Connecticut State Historic Preservation Office
Historic/Cultural Resources Coastal Resiliency Planning

Western Connecticut Council of Governments

June 23, 2016
Agenda

• Introduction

• Background

• Historic and Cultural Resources Defined

• Resources and Resilience - Findings to-date
  • Overview of resources at risk
  • Overview of current plans and approaches (gap analysis)

• Best Practices and Procedures / Resilience Options

• Breakout Sessions
  • Review maps of resources and hazards
  • Review gap analysis – brainstorm solutions for historic resources

• Questions and Discussion
Program Sponsors

- Funded by the Disaster Relief Appropriations Act of 2013 (PL 113-2)
- Department of Interior – National Park Service
- Grant to SHPO
  - Funding limited to Sandy impacted Counties
Historic Preservation in CT

• CT State Historic Preservation Office (SHPO)
  Programs that Intersect with Local Planning:
    • Historical Designations of Districts, Buildings, Structures, Sites and Objects to the National Register of Historic Places & State Register of Historic Places
    • Certified Local Government Program (CLG)
    • Historic Preservation Grant Programs
    • Federal & State Historic Preservation Tax Credit Programs
    • Archaeological Preserves
    • Cemetery Preservation
    • Local Historic Districts and Individual Historic Properties
    • Village Districts
Following meetings with the COGs, project teams will hold working sessions with the 28 coastal municipalities and providing recommendations

Best Practices Guide will be provided to all municipalities in CT

GIS data for the four southern counties with resource and hazard layers and point locations are available today in draft form and will be updated

Project findings and recommendation will be incorporated into the next revision of the SHPP
• With few exceptions, natural hazard resiliency planning has not considered Historic Resources

• Addressing hazard related issues for Historic Resources has been reactive and institution specific

• Recognition of the need to incorporate historic resources into planning has increased since Sandy

• CT will be the *first* state to address these planning issues at the statewide level
Historic Resources
What are Historic Properties?

Districts, Buildings, Structures, Sites, and Objects that are important on a local, state, or national level

- Orange Street Historic District, New Haven
- Holmes House, Stonington
- Elm Grove Cemetery, Mystic
- Orange Street Historic District, New Haven

Holmes House, Stonington
Areas of Importance

• Historic Properties are cultural resources that are important in:
  • American History
  • Architecture
  • Archaeology
  • Engineering, and
  • Culture.
Legislative Background

• Appreciation of the importance of preservation
  • Antiquities Act of 1906 under Teddy Roosevelt’s Administration
  • Historic Sites Act of 1935 stated “It is a national policy to preserve for public use historic sites, buildings and objects of national significance.”
  • National Historic Preservation Act of 1966 created the NRHP, NHLs and SHPOs, and delegated funding and authority to SHPOs through NPS
  • CT was a leader at the state level in heritage conservation, and established the CT Historical Commission in 1955
Benefits of Historic Preservation

• Historic Properties are Irreplaceable
  Resources that contribute to
  • Our cultural identity
    • Sense of Place
    • Community Cohesion
    • Quality of Life
  • Sustainability
    • Leveraging existing buildings as assets to create places where people want to live and work now and in the future
  • Economy
    • Rehabilitation for Commercial Use and Housing
    • Tourism
    • Jobs
Why Consider Historic Properties in Resiliency?

- A Proactive Approach at the local level will help:
  - Foster Appreciation for Heritage Resources
  - Assess Cultural Resource Data within the Context of Hazards Planning
  - Establish Community-Level Preservation Priorities
  - Identify Tools & Strategies for Community-Based Preservation
  - Develop Action Plans that consider Historic Resources in Community Planning
  - Position for pre and post-disaster action and funding
What is at stake?

Of more than 5,100 historic buildings within WestCOG, more than 790 are at risk for flooding!
Resilience
Resilience Defined

- **Resilience** is “the ability of any system (infrastructure, government, business, and resources) to resist, absorb and recover from or successfully adapt to an adversity.”

- **Community** Resilience is “the ability of a community to prepare for anticipated hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions.” - NIST

- **Coastal** Resilience is the ability to resist, absorb, recover from, or adapt to coastal hazards such as sea level rise, increased flooding, and more frequent storm surges.
Categories of Adaptation (NOAA, 2010)

1. Impact Identification and Assessment
   Know the facts

2. Awareness and Assistance
   Share the facts

3. Growth and Development Management
   Prevent creation of new vulnerabilities

4. Loss Reduction
   Decrease existing vulnerabilities

5. Shoreline Management
   Protect natural, aesthetic, & economic benefits of beach & shore

6. Coastal Ecosystem Management
   Protect natural, aesthetic, & economic benefits of coastal ecosystems

   Decrease unique risks to drainage & water supply infrastructure
What is at Risk?
Hazard Considered

