

Financing and Funding Adaptation and Resilience Working Group

Governor's Council on Climate Change
Public Forums
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Financing and Funding Resilience Work Group

- **Co-Chairs**
- Alexandra Daum, Deputy Commissioner, Connecticut Department of Economic and Community Development
- Rebecca French, Department of Energy and Environmental Protection
- Bryan Garcia, Connecticut Green Bank
- Andrew Mais, Commissioner, Connecticut Insurance Department
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- Dean Audet, Fuss & O'Neill, Inc.
- George Bradner, Connecticut Insurance Department
- Patrick Brown, The Hartford
- Wayne Cobleigh, GZA GeoEnvironmental, Inc.
- Claire Coleman, Office of Policy and Management
- Kathy Dorgan, Dorgan Architecture & Planning
- Adrienne Farrar Houël, Bridgeport Community Enterprises
- Curt Johnson, Save the Sound
- Robert LaFrance, Audubon Connecticut
- Joseph MacDougald, University of Connecticut
- Jennifer O'Brien, Connecticut Foundation of Eastern Connecticut
- James O'Donnell, University of Connecticut
- David Sutherland, The Nature Conservancy
- John Truscinski, University of Connecticut

Financing and Funding Working Group Charge

- As part of the statewide Adaptation and Resilience Plan –
- *“Recommendations and proposals for funding sources and financing mechanisms to advance investment in recommended strategies.”*

What is in our report

- Reviewed need for climate resilience and funding
- Presented findings of our group on barriers, insurance, nature-based solutions, engaging foundation and philanthropic community, and assessing equity
- Recommended options for financing and funding: 5 strategies with multiple implementation actions
- Appendix of funding resources currently available to Connecticut

The Need: Climate Crisis and Financial Crisis

40 investors with nearly \$1 trillion join other leaders to urge U.S. financial regulators to act on climate change as a systemic financial risk



MANAGING CLIMATE RISK IN THE U.S. FINANCIAL SYSTEM

Report of the Climate-Related Market Risk Subcommittee, Market Risk Advisory Committee of the U.S. Commodity Futures Trading Commission

The New York Times

Rising Seas Threaten an American Institution: The 30-Year Mortgage

Bloomberg

City Bonds May Be Hit by Climate Change. Moody's Can Now See How



Findings: Barriers

Disaster recovery funding programs are increasing the racial wealth gap of whites and people of color.

2018 study found that FEMA disaster recovery aid in 20 U.S. Counties increased inequality of wealth, finding that whites accumulate more wealth after natural disasters while residents of color accumulate less.



Robert Neubecker

Findings: Insurance

- Connecticut has \$754 billion in insured assets at risk from storms in our coastal areas.
- We are also the 'insurance capital of the world'
- Connecticut is where insurance could take on the climate crisis



