Centering Equity in Climate Change Resilience Planning: A Guide for Connecticut Municipalities

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Prepared for:
Connecticut Governor's Council on Climate Change
Equity and Environmental Justice Working Group

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A Guide for Connecticut Municipalities

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This is a living document that is open to changes and ongoing feedback. Please send your comments to Dr. Mark Mitchell, mmitch3@gmu.edu. This document was last revised June 7, 2022.

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Background

Glossary of Terms

Term	Definition
Adaptive Capacity	The potential or ability of a system, region, or community to adapt to the effects or impacts of climate change[1]
Climate Change	Changes in average weather conditions that persist over multiple decades…Climate change encompasses both increases and decreases in temperature, as well as shifts in precipitation, changing risk of certain types of severe weather events, and changes to other features of the climate system[2]
Climate Adaptation	Adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects or impacts. It refers to changes in processes, practices, and structures to moderate potential damages or to benefit from opportunities associated with climate change.[3]
Climate Justice	A system recognizing that climate change is a social, economic, and public health problem that disproportionately affects historically marginalized groups by exacerbating existing inequities. It identifies the discriminatory systems and policies that cause climate change and perpetuate systemic oppression. It acknowledges the need for multiple dimensions of justice, including contextual, distributive, corrective, and reparative justice, in climate change decision-making processes and in who bares the burdens and benefits of the climate crisis.[4] [5] [6]
Climate Mitigation	Measures to reduce the amount and speed of future climate change by reducing emissions of heat-trapping gasses or removing carbon dioxide from the atmosphere.[7]
Climate Resilience	The capacity of a community, business, or natural environment to prevent, withstand, respond to, and recover from a disruption[8]
Climate Vulnerability	The propensity or predisposition to be adversely affected by hazards. Vulnerability encompasses exposure, sensitivity, potential impacts, and adaptive capacity.[9]
Community Resilience	The ability of a community to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions[10]
Collaborative Governance	Co-definition of problems and the co-development of solutions among multiple sectors. It is possible when there is clear commitment among all parties to both build the capacity for collaboration and break down existing barriers to equitable participation.[11]

Contextual Equity	Assessing the vulnerabilities of communities across Connecticut to climate change, due to the legacy of racial and income inequality and other factors.[12]
Corrective Equity	Providing communities with clear processes to hold the state accountable to its commitments to pursue equity.[13]
Deep Democracy	A form of governance including direct and ongoing participation of community members in civic institutions and organizations, including equitable problem solving and capacity building for citizens and City workers[14]
Distributional Equity	Placing the most vulnerable communities at the forefront of any potential benefits a policy might create; ensuring that the distribution of the benefits and burdens of climate change mitigation and adaptation are equitably distributed.[15]
Environmental Justice	The just treatment and meaningful involvement of all people regardless of race, color, national origin, or income, or ability, with respect to the development, implementation, enforcement, and evaluation of laws, regulations, programs, policies, practices, and activities, that affect human health and the environment.[16]
Environmental Racism	Any policy, practice, or directive that differentially affects or disadvantages (whether intended or unintended) individuals, groups, or communities based on race or color. It also includes exclusionary and restrictive practices that limit participation by people of color in decision-making boards, commissions, and regulatory bodies.[17]
Equity	Acknowledging that different people start in different places due to racist historical context and giving everyone what they need to succeed equally. "Equity" is about equal outcomes. Equity starts by recognizing that there are disparities and inequities in living conditions. Some communities lack resources, political power, and/or access to higher education, or have poor health outcomes. These examples place low-income communities and many communities of color at greater risk while limiting their capacity to adapt.[18,19]
Frontline Communities	Communities that bear the brunt of the impacts caused by climate change, typically communities of color and low-income communities.[20]
Procedural Equity	Planning in partnership with low-income communities and communities of color.[21]
Structural Racism	A history and current reality of institutional racism across all institutions, combining to create a system that negatively impacts communities of color.[22]

Commonly Used Acronyms and Abbreviations

Acronym	Meaning	Acronym	Meaning
DEEP	Department of Energy and Environmental Protection	FEMA	Federal Emergency Management Association
CIRCA	Connecticut Institute for Resilience & Climate Adaptation	CDC	Center for Disease Control and Prevention
CPT	Community-led Planning Team	VLS	Vermont Law School
GC3	Governor's Council on Climate Change	YCEJ	Yale Center for Environmental Justice
COG	Council of Government	YSE	Yale School of Environment
IPCC	Intergovernmental Panel on Climate Change	YSPH	Yale School of Public Health
IRIS	Integrated Refugee & Immigrant Services	YWCA	Young Women's Christian Association

Statement of Purpose

Climate change amplifies social, physical, economic, and political vulnerabilities: a child attending an underfunded school without air conditioning faces the physical and intellectual burden of extreme heat, and a family living in a less expensive, low-lying area will bear the damage and costs of rising sea levels. Yet, municipal planning processes continue to exclude or inadequately incorporate the people that will be most impacted by climate change. This insular approach misses key information and produces disjointed responses with the potential to further burden these communities. Inclusive planning grounded in environmental and climate justice results in more resilient communities. This is well-understood as best practice by climate change planning organizations such as C40 Cities and the American Society of Adaptation Professionals. More resilient communities can better adapt to or recover from major disruptions such as extreme heat days or flooding streets.[23]