- FEMA 1% Annual Chance Flood
- 2080 Scenario Sea Level Rise
- Wind
- Winter Storms

The risk assessment relies on sea level rise projections generated by the National Oceanic and Atmospheric Administration Office of Coastal Management.
Fairfield County – Total Number of Historic Structures in FEMA SFHA today = 900

* Maps and lists by community will be available later in the day
3-Ft. Sea Level Rise

Fairfield County – Total Number of Historic Structures in 3-Ft. SLR Inundation Area = 261

* Maps and lists by community will be available later in the day
SFHA and SLR Exposure

- Fairfield County = 8,258 total historic buildings
  - Special Flood Hazard Area (SFHA) = 900 (11%)
- WestCOG = 5,149 total historic buildings*
  - Special Flood Hazard Area (SFHA) = 550 (11%)*
- Fairfield County = 8,258 total historic buildings
  - Sea Level Rise (SLR) = 261 (3%)
- WestCOG = 5,149 total historic buildings*
  - Sea Level Rise (SLR) = 244 (5%)*

* Excludes New Milford and Bridgewater
Wind

• Vulnerability to wind damage is approximately equal geographically across the planning area.

• Certain types of construction are more vulnerable.

• Properties directly on the water are typically more vulnerable.

• In general, all 8,200+ historic properties face some risk.
Winter Storm

• Vulnerability to damage from winter storms also is approximately equal geographically across the planning area

• Certain types of construction are more vulnerable

• Snow load on roofs of older buildings is the greatest risk

• In general, all 8,200+ properties face some risk

• Some local plans already discuss snow load
Current Planning Around Historic Resources
What we reviewed

- Hazard Mitigation Plans
- Plans of Cons. and Dev.
- Coastal Resilience Plans
- NFIP Ordinances / Regulations
- Zoning Regulations
- Historic Preservation Ordinances
- Emergency Operations Plans
Findings – Hazard Mitigation Plans

- Seventeen of 23 plans are covered by regional mitigation plans. Eight are stand alone.

- Do plans include historical resources in the Hazard ID and Risk Assessment
  - 13 – No
  - 10 – Yes, anecdotally

- Do plans include historical resources in the Capability Assessment of Background/Setting
  - 12 – No
  - 11 – yes
Findings – Hazard Mitigation Plans

• Specific mitigation strategies and actions including historical resources
  • 22 – No
  • 1 – Yes (Westport)

• Six of the 23 plans had strategies that inadvertently may involve historic properties
Findings – Hazard Mitigation Plans

• Other common statements, themes and strategies:
  • Stand by power generators
  • Many buildings more than 50 years old are not built to current code - concern for roofs and window damage from wind is noted
  • Seismic concerns for older buildings
Findings – Plans of Conservation and Development

• POCDs are Required to Address Historic Resources
  • Sec. 8-20. Preparation, amendment, or adoption of plan of conservation and development: [growth principles include] (e)(1)(F)(iv) “conservation and restoration of the natural environment, cultural and historical resources and existing farmlands;”

• Does not require that the municipal POCD address historic resources in hazard areas
Findings – Plans of Conservation and Development

• Only 3 communities do not have a stand alone historic resources chapter/element
• Most municipal POCDs address preservation of historic resources in general or in response to development pressures
• None of the plans specifically include preservation from natural hazards

Recommendations

• Amend zoning and subdivision regulations to allow the Commissions to require archaeological and historic surveys prior to approval.
• Include historic assets and historic districts as critical features that merit protection and/or planning when considering Disaster Mitigation Plans, especially with regards to flooding, storm surge, sea level rise, and coastal erosion.
• Amend regulations to support redevelopment and creative reuse of historic properties while maintaining historic characteristics.
Findings – Plans of Conservation and Development

• Twenty two plans have specific hazard or flood chapters / elements
  • One of those include mention of historic resources (Fairfield)

• Seven plans reference historic preservation ordinances
Findings – Coastal Resiliency Plans

• Stratford has a recently completed plan (2016)
  • Some neighborhood scale plans may impact historic resources

• Fairfield has a post-Sandy Flood Mitigation Plan
  • One pump station project notes protection of historic resources
Findings – Zoning Regulations and NFIP

- All communities participate in the NFIP and have either ordinances or zoning regulations
  - The majority use the FEMA Substantial Damage definition and variance criteria that allow for exceptions for historic structures
  - Five have variations on FEMA language

- Majority of zoning regulations address historic preservation
  - Some very lightly, some substantively

- One of the zoning regulations address historic buildings within the context of hazards (allows for relocation – Westport)

