Mitigation Strategy**
- **Plan Maintenance**

## *Mitigation*

*Effort to reduce loss of life and property by lessening the impacts of hazards.*

*Economic Resilience*

# Recommendations for Planning Process

HMP

PLANNING PROCESS

RISK ASSESSMENT

MITIGATION STRATEGY

PLAN MAINTENANCE

- Include economic development and business partners, such as:
  - City and county economic developers;
  - Owners/managers of small, medium, and large businesses;
  - Chamber of Commerce representatives;
  - Small business development professionals; and
  - Insurance providers.

- Review CEDS and other economic development plans, projects, and programs.
- Establish a Regional Resilience Council

# Recommendations for Risk Assessment

HMP

PLANNING PROCESS

RISK ASSESSMENT

MITIGATION STRATEGY

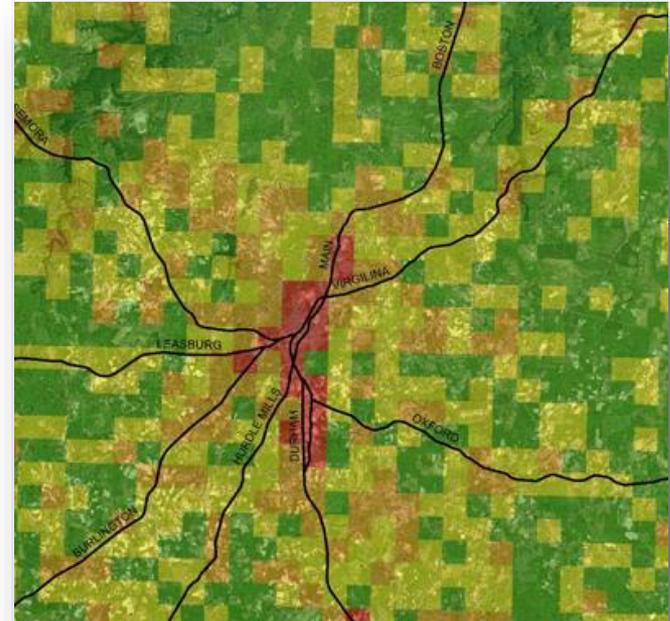
PLAN MAINTENANCE

## Incorporate economic variables into the risk assessment model:

- Business locations;
- Centers of economic activity;
- Critical infrastructure for economic development; and
- Age of commercial building stock.

## Supplement with a qualitative analysis of economic risks.

- Gather feedback from stakeholders
- Gather information on specific risks to major industry clusters identified in the CEDS.