Component	Description
Distributive Equity (or Equitable Outcomes)	Equitable mitigation and adaptation strategies place the most vulnerable communities at the forefront. Such strategies would provide our most vulnerable communities with work opportunities and quality-of-life benefits.
Procedural Equity (or Equitable Planning)	Equitable mitigation and adaptation strategies must be planned in partnership with low-income communities and communities of color.
Contextual Equity	Equitable mitigation and adaptation strategies take into account that low-income communities and communities of color are often more vulnerable to climate change, and the development of mitigation and adaptation strategies must take into account the special mapping of these populations.
Corrective Equity	Equitable mitigation and adaptation strategies would provide communities with clear processes to hold the state accountable to its communities to pursue equity.

Table 1: How does equity relate to climate change? Source: GC3 Equity Lens, Presentation by Leticia Colón de Mejias to the Governor's Council on Climate Change, February 25 2020.

Centering Equity in Climate Change Resilience Planning outlines a nine-step framework that is grounded in the principles of procedural equity. Procedural equity emphasizes partnership between municipalities and low-income communities and communities of color that have historically been excluded from planning processes. This guide illustrates how planners can center equity by incorporating a variety of questions, techniques, requirements, and practices into planning processes. It should be used as a complement to existing technical and planning guidelines.

The proposed process centers environmental justice communities and other people who face the most extreme climate threats, and recommends Connecticut communities take a collaborative governance approach to planning. Justice and practicality both demand that planners disrupt the pattern of leaving people out of efforts to map the future.

Using this guide, municipal and regional planners will develop a *Resilience Assessment and Prioritization Plan* with and for their communities.

This process is effective because it grows:

Social Resilience	Community Knowledge	Long-Term Results
Trust & Support: Early, transparent, consistent engagement and involvement will lead to greater community trust in the plan and between community members and decision-makers.	Information from the Source: Representatives from communities most impacted by climate change can provide insights from experiences, which will lead to a more accurate understanding of vulnerabilities and solutions.	Collective Governance: The co-development of solutions means more people will be interested and ready to assist with project implementation.
Social Connection & Communication: The process opens communication channels with people most impacted by climate change by connecting with organizations and leaders that serve them.	Learning Together: Municipal staff and community members will learn together how climate change plays out in daily dangers and harms.	Deep Democracy: Engaging more people in planning, especially people previously left out, helps to support democratic processes. This can work to prevent harm and heal disparities in communities.
Stronger Crisis Response: Community-wide education and awareness of relevant resources will strengthen emergency management processes.	Diverse Problem-Solving: With expanded input, there is more time and space to develop innovative ideas.	Strong Future Community: By addressing the vulnerabilities of the most impacted communities, the plan will help to improve the resilience baseline of future generations.

Table 2

Confronting the Past and Present

To pursue environmental and climate justice, municipalities must confront Connecticut's history of racial and social inequities. Planners' past land use and development practices created current disparities. Planners' decisions will continue to exacerbate these harms unless they recognize their role in addressing ongoing inequities and understand the ways that **climate threats will compound these existing social, physical, economic, and political vulnerabilities**.
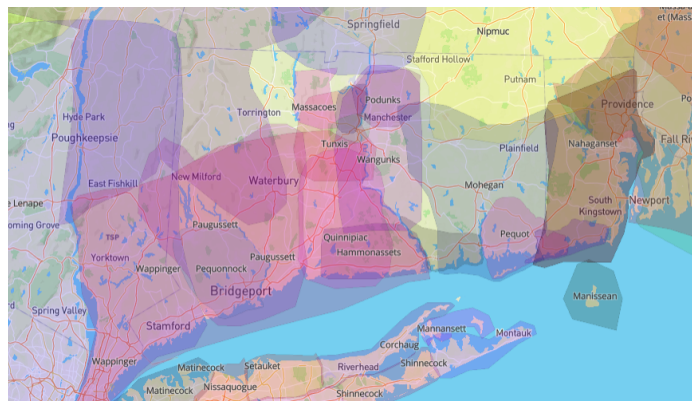
Image 1: *Indigenous territories of the land that is settled as Connecticut.(2022) [Screenshot] Native-Land.ca.*

Today, the median household income of Connecticut residents differs significantly by race and ethnicity: Black or African American and Hispanic or Latino households earn a little over half the income of White households, according to the 2016-20 American Community Survey 5-Year Estimate.[24] This impacts where residents live, and how they can respond to climate threats. For example, the state's urban heat islands—areas with concentrations of pavement and buildings that result in higher temperatures—correlate with low-income communities and communities of color.[25] Disinvestment in housing and green spaces impacts temperatures, and residents in these neighborhoods may also have fewer resources to pay for air conditioning. Occupation also plays a role: Hispanic people, who are the state's fastest growing demographic, comprise almost half of people who work outdoors nationally, and are more likely to die from heat-based illnesses on the job than non-Hispanic people.[26] These patterns are no coincidence—discriminatory state policies and practices that have existed since Connecticut's founding, and evolved with time, perpetuate racial and ethnic inequalities, resulting in the social and health disparities observed today. There are already over 400 heat-related emergency visits in the state each year, and this number is expected to increase with more extreme heat days.[27]

