

Draft Resilient Connecticut Planning Framework

This document outlines strategies for the Resilient Connecticut planning process. The Resilient Connecticut Planning Framework (RCPF) informs the objectives and scope for Phases II & III of Resilient Connecticut. To learn more about Resilient Connecticut, visit: <u>https://resilientconnecticut.uconn.edu/</u>

1. Set the Stage – Establish Project Partnerships, Goals and Regional Scope Informing Locations and Scales

- a. Define relevant partnerships between stakeholders, building on existing and creating new collaborative partnerships where needed (e.g. between municipalities, regional councils of governments, state agencies, utilities, and others) to enable comprehensive regional adaptation approaches that reduce shared risks. Capitalize on existing communication, coordination, and working relationships between municipalities and regional councils of government. Promote inter-municipal coordination, cooperation, and assistance to address shared hazards.
- b. Establish clear goals and objectives including project scales and boundaries considering the project context, participants, scope, budget and timeframe.
- c. Build on the state's approach of assessing the patterns imposed by Connecticut's geologic, watershed, and political boundaries, overlaid with existing infrastructure to define regional project scales. This includes looking at regional transportation, energy, water, housing, health, recreation and commercial infrastructure systems and the unique geography of Connecticut.
- d. Collect, organize and evaluate available planning documents and data sources, identify critical assets, and areas of planned conservation and development. Identify existing planning processes within and between towns, regional councils of government, and state agencies, building on previous climate adaptation efforts where possible and avoiding duplicative efforts. Identify barriers and opportunities in the planning process to achieving local and regional resilience.

2. Apply Robust Science and Technical Analysis to Planning

- a. Utilize projected climate change scenarios using CIRCA's vulnerability assessment and other tools to establish a shared baseline understanding of climate change risks and their regional impacts in Connecticut.
- b. Identify and model climate risks and interdependencies of critical regional infrastructure systems such as transportation, ecology, energy, water, housing, health, and socio-cultural spaces.
- c. Define regional scale challenges and downscale the modeling of climate change impacts (e.g. the predicted effects of sea-level rise, precipitation, and temperature changes) across near (2030), mid (2050), and long term (2100) timescales.
- d. Use analysis to identify regional challenges. Map "Zones of Shared Risk"ⁱ at regional, sub-regional, and municipal scales in both New Haven and Fairfield Counties. Identify areas of vulnerability exacerbated by issues of existing environmental degradation, economics, health, or historically disadvantaged communities.
- e. Define additional data needed including social, ecological, and economic factors to inform technical and planning practices and to refine CIRCA's vulnerability assessment.
- f. Collaborate with research scientists and practitioners to establish field research protocols and modeling to further refine the assessment of climate risks and inform adaptation scenarios.

3. Develop Adaptation Scenarios Through Inclusive and Participatory Engagement and Effective Planning

- a. Incorporate an inclusive and participatory stakeholder engagement process; working towards development of regional and cross-jurisdictional capacity for shared decision-making, investment, and project implementation.
- b. Through an inclusive engagement process, incorporate local knowledge from diverse perspectives to further refine a shared understanding of vulnerabilities and strengths. Share the results of the scientific and technical analysis with stakeholders to build community capacity.

Avery Point Campus Connecticut Institute For Resilience And Climate Adaptation 1080 SHENNECOSSETT ROAD MARINE SCIENCES BUILDING GROTON, CT 06340 PHONE 860.405.9228 Fax 860.405.9287









- c. Identify regional "resilience corridorsⁱⁱ" and "resilient transit-oriented development opportunity zonesⁱⁱⁱ" at the watershed and cross-jurisdictional scales, tying adaptation planning to economic development opportunities; build on the concept of community identified strengths and opportunities.
- d. Work with engineering, planning, and design teams to identify, design and evaluate adaptation strategies incorporating modeling, field research, and technical analysis to inform planning scenarios. Capture ordinances, codes, and/or regulations that may or may not hinder implementation of the projects.

4. Enact Equitable & Informed Prioritization of Site-scale Pilot Projects

- a. Identify highest priority projects through inclusive stakeholder engagement processes.
- b. Focus on implementable projects or include buildable projects as components of larger visionary projects.
- c. Incorporate the Resilient Connecticut *PERSISTS* decision support criteria to assess near, mid, and long term strategies:
 - Permittable can get all necessary permits
 - Economic there is a plausible funding source
 - Realistic can be realistically engineered
 - Safe reduces risks to people and infrastructure
 - Innovative process has considered innovative options
 - Scientific uses the best available science
 - Transferable can serve as a model for other sites
 - Supported sustainable with support from the public and leadership
- d. Develop a quantitative and qualitative cost/benefit analysis of identified projects.
- e. Prioritize and select pilot projects and develop implementation plans including conceptual designs, cost estimates, and proposed funding pathways.

5. Develop Funding, Policy, Implementation and Monitoring Strategies with Recommendations for a Statewide Resilience Roadmap

- a. Develop funding strategies for selected projects.
- b. Develop projects towards implementation with design drawings and budgets.
- c. Identify models of inter-agency cooperation across scales, jurisdictions, and missions that can continue to develop going forward
- d. Inform legislative strategies for a statewide climate adaptation and resilience program.
- e. Develop monitoring protocols to measure the impact of resilience strategies over time.
- f. Generate recommendations for a Statewide Resilience Roadmap, including:
 - I. State and local policies
 - II. Opportunities to improve existing planning processes and capacity at local, regional, and state levels
 - III. Resilient Transit-Oriented Development
 - IV. Innovative planning, design, and engineering approaches
 - V. Science and research needs going forward
 - VI. Communication and engagement
 - VII. Future funding for climate adaptation

ⁱ Zones of Shared Risk are areas of land with groups of people who face common challenges. This can include the houses, land, infrastructure, hydrology, ecology, and social elements.

ⁱⁱ *Resilience Corridors* are strategic investment areas linking uplands to the coast through transportation hubs and providing egress and access routes across municipalities.

^{III} Opportunity Zones are areas in Connecticut created to attract private investment to improve economic growth, community wealth, business development, housing opportunities and infrastructure while creating significant jobs in the most challenged but promising areas of Connecticut. Opportunity Zones typically present vibrant downtowns, robust transit options, robust housing demand, and a growing and diverse private sector of entrepreneurs and innovative companies.