- 30% of communities have historic building design standards

- 1 community has zoning that is silent on historic resources
Findings – Zoning Regulations and NFIP

• Common themes
  • Town Center Historic Districts
  • Exceptions for setbacks
  • Excavation rules
  • Wireless Communications towers
  • Signage
  • Conservation

• Historic resources are typically addressed in generalities
• Different resource classes are not usually called out
• Nexus between resources and hazard risks not included
Findings – Historic Preservation Ordinances

- Sixteen municipalities have one
- None specifically address natural hazards
Findings – Emergency Operations Plans

• Designed to set incident command, communications protocols, and specific procedures for the different departments collaborating to address disasters

• In EOPs, recovery is focused on life, health, safety, and financial accounting

• EOPs are maintained by the Emergency Management Director

• CT generally does not have Recovery Plans at the local level

• EOPs currently are not designed to address historical resources or to avoid inadvertent adverse impacts
Incorporating Historic Resource Resiliency into Planning
• Historic resources chapter or element should address hazards; and,

• Hazards chapter or element should address historic resources.

• Use hazard data and historic resources point data to describe and quantify what is at risk

• Implementation matrix should include strategies that include historic resources in the context of hazards
Recommendations

- Amend zoning and subdivision regulations to allow the Commissions to require archaeological and historic surveys prior to approval, include historic assets and historic districts as critical features that merit protection and/or planning when considering Disaster Mitigation Plans, especially with regards to flooding, storm surge, sea level rise, and coastal erosion.
- Amend Regulations to support redevelopment and creative reuse of historic properties while maintaining historic characteristics.
Best Practices – HMPs

• Capability Assessment
  • Describe the community’s understanding of its historical resources
  • Does the municipality designate staff or a commission to plan for these resources?
  • Does that staff or commission interact with those that address natural hazards?

• Critical Facilities
  • Are any critical facilities also historic structures?
  • Are any critical facilities located in historic districts?
Best Practices – HMPs

• Hazard Assessment
  • Show or describe locations of historic resources in flood zones, sea level rise risk areas, erosion risk areas, wildfire risk areas, etc.
  • Are any specific resources known to be at risk?
  • What Attributes are available to quantify risk?
  • Are historic resources more at risk than other resources? For example, would heavy snow be more or less of a concern?
Best Practices – HMPs

• Loss Estimates
  • Have any historic resources been damaged or suffered losses from hazards?
  • Do the loss estimates for a specific hazard include any known historic resources?
Best Practices – HMPs

• Hazard Mitigation Strategies
  • Add one or more strategies addressing historic resources (include buildings, districts, archaeological sites, the town green, or whatever is appropriate for the community)

• Hazard Mitigation Actions
  • Add one or more specific actions linked directly to risk
  • FEMA Region 1 has buckled down on how actions can be worded (no more “Consider…?” and no more ongoing actions)
Best Practices – HMPs

• Possible examples:
  • Improve drainage to reduce the frequency of flooding in the lower levels of the old town hall
  • Relocate the historic structure located on Main Street
  • Stabilize the streambank adjacent to the remains of an old settlement on River Street
  • Devise a snow removal procedure for the historic library building to reduce the risk of collapse
  • Develop guidelines for building elevations within historic districts
  • Develop EM protocols to ensure response does not harm historic resources
Best Practices – Coastal Resiliency Plans

• Incorporate improved historic resources data into risk and vulnerability assessment

• Use neighborhood level concept planning for historic districts

• Ensure emergency access to historic properties
• Use new GIS based data to perform analysis of at risk resources

• Utilize and update database of historic resources and rank preservation priorities

• Develop resiliency standards for local historic districts to complement existing standards

• Incorporate other classes of resources (i.e., archaeological, historic landscapes) in revisions to historic district ordinances
Historic resources could be addressed in an “annex,” similar to how all sectors are addressed.

Consider adding a recovery/damage assessment annex if one doesn’t exist.

Point data can be used by responders to understand resources.

The annex may describe how a specific department or individual is responsible for checking on the status of historic resources during and after a disaster.
• Resiliency Planning for Historic Properties Pre-Positions communities for post-disaster funding for State and Federal Programs and Future Special Congressional Appropriations.
  • Applications for Such Funding requires Accurate Data on the Location, Type, and Significance of Historic Properties
Information for your Communities

• Countywide SFHA and SLR shape files
• Countywide draft historic building points
• Comprehensive list by community of buildings, addresses and x/y coordinates
• PDF maps of communities where there are historical properties in either the SFHA or predicted SLR inundation area
• Copy of a gap analysis of current plans
Break Out Groups
Questions and Discussion