The roots of Connecticut's climate and socioeconomic realities can be traced back to the state's establishment. The name "Connecticut" derives from the Algonquin word for the land by the long tidal river.[28] Pre-colonial lands were home to numerous Algonquin-speaking tribes (**see map**). European settlers violently stripped the tribes of their homelands to gain territory, facilitating intergenerational trauma and the land and cultural dispossession of Indigenous peoples. Colonization also resulted in significant changes in land use patterns, including vast deforestation and industrialization, that have perpetuated the climate crisis. Prejudicial practices continue to infringe on the sovereignty of tribes. Currently, the Golden Hill Paugussett, Paucatuck Eastern Pequot, and Schaghticoke are state recognized tribes, while the Mohegan and Mashantucket Pequot tribes are both state and federally recognized.[29] Today, many recognized and unrecognized tribes survive with strong connection to their lands.

Connecticut also supported and profited greatly from slavery. It was a hub of trade with Caribbean sugar cane plantations, which relied on the labor of enslaved people.[30] Eli Whitney, a Connecticut resident and

Yale graduate, boosted the slavery economy by inventing the cotton gin.[31] By 1833, there were reportedly over 100 textile mills operating between Norwich, CT and Worcester, MA. Many of them profited from weaving cotton picked by enslaved Black Americans, with Whitney's machine increasing profits. In the mid-1700s New London County had more enslaved African and African American people than anywhere else in New England, and was sometimes referred to as the "Georgia of the North." At the time of the American revolution, an estimated 5,000 people were enslaved in the state.[32] While slavery was formally abolished by the Connecticut General Assembly in 1848, the legacy of racism continues to impact African Americans and other people of color in the state.

In the 20th century, Connecticut enacted land use policies that created highly segregated cities and suburbs. Government-sponsored and informal racially-biased housing practices, such as redlining—the denial of loans and financial services to neighborhoods based on their racial and ethnic makeup—forced many Black families into urban neighborhoods with overcrowded housing, often sited near polluting industry.[33] At the same time, helped by loans from the GI Bill, many white residents fled to the suburbs. Connecticut then became an epicenter of the country's "Urban Renewal" policies: New Haven received more grants for urban renewal per capita than any other city, in part for its work to build highway infrastructure that tore apart neighborhoods and displaced thousands of mostly low-income residents in communities of color.[34]
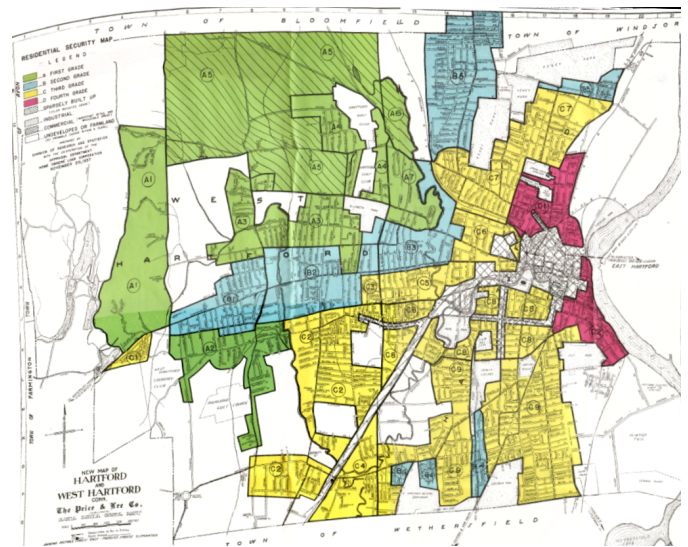
Image 2: Home Owners' Loan Corporation 1937 map showing redlining practices in Hartford, CT. Source: Digital Scholarship Lab at University of Richmond.

Public policy decisions continue to exclude people of color from access to economic gains and place a disproportionate share of the state's environmental burdens on low-income communities and communities of color. For example, there is a $639 million public school education funding gap between districts with majority White students and districts with majority students of color.[35] People in low-income communities and communities of color are also more likely to live near major highways and be exposed to pollutants, and to have hazardous facilities, such as trash incinerators, landfills, power plants, sewage treatment centers, and abandoned contaminated industrial facilities in their neighborhoods.[36][37][38] Further, many of these facilities are at risk of inundation as a result of sea level rise and storm surges, which may spread contaminants even further into communities than in the past. **This is one example of how climate threats are compounding existing inequities**. These threats have serious consequences for the health of the state's residents: Black children and teens are more than five times more likely to go to the emergency room for asthma than their White counterparts.

Connecticut planners must recognize how their predecessors disinvested in communities of color, and now work with communities to plan for a more equitable future. Planners must also acknowledge that

these historical inequities–as well as past efforts to explicitly ignore or exclude residents' voices–may directly impact communities' trust in and ability to participate in current community engagement processes. Acknowledging these limits, current planners can also design practices to address these inequities. **Centering Equity in Climate Change Resilience Planning** provides planners with guidance on how to confront these disparities in their planning efforts.