Person County Business Assets

# Recommendations for Risk Assessment

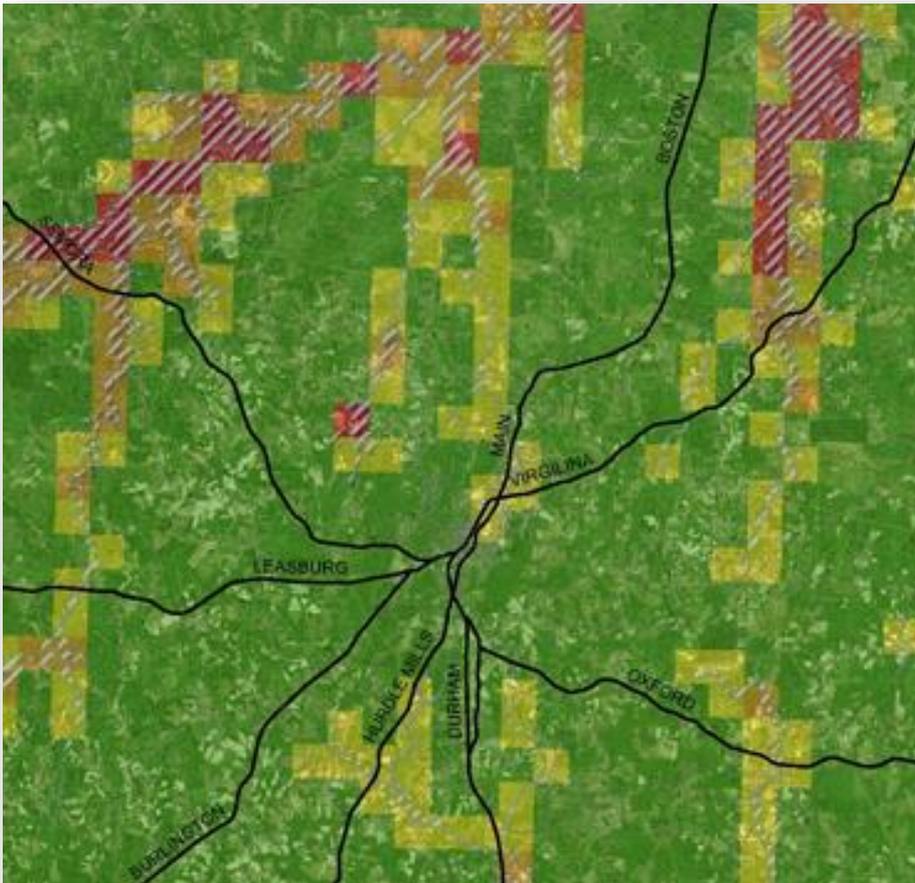
HMP

PLANNING PROCESS

RISK ASSESSMENT

MITIGATION STRATEGY

PLAN MAINTENANCE



$$\text{Hazard Resilience Score} = \text{Socioeconomic Resilience Score} + \text{Hazard Vulnerability Score}$$

## Flood Resilience Score:

The Hazard Resilience Score Maps combine areas that have lower resilience levels with areas that have high hazard vulnerabilities. These maps should be used to address strategies toward building more resiliency in specific areas that are vulnerable to specific hazard types.

# Recommendations for Mitigation Strategy

HMP

PLANNING PROCESS

RISK ASSESSMENT

MITIGATION STRATEGY

PLAN MAINTENANCE

- Incorporate strategies into future plans:
  - Target new development to low-risk areas;
  - Preserve and enhance open space and other natural resources;
  - Adopt and enforce building codes and development standards;
  - Retrofit major roadways in floodprone areas;
  - Install back up power generation at critical facilities; and
  - Provide information to agricultural entrepreneurs, extension agents, and small business development specialists.

# Recommendations for Mitigation Strategy

HMP

PLANNING PROCESS

RISK ASSESSMENT

MITIGATION STRATEGY

PLAN MAINTENANCE

- Work with local emergency managers, Chamber of Commerce, and Small Business Development Centers to offer hazard vulnerability audits to small businesses;
- Use existing programs and networks to facilitate business-to-business mitigation mentoring;
- Development agreements with alternative water providers; and
- Offer expanded development rights to developers and building owners in hazard areas for performing mitigation retrofits.

# Recommendations for Plan Maintenance

HMP



- Form an implementation steering committee that includes at least one economic development representative;
- Continue to coordinate CEDS and HMPs through the maintenance process and identify areas for alignment in future plans;
- Align five-year update cycles so they are on the same schedule; and
- Create database to track progress on mitigation actions and projects.

# Tap Into Hazard Mitigation Stakeholders' Knowledge

- Engage hazard mitigation planning team members, emergency managers, land use planners, floodplain administrators, public works staff, and others with expertise on natural hazards in your CEDS planning process.
- Include a hazard mitigation stakeholder on the CEDS strategy committee
- Conduct targeted outreach to hazard mitigation stakeholders to gather feedback on goals and strategies



# Conduct a Comprehensive SWOT Analysis

- Engage emergency managers, land use planners, and others familiar with critical infrastructure and hazards in your SWOT analysis, or conduct a separate SWOT with those stakeholders.
- Use the HMP risk assessment to identify natural hazard threats to include in the SWOT analysis.
  - Use risk assessment maps as visual aids to inform discussions during the SWOT analysis process.
- Consider threats related to the impacts of climate change on the region.
- Consider the secondary and tertiary threats related to the interaction of natural hazards and climate change with the regional economy.
  - Threats to individual businesses
  - Supply chain vulnerabilities
  - Industry-specific threats
- Include strengths and opportunities related to resilience.

# View Your Strategies Through a Mitigation Lens

- Incorporate strategic direction and actions that flow from the SWOT and risk assessment results.
- Strategies should strive to achieve multiple benefits when possible, and avoid contradicting each other at least.



*Diagram modified from FEMA Local Mitigation Planning Handbook for CEDS applicability.*

# Summary Background

- Write the summary background after performing the SWOT analysis and developing the economic vision for the region.
- Point to relevant key findings of the SWOT and risk assessment, highlighting the potential impacts of natural hazards on regional economic drivers.

The summary background could include the following, as applicable:

- Demographic and/or socioeconomic data;
- Environmental, geographic, climatic, cultural, and/or natural resource profiles;
- Infrastructure assets that relate to economic development including water, sewer, communications, energy distribution, and transportation systems;
- Emerging or declining clusters and their past, present, and projected impacts on the region's competitive advantage and economic development capacity;
- The relationship of the regional economy to the economy of the broader area or state, with particular regard to local advantages and disadvantages;
- Factors that directly affect economic performance in the region such as workforce availability and preparedness, state and local laws, financial resources, energy costs, and land use patterns; and
- Other factors that relate to economic performance such as housing, health services, public safety, and educational, cultural, and recreational resources.