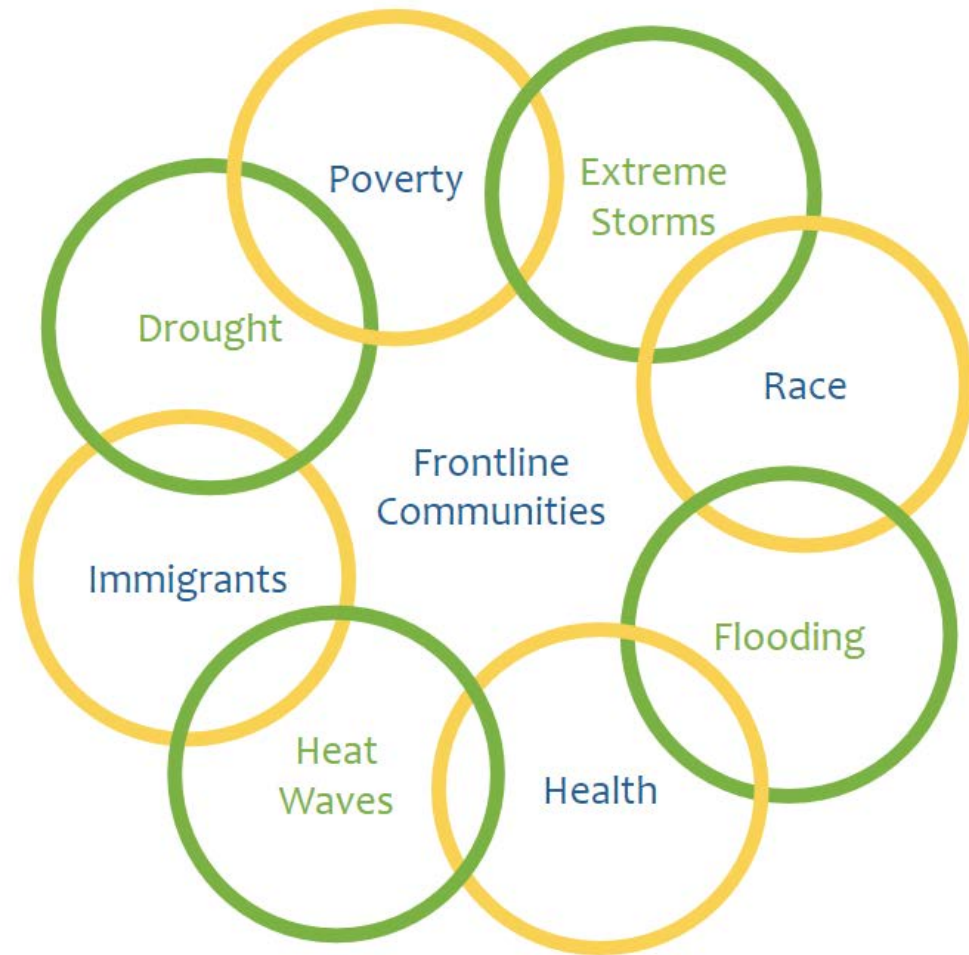
Findings: Nature-based Solutions

- Mimic nature to address impacts of climate change
 - ‘living shorelines’ using plants to stabilize shores from erosion
 - ‘green infrastructure’ = rain gardens, bioswales to absorb and clean stormwater
- Previous planning efforts identified 500 nature-based resilience projects in Connecticut
- Encouraged in notices of federal funding opportunities for resilience projects



Equitable Financing and Funding

- We need to evaluate all funding and financing mechanisms to be accessible and to prioritize vulnerable communities.



Existing Funding and Financing Mechanisms

Funding Screening Table with legend for rating fairness and equity and how the program connects to community lifelines

Existing Federal Funding Mechanisms for Climate Adaptation and Resilience

Refer to the Legend for key screening scores and symbols

| Funding Mechanism (Funding Source/Agency) Grant (G) Loan (L) | Match % (0-100) | Funding Range (1000s)/Term Period/Dedicated (+) or Discretionary Funding Source (-) | Projects Completed in CT? /Administered by State of CT | Pre- or Post-Disaster Mitigation Adaptation Resilience | Work Phase | Cost Benefit Analysis Required | Fairness to Payers | Equity Impact/Community Lifelines Impact |
|---|-----------------|--|--|--|--------------|---|--------------------|---|
| Building Resilient Infrastructure and Communities (BRIC) (FEMA) (G) | 10% to 25% | Up to 6% annual set aside from post disaster grant funding (+) State, territory and tribal set asides and national competition for balance, large and small grants, 3 years with extensions for large multi-phase projects, \$350-500 million expected in FY20 | Yes as Pre-Disaster Mitigation Program /No | Pre (must have a national declared disaster in past 7 years from application date) | All except O | Yes, including eligible mitigation projects that are cost-effective based on FEMA's pre-calculated benefits (see FEMA pre-calculated benefits table for more details) | 0 | (+) focus on community lifelines and partnerships with shared responsibilities and lower 10% match for small impoverished communities (pop. less than 3000 and average income less than 80% national average) some projects eligible for environmental and social benefits in BCA |

Legend -Key Screening Factors of Existing Funding Mechanisms Table

Funding Type: (L) Loan, (G) Grant, (B) Bond, (I) Insurance Backed Security, (CE) Credit Enhancement

Funding Range: 1000's \$, ex. 5,000= 5,000,000

Funding Term: in years, ex. 1, 3, 5, 10, 20 or more

Federal Funding Source: (+) Dedicated not subject to annual committee appropriations, (-) Discretionary, subject to annual committee appropriations

Federal Programs Administered by State: Examples FEMA, HUD, NOAA, (Yes/No)

Pre- or Post- Disaster Mitigation, Adaptation, Resilience: Pre, Post, Both

Work Phase: (P) Planning/Capacity Building, (FS) Feasibility Study, (D) Design, Permit, (C) Construction, (R) Retrofit/Renovate (O) Operate & Maintain, (Z) Land Use Zoning Ordinance (BC) Building Code

Cost Benefit Analysis Required: (Yes/No)

Fairness to Payers: Less Ability to Pay Payers pay less or none, and High Ability to Pay Payers pay more (+), All Payers pay the same but may result in insufficient fund amount to meet total need (0), Less Ability to Pay Payers pay unaffordable amount and High Ability to Pay Payers pay none or insufficient amount (-)

Equity Impact: Equity Lens Criteria is positively impacted (+), Equity Lens Criteria is positively and negatively impacted or unchanged (0), and Equity Lens Criteria is negatively impacted (-)

Community Lifelines Impact: One or more of 7 Community Lifelines are positively impacted for increased resilience (+), One or more of 7 Community Lifelines are stabilized but resilience is unchanged (0), One or more of & Community Lifelines are destabilized or negatively impacted for resilience (-)

Community Lifelines

Community Lifelines

Lifelines are services communities use. The goals and objectives of FEMA's Strategic Plan promote using mitigation to reduce risk to lifelines before a disaster and to quickly stabilize a community after disaster by preventing cascading impacts. BRIC mitigation grants can go toward projects which help improve these systems.

Lifeline-focused mitigation projects could involve a wide variety of public, private, and non-profit organizations



<https://www.fema.gov/emergency-managers/practitioners/lifelines>

Strategy 1

Build the governance structure to allow for effective and efficient financing and funding.