Planning for the Future

Connecticut policy calls for equitable practices. In 1993, CT DEEP enacted its *Environmental Equity Policy*, which [states that](#), "...no segment of the population should, because of its racial or economic makeup, bear a disproportionate share of the risks and consequences of environmental pollution or be denied equal access to environmental benefits." In recent decades, environmental justice movements have increasingly recognized the connections between environmental justice and climate change. As climate change exacerbates existing inequities, people with oversized pollution burdens and other socioeconomic challenges are at heightened vulnerability to sea level rise, extreme heat, flash flooding, air pollution, and other climate threats.

Momentum for comprehensive action on climate change is growing across the state. In 2015, we saw the first convening of the Governor's Council of Climate Change (GC3). While the GC3 initially focused on climate mitigation strategies, in recent years, Governor Ned Lamont re-established and expanded the GC3 to include consideration of climate adaptation, resilience, and environmental justice. Since then, the GC3's working groups have developed multiple reports with recommendations for climate action.

Principles for Public Participation	Guiding Questions to Hold Ourselves Accountable
Transparent and Accountable Decision-Making	Is decision-making open, transparent, and accountable to the public at all stages?
Accessible and Inclusive Decision-Making	Is the decision-making process accessible to and inclusive of diverse populations? Are we ensuring that members from historically disadvantaged communities -- including communities of color, communities that are economically disadvantaged, people with disabilities, and others are fully participating?
Equal Partnerships, Co-Production, and Self-Determination	Are community members equal partners in decision-making? Are we asking communities for their equal input and creating policies with them rather than for them?
Respect, Efficiency, and Non-Exploitation	Is the decision-making process respectful and streamlined to ensure the time and effort of participants is valued?

Table 3. *As part of its final working report, the Governor's Council on Climate Change's Equity and Environmental Justice Working Group published guiding principles for public participation. For a more detailed checklist that can be applied to a variety of planning processes, see page 23 of the report.*

The [GC3 Equity and Environmental Justice (EEJ) Working Group](#) is focused on "a robust stakeholder engagement process that ensures communities most vulnerable to and disproportionately impacted by climate change will have the opportunity to (1) meaningfully participate in the development of adaptation strategies that meet their needs and achieve equitable solutions, and (2) review and evaluate the recommendations made in the 2018 GC3 report to identify potential positive and negative impacts for low-income populations, communities of color, and other underserved or marginalized groups in order to make new, relevant sub-recommendations to be considered for inclusion in an updated report."[39]

Image 3: Breakout sessions of the GC3 Equity and Environmental Justice (EEJ) Working Group. Source: GC3 EEJ Final Report.

The GC3 EEJ Working Group's recommendations include guidelines on public participation. *Centering Equity in Climate Change Resilience Planning* continues this work, and aims to apply the public participation principles identified by the EEJ working group to the specific process of municipal climate change resilience planning. To contact the GC3, email [DEEP.climatechange@ct.gov.](mailto:DEEP.climatechange@ct.gov)

In December 2021, Governor Lamont signed Executive Order No. 21-3, which calls for the establishment of the Community Climate Resilience Program and the Connecticut Equity and Environmental Justice Advisory Council. This creates incentives for Connecticut municipalities to plan for climate change through robust and equity-centered processes. The *Centering Equity in Climate Change Resilience Planning* guide outlines a way for planners to get started.

How to Use This Document

<u>Adapt this guide to your context:</u>
Municipalities should incorporate community-level climate change planning into existing municipal plans and processes, while acknowledging that past planning processes have excluded communities of color, low-income people, and additional people of concern. As you decide how to apply this document in your context, consider how it can complement your municipality's and your region's current (required or optional) planning efforts. These may include a:

- Plan of Conservation and Development;
- Hazard Mitigation Plan;
- Local Emergency Operations Plan; or
- Community Resilience Building Workshop Report.

For reference, CIRCA [maintains a statewide list of existing relevant local and regional planning documents](.).

