Meeting of the Governor’s Council on Climate Change
Infrastructure and Land Use Adaptation Working Group

Public Presentation

October 5, 2020
4:30 pm - 6:00 pm
Climate change resilience and adaptation is an investment in Connecticut’s future. The investments will improve response to acute stressors, reduce risk and preserve assets into the future. Connecticut is responsive and flexible as science evolves and demographics shift. Our economy, environment, and quality of life thrive.
Scope

Transportation

• Resilience of roads, highways, bridges, bus transit, rail operations, bicycle and pedestrian amenities, ports and airports
• Comprehensive & multi-jurisdictional
• Equitable and accessible for all Connecticut residents

Land Use & Buildings

• Conservation and development practices at all scales
• Location of future development
• Current and future building practices

Utility Infrastructure

• Critical infrastructure necessary for the economic resilience and physical health and safety
• Communications, Fuel, Drinking Water, Waste Water, Electricity, Stormwater & Flood Control, Dams; recognizing interconnectedness
• Support local and regional planners, local and state officials, utility stakeholders.
Climate Change Impacts to Evaluate

Flood Impacts from SLR & Storms

• Facilities, buildings
• Accessibility, evacuation
• Continuity of operations

Air Temperature

• Health impacts associated with building design
• Heat effects on construction materials
Vulnerable Communities

Impact

• Inability to adapt or improve their resilience due to economic limitations, disinvestment in their communities and historic lack of directed engagement in planning processes.

Process

• Include broad representation and coordination with stakeholders and partners that work, live and engage with vulnerable communities.

• Engagement with EEJ Working Group
2011 Concepts Carried Forward

- Determine vulnerable transportation routes
- Develop decision tools to evaluate replacement, modification and design life for infrastructure
- Assess flood risk to natural and build infrastructure
- Low impact development
- Sustainable water use and water reuse
- Funding infrastructure resilience
- Reduce combined sewer overflows
Recommended Strategies

Process Overview

• Multiple brainstorming sessions to determine preliminary list of strategies within each subgroup.

• Presentation & discussion of preliminary strategies at Working Group Meetings.

• Presentation, discussion and comments from Equity and Environmental Justice Working Group.

• Additions and modifications in response to comments and input from working group members and the public.

• Recommendations were sorted into two “bins”;
  • Include in 2020 Report
  • Defer for further discussion and development in 2021
Recommended Strategies for 2020

General
1. Establish a State-wide **Climate Adaptation Implementation Committee**

Land Use & Buildings
1. Establish **Connecticut Community Resilience Program**.
2. Convene a Resilience Infrastructure Task Force including representatives and stakeholders from state agencies, municipalities and non-governmental organizations to review relevant planning documents, evaluate alternatives and develop a proposal to address needs related to **ownership, operation and maintenance of resilience structures**.
3. Establish an **Energy Efficiency and Healthy Homes (EEHH) Equity Fund** to assist low to moderate income households increase the energy efficiency and thermal comfort and safety of their homes and remove the indoor health barriers to efficiency upgrades such as weatherization.
Connecticut Department of ENERGY & ENVIRONMENTAL PROTECTION

Recommended Strategies for 2020

**Transportation**
1. Improve, coordinate statewide **evacuation route planning**
2. Conduct **vulnerability assessment** on bus and rail operations and facilities, and on bicycle and pedestrian facilities.
3. Identify **geographically isolated communities** predicted to have limited access due to future coastal and inland flooding events.
4. Continue to **pursue best available science** for updating standards and guidelines used in transportation engineering design.
5. Create a **statewide database of water control structures** that restrict flow (such as culverts, flood gates, tide gates).

**Utility Infrastructure**
1. Update safe daily yield calculations and assess current drinking water quality measures/testing to understand and address climate change impact.
Strategies for Continued Discussion in 2021

Transportation
1. Vulnerability assessment using standard methodology on the entire road and pedestrian/bicycle network

Land Use & Buildings
1. Establish state-wide storm water utility
2. Prioritize Low Impact Development
3. Update State Building Code
4. Redevelopment of previously used sites within established neighborhoods
5. Prioritized protection of currently undeveloped land.
Strategies for Continued Discussion in 2021

**Utility Infrastructure**

1. Inventory and geo-locate vulnerable utility facilities
2. Utilities consider projected climate change impacts in planning
3. Unified disaster response and recovery across all seven utility sectors
4. Study the appropriate techniques for overall resiliency of electric distribution
5. Construction of high-priority water supply interconnections to improve resiliency
6. Assess viability and future needs for wastewater reuse strategies
7. Resolution of chronic CSO over-flow conditions
8. Determine what dams are vulnerable to changing climate
9. Prioritize funding for critical infrastructure
10. Advisory council for infrastructure in EEJ communities
11. Price utility infrastructure risk correctly
12. Improve access to services and availability of electricity for people with disabilities, limited mobility or special medical needs
Clarifying Questions