Dollars alone do not lead to implementable projects. We need a government that leads and facilitates the development of projects at the state, regional and municipal scale.



GOOD
GOVERNANCE

Strategy 1 – Actions - Equity

State funded and initiated infrastructure and building projects should meet climate adaptation and resilience standards.

- *Equity Impact and Considerations: (+)*
 - communities are better protected from the impacts of climate change

Better Culverts & Stream Crossings



Flood Ready State of Vermont

Strategy 2

Generate revenue sources to pay for resilience projects and programs

Resilience and adaptation projects and programs savings come in the form of avoided losses making it fundamentally more difficult to pay for those programs with dollars generated by the projects themselves.

In order to finance projects, it is necessary to establish other revenue sources for the funds that will save the state and municipalities dollars in avoided loss.

Strategy 2 – Actions - Equity

Establish 'resilience fees' to provide revenue sources for resilience and adaptation funds.

- *Equity Impact and Considerations:* (0) Fees can be designed to be more or less equitable.
 - Raise costs for those paying the fee and therefore ability to pay should be accounted for in any fee assessment.
 - Fees will always be assessed on a much smaller subset of the state's population than funding resilience through a bond backed by state income taxes
 - Special care must be taken to ensure the group singled out is not unfairly or unjustly burdened by that cost.

Strategy 3

Supply grants and loans to fund resilience projects and programs

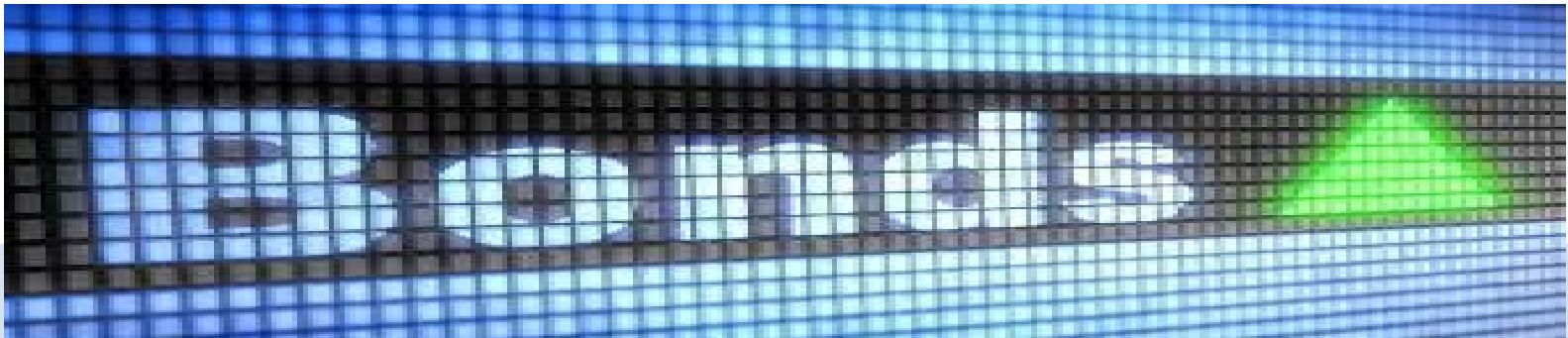
Connecticut needs to establish a program of grants and loans at the state level to fund projects.

These programs are largely supported by state bond financing backed by taxpayer dollars, but funds could also be backed by the revenue-generating mechanisms in Strategy 2.

Strategy 3 – Actions - Equity

Provide state general obligation bond funding for resilience and adaptation programs and projects

- *Equity Impact and Considerations:* (+) Represents a minimal incremental cost to any individual person, lowering the potential for a disproportionate impact on a low-income vulnerable community.
- Prioritized for programs and projects supporting vulnerable communities without asking those communities to pay for the entire cost.



Strategy 4

Investigate the use of tax credit programs to invest in community resilience.

Tax credits have been successful in spurring development and may also be used to incentivize or attract investment in resilience projects.

Investigate the use of the New Market Tax Credit, Opportunity Zones, and the 4% Low Income Housing Tax Credit for resilience investments.

Strategy 5 – Actions

Engage the foundation and philanthropic community as a funding and financing partner

- Convene Connecticut's foundation community
- Launch a statewide campaign for Just Climate Change Engagement.
- Pool together foundation resources where appropriate and facilitate relationship building

Connecticut Foundations

| Assets | Total Giving |
|--|--------------|
| 1. Boehringer Ingelheim Cares Foundation, Inc. | \$423.5M |
| 2. Dalio Foundation, Inc. | \$124.8M |
| 3. GE Foundation | \$87.8M |
| 4. Steven & Alexandra M Cohen Foundation, Inc. | \$62M |
| 5. Stanley Family Foundation | \$50.7M |
| 6. The Zoom Foundation | \$46.2M |
| 7. Hartford Foundation for Public Giving | \$30.3M |
| 8. Community Foundation for Greater New Haven | \$29.2M |
| 9. Seedlings Foundation | \$27.9M |
| 10. Newman's Own Foundation | \$26.6M |