Throughout the planning process, you may also wish to use the shorter companion Quick Reference and Executive Summary in workshops or to easily print worksheets.
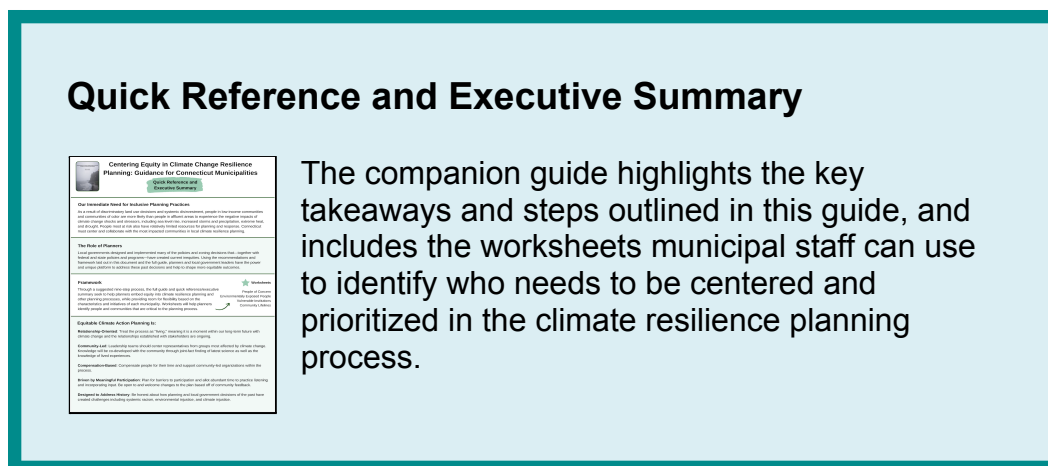
<u>Follow the nine-step planning framework:</u>
This guide outlines nine steps to identify and engage with the people most impacted by climate threats. It shows how to integrate local insights into the planning process, highlights resources, and guides planners on how to tap what's in these resources. **Figure 1** outlines the nine steps and indicates which team or teams manage each step. The roles of the **Oversight Team** and **Community-led Planning Team (CPT)** will be described in detail throughout the guide.

Planning Framework

Figure 1

1

Establish an Oversight Team

Municipal Staff in Consultation with Community Leaders

2

Determine the Scope of the *Resilience Assessment and Prioritization Plan*

Oversight Team

3

Identify Potential Climate Change Threats

Oversight Team

4

Conduct Initial Assessment of Community's Social and Physical Vulnerabilities

Oversight Team

5

Establish the Community-led Planning Team (CPT)

Oversight Team

6

Hold CPT Meetings

Community-led Planning Team

7

Prioritize Community-Identified Issues and Actions

Oversight Team; CPT

8

Draft *Resilience Assessment and Prioritization Plan*

Oversight Team; CPT

9

Circulate Plan and Seek Public Comment

Oversight Team; CPT

Implementation

# Steps to Complete *Resilience Assessment and Prioritization Plan*

Step 1: Establish an Oversight Team

Before beginning the climate change resilience planning process, the municipality will need to establish an **Oversight Team**.

The responsibilities of the **Oversight Team** include:
- meeting regularly to determine the scope of the planning process;
- identifying and contacting potential **CPT** members (see Step 5); and
- collecting and assembling background information on climate change impacts and community vulnerabilities.
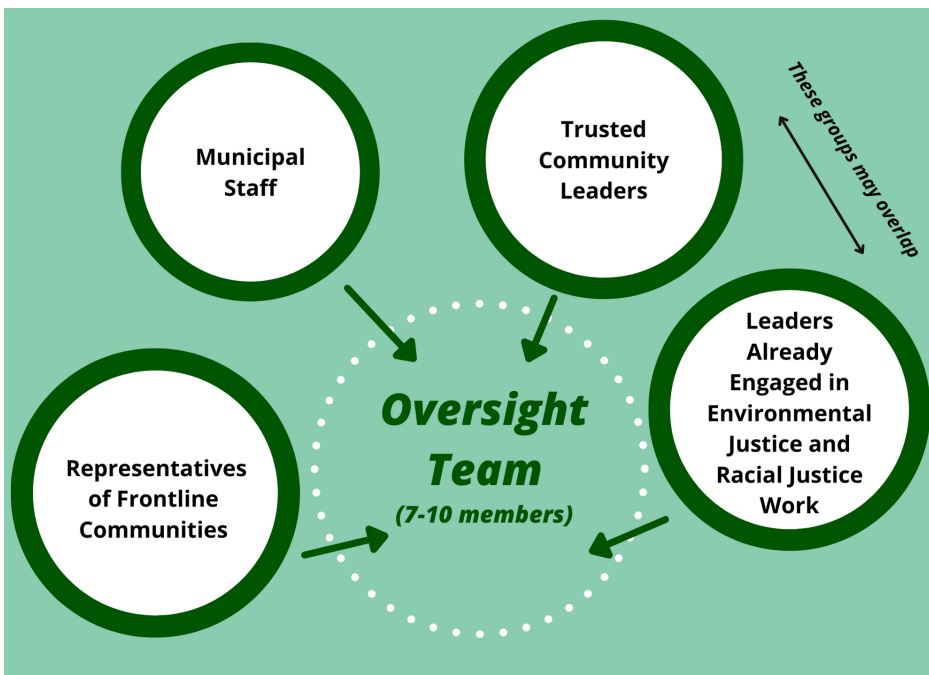
At this point, it is important to pause and ask: **who is in the room? who is not?** Consider an **Oversight Team** selection process that includes public nominations or open applications in order to **encourage community involvement and ownership from the start**. Community leaders, government representatives, and representatives of impacted groups should join the **Oversight Team** and participate in the broader planning and prioritization process. Government representatives can include planning staff, elected members of municipal boards and committees, and staff from other departments such as social services, emergency services, and public health, or other departments whose staff work closely with people most impacted by climate threats.

The **Oversight Team** can be a new committee or a pre-existing group and its form may depend on the size and needs of the community. The **Oversight Team** should include leaders from groups already working on projects related to climate change, environmental justice, and racial justice, as well as frontline communities who are the "subject matter experts" on their own experiences of climate change. The **Oversight Team** should be between 7-10 members. **Including at least 60% representatives of groups most impacted by climate change, including people of color, is best practice.**

Paying the Oversight Team

Members of the **Oversight Team** who are not on the municipality's payroll should be paid for their role in the planning process. While looking for **Oversight Team** members, municipal staff should clearly communicate how participating community members will be paid. By paying community members for their time, municipalities recognize community members' expertise, move away from an extractive model of community engagement, and may reduce some barriers to participation. Municipalities might directly pay residents or offer payments through consultant teams that are also working on the project.

There are numerous examples of committees that are paid in other states.

City of Providence, RI: The [Racial and Environmental Justice Committee](#), formed by community leaders and the City of Providence in 2017, provides stipends through yearly grants to members. For example, [Committee members were compensated $1300 for working 10 hours/week](#) from November 2017 through June 2018.

City of Seattle, WA: The [Seattle Environmental Justice Committee](#), formed by the City of Seattle in 2017, includes 12 members representing communities most affected by environmental inequities. The Committee aims to center community ownership in decision-making and environmental program and policy design. Funding of up to $3,000 per member for two-year terms is provided to support organizations whose staff, volunteers or board members participate. This funding helps to cover members' participation in retreats and routine meetings and time to review materials between meetings.

☑ **Form an Oversight Team with comprehensive representation**

☑ **Identify funding to pay members of Oversight Team**

Step 2: Determine the Scope of the *Resilience Assessment and Prioritization Plan*

To start, the **Oversight Team** should determine the scope of the *Resilience Assessment and Prioritization Plan*. The scope will determine:

- the geographic focus of the planning process (i.e., the boundaries of the community where resilience planning is taking place), which may depend on natural barriers like mountains and rivers or the municipality's defined boundaries such as city lines and street maps; and
- the people, resources, and logistics (including funding, partnerships, and timing) required to make the planning process successful.

In determining the geographic focus of the process, the **Oversight Team** should also develop a deeper understanding of the land use history of the area. This includes researching:

- the pre-colonial history and Indigenous territories;
- species and ecosystems;
- the context of neighboring communities and the broader region; and
- the land use development history and policies that have changed the landscape and its communities.

With this deepened understanding, the **Oversight Team** will be better able to conduct a climate change planning process that considers both social and ecological resilience. For example, a municipality could develop a coastal resilience action that protects Indigenous cultural uses.

Relevant Resources	
Native Land Digital Map | Our home on native land	**White House Center on Environmental Quality Climate and Economic Justice Screening Tool**
CT Department of Energy and Environmental Protection GIS Maps and Data	**Environmental Protection Agency EJScreen: Environmental Justice Screening and Mapping Tool**
University of Connecticut Environmental Conditions Online (ECO) Maps	

Table 4

Second, in order to determine the people, resources, and logistics that the process will require, the **Oversight Team** should compile a list of past planning processes, whether related to climate change or not, and review the resources used. During this step, the team should consider how past planning processes did or did not allocate resources equitably, and how this process can be more effective (within the constraints of the municipality's budget and available supplementary resources).

Embedding Equity in Budget Planning

The **Oversight Team** should take an equity-centered approach to the allocation of financial resources. This means that the team should prioritize funding for low-income participants, and support communities of color and community-led organizations.

There are numerous tools that cities and organizations have developed to center equity in resource allocation processes.

City of San Antonio, TX: The City of San Antonio Budget Equity Tool is used across city departments to understand "how [department] budgets benefit and/or burden communities, specifically communities of color and low-income communities."

Metropolitan Planning Council (Chicago): "Budgeting for Equitable Outcomes" outlines "why state and local governments must change their budget processes to evaluate the racial impacts of their services and investments." The article includes helpful diagrams and outlines how equity could be embedded at key steps of the budgeting process.

City of Portland, OR: The Budget Equity Assessment Tool includes a set of questions city bureaus use to track service and investment by geography and community and evaluate the equity impacts of budget requests.

☑ **Research local land use and development history**

☑ **Review budgeting and resource allocation in past planning processes and determine resources required for current resilience planning process**

☑ **Using information gathered, determine scope of the planning process**

Step 3: Identify Potential Climate Change Threats

In order to best prepare and adapt, a municipality should determine which combination of global climate threats is most relevant in its region**.** Though there is variation throughout the state, several changes are likely to impact Connecticut municipalities (see **Figure 2**).

These include both acute events, such as hurricanes or flash floods, and chronic conditions like routine flooding and increasing temperatures. Municipalities should also confront compound events, which are events during which multiple stressors or hazards occur simultaneously (e.g. heat wave and drought).