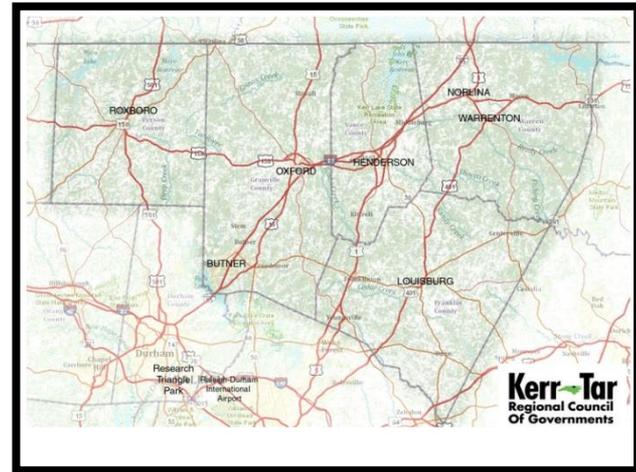
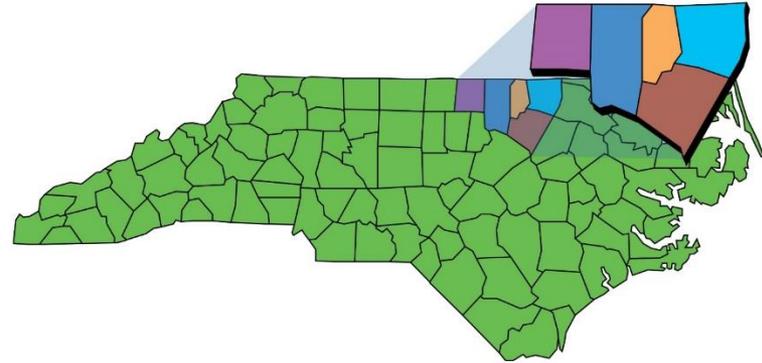
# Implementing the Recommendations



# About the Kerr-Tar Region

## Quick Facts on Kerr-Tar Regional Council

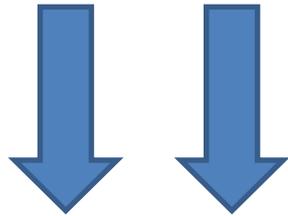
- Five county region in the North Carolina Piedmont, north of Research Triangle Park (RTP)
- 21 local government members
- Serve as a staff extension of our local governments, also:
  - Transportation planning
  - Alternative energy/fuels
  - Mobility management
  - Hazard mitigation planning



# Plan Alignment

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## North Carolina CEDS 2014



**Kerr-Tar Region CEDS  
2013 - 2017**



**Work plan**

- The 2014 work plan tasked updating a hazard mitigation plan for city of Roxboro and Person County into a multi-jurisdictional plan
- NADO Research Foundation and the Center for Hazard and Policy Research worked with Kerr Tar to develop a technical memo on syncing hazard mitigation planning and CEDS activities to foster improved community resiliency

# Implementing the Recommendations

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- Broader engagement strategies – Reaching out to non-traditional stakeholders, particularly small business owners
- Business continuity planning outreach – Educating our communities on the impacts of short and long term natural and man made hazards
- Establish a resiliency council – Build regional dialogue between planners, emergency services, economic developers, and citizens-at-large
- Build a case for resiliency in other planning documents – Provide tailored research and reference information for easy-to-make resiliency planning in local government comprehensive and land-use plan updates.

# Questions?

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

The webinar recording and slides will be available at [www.nado.org](http://www.nado.org) and [www.sclearningnetwork.org](http://www.sclearningnetwork.org) (for SCLN members).

Resources:

- Kerr-Tar Report: [www.ktplanning.org/uploads/1/3/8/1/13819061/kerr\\_tar\\_economic\\_resilience\\_report\\_final.pdf](http://www.ktplanning.org/uploads/1/3/8/1/13819061/kerr_tar_economic_resilience_report_final.pdf)
- EDA CEDS Content Guidelines: [www.eda.gov/ceds/](http://www.eda.gov/ceds/)
- NADO/EDA CEDS Content Guidelines webinar: [www.nado.org/recording-now-available-for-ceds-content-guidelines-webinar/](http://www.nado.org/recording-now-available-for-ceds-content-guidelines-webinar/)
- NADO CEDS Resilience Library: [www.nado.org/resources/ceds-library](http://www.nado.org/resources/ceds-library)
- FEMA Local Mitigation Planning Handbook: [www.fema.gov/media-library/assets/documents/31598](http://www.fema.gov/media-library/assets/documents/31598)



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