1. SEA LEVEL RISE	2. DROUGHT
By 2050, sea level rise is expected to be 20 inches higher than it is today in the Long Island Sound. *Potential Impacts: displacement of coastal populations; damage to critical infrastructure; groundwater contamination; chronic flooding* CIRCA Connecticut Sea Level Rise and Storm Surge Viewer CIRCA Climate Vulnerability Index – Flood Risk	Though potentially less extreme than other threats, drought could be more common with extreme weather spikes (for example, 46-week statewide drought in 2016-2017). *Potential Impacts: Lack of sufficient water for residents, lack of clean water* U.S. Drought Monitor - Connecticut Conditions
3. EXTREME HEAT	4. INCREASED STORMS & PRECIPITATION
The state will see an average increase of 5°F by 2050 compared to the 1970-1999 baseline and the number of days over 90°F will increase from 5 to 25 from the same baseline. *Potential Impacts: heat-related illnesses and deaths; increased air pollutants in urban areas; changing distribution of tick- or mosquito-transmitted diseases* CIRCA Climate Vulnerability Index – Heat Risk	Extratropical storms will include more precipitation and tropical storms will become more frequent and intense. *Potential Impacts: threats to human life in absence of emergency planning response; damage to houses; loss of power, inland flooding* CIRCA Connecticut Sea Level Rise and Storm Surge Viewer CIRCA Climate Vulnerability Index – Flood Risk

Figure 2: Climate Change Threats in Connecticut.

Image 4: Top Left - Surge from Long Island Sound in Branford, CT. Credit:Nicole Wall/Branford Patch; Image 5: Top Right - Drought affects Colebrook River Lake in Colebrook, CT. Credit: Mark Mirko/Hartford Courant. Image 6: Bottom left - Extreme Heat closes Restaurant Indoor Dining in Plainville, CT. Credit: NBC Connecticut News. Image 7: Bottom right: Tree Limb Hangs on Power Lines After Storm in Branford, CT. Credit: Nicole Wall/Branford Patch.

The **Oversight Team** should review the threats listed in **Figure 2**. Additional resources listed in **Table 7** include both national resources, such as NOAA's Climate Snapshots that map temperature, precipitation, and other factors, and Connecticut-specific resources, such as a report on the health impacts, including infectious diseases and heat exhaustion, of climate change threats on the state's population.

The **Oversight Team** should also consult other sources as needed in order to determine which threats are relevant to their own community.

While the frequency and severity of climate threats are quickly increasing, the **Oversight Team** may also want to identify the disasters and weather events that the community has historically experienced.

This can be accomplished by consulting government officials and reports, which may be accessible through the city or town hall, and FEMA's list of declared disasters in Connecticut since 1954.

However, the resources outlined will not necessarily paint the entire picture of climate threats in the state. **It will be important to supplement official reports with knowledge and experiences from residents.** The American Planning Association calls this key element of the planning process, "giving deference to local knowledge."[40] For example, community members may be more qualified to describe urban heat islands or point to corners that routinely flood. **Table 5** highlights the findings of a recent effort to learn directly from the people most impacted by climate change about what they perceive as the worst impacts. In future steps, the **Community-led Planning Team** will review the information gathered in this step and make necessary changes or additions.

Energy Security	- Power outages affecting health through trickle down effects: - Lack of refrigeration causing food and medication spoilage - Life-sustaining electronic medical devices - Loss of heating and cooling appliances for vulnerable community members - Lack of communication, isolating community members from emergency services
Food Security	- Lack of access to healthy and affordable food options, with concerns due to: - Convenience - Transportation - Affordability - Availability - Food quality **Many respondents described having to choose between paying bills or purchasing food in their daily lives**
Transportation	- Access to transportation and affordable fuel during extreme weather events was critical to: - Staying warm - Acquiring food - Charging devices necessary for communication and receiving emergency notifications
Clean Water	Participants particularly from EJ communities reported decreased water quality of unknown cause after extreme weather events
Clear Air	Concerns of poor air quality and increasing asthma rates, especially during extreme events

Table 5: *Summary of Community-Identified, High-Priority Impacts of Extreme Weather Events. Source: This table is adapted from* Community-Centered Climate Resilience in Connecticut: Summary for Communities and Policymakers *(Davis et al.)*

Based on the expected local climate threats identified in this step, the **Oversight Team** may want to generate a table (see **Table 6**) that organizes climate change-related incidents by both predicted severity (risk) and likelihood of occurring (risk * probability = vulnerability). This table will help the team to think through which climate threats have posed or will pose the greatest threats in the municipality. In future steps, the **Oversight Team** and **CPT** will think more specifically about the intersection of these identified threats and the existing socioeconomic inequities within the community. There are a variety of methods available to assess vulnerability (see resources in **Table 7** for more options). Keep in mind while constructing this table that climate change threatens to increase both the severity and frequency of many natural disasters and severe weather patterns.

	Low Likelihood of Occurring	**High Likelihood of Occurring**
High Severity/Risk		
Low Severity/Risk		

Table 6: *Table categorizing climate change impacts by severity and probability of occurring.*

Questions to Consider

Has our community historically experienced heat waves, flooding, severe wind damage from storms, or any other natural disasters?

Did these events impact any of the community's important infrastructure like roads, bridges, or electrical power?

What were the short-term impacts? If any, what are the long-term or lasting impacts on the community? (list them)

How many people were impacted?

Were there some areas of the community or residents affected more than other areas or residents?

Are these impacts expected to increase with climate change? Are additional impacts expected?

Additional Resources to Identify Climate Change Threats in Connecticut

Connecticut

Governor's Council on Climate Change Phase 1 Report (Pg. 28)

Climate Change and Health in Connecticut

Extreme Events and Health in Connecticut

Extreme Heat in Connecticut

National Oceanic and Atmospheric Administration Connecticut State Climate Summary 2022

United States

U.S. Fourth National Climate Change Assessment Summary Findings

Center for Disease Control and Prevention Climate and Health Northeast Health Impacts

NOAA Climate Data Snapshots

Environmental Protection Agency (EPA) climate change science information

IPCC Regional Fact Sheet: North and Central America

U.S. Climate Resilience Toolkit

Table 7

☑ **Identify relevant threats in community using resources outlined and other resources**

Step 4: Conduct Initial Assessment of Community's Social and Physical Vulnerabilities

Many things affect a community's vulnerability to climate change threats: geographic location, structural integrity and placement of key infrastructure, systemic factors like socioeconomic status, and population demographics. Climate vulnerability is measured by two main variables: sensitivity and adaptive capacity. Sensitivity refers to the likelihood that a population group or crucial piece of infrastructure will be impacted by a hazard, such as flash flooding. On the other hand, adaptive capacity refers to "the potential or ability of a system, region, or community to adapt to the effects or impacts of climate change."[41] For example, while two houses might be equally sensitive to flooding, the owners of one house may have access to more resources and wealth to move themselves to safety during a storm than the other house, whose occupants may have a lower income. Municipalities must consider both sensitivity and adaptive capacity in order to equitably build climate resilience. **The Oversight Team should also understand and discuss how historic and current policies and practices shape the differing impacts of the identified climate threats. Flooding offers an urgent example, and "Climate Change, Flood Risk, and Redlining," a graphic that appears at the conclusion of this step, offers a more extensive outline of these connections.**

To start its assessment, the **Oversight Team** should first develop a clear understanding of the community's demographics using the resources outlined in **Table 8.** The **Oversight Team** should consider not only the demographics of people living in the town, but also those of people working in the town but living elsewhere and people living in neighboring towns or cities that might be more impacted by climate threats.

Using this understanding of the community's demographics and the understanding of local climate threats developed in Step 3, the **Oversight Team** should then should follow the guidelines laid out in **Appendix 1: People of Concern, Appendix 2: Environmentally Exposed People, Appendix 3: Vulnerable Institutions,** and **Appendix 4: Community Lifelines.** The **Oversight Team** may also find the accompanying **Worksheets 1-4**, which include guiding questions, helpful. Step 5 goes into more detail about how the **Oversight Team** should reach out to and invite the people identified in this step to join the **Community-Led Planning Team**.

Resources to Identify Community Demographics
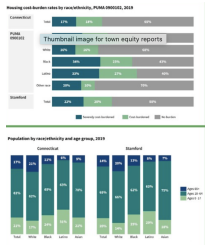
Connecticut Town Equity Reports
DataHaven generated reports for all 169 municipalities that include data on linguistic isolation, homeownership rate by race, health outcomes, educational attainment by race, the location of environmental justice populations, and more.
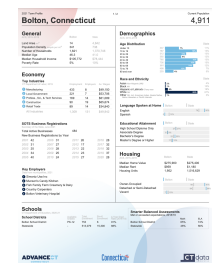
Town Profiles
AdvanceCT worked with the state and other partners to compile town profiles that detail demographics (race and ethnicity, language spoken, education, income, age), employment, and fiscal data.
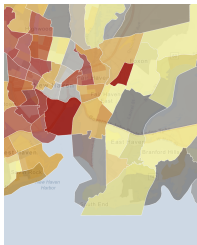
EJScreen
The Environmental Protection Agency's EJScreen mapping tool allows users to visually display environmental justice factors (such as proximity to Superfund sites), environmental indicators, and demographic information.

Climate and Economic Justice Screening Tool
The beta Climate and Environmental Justice Screening Tool, designed by the White House Council on Environmental Quality, uses criteria from eight categories, including climate change, clean energy and energy efficiency, clean transit, affordable and sustainable housing, reduction and remediation of legacy pollution, critical clean water and waste water infrastructure. health burdens, and training and workforce development, to identify communities that are disadvantaged. This tool is part of the federal Justice40 Initiative.

Table 8

Climate Change, Flood Risk, and Redlining

Formerly redlined neighborhoods face a higher risk of flooding and higher levels of air pollution, and factories and highways are more likely to be sited in these same neighborhoods.[42][43][44] Ongoing discriminatory siting and housing practices and other factors perpetuate these patterns. In New Haven, CT, for example, side-by-side maps of redlining (**Image 8**) and flood risk (**Image 9**) illustrate that flood-prone geographies overlap with neighborhoods that were deemed "hazardous" (red) or "declining" (yellow) by the Home Owners' Loan Corporation in the 20th century.

Image 9: FEMA flood map of New Haven, CT. Source: FEMA Flood Map Service Center.

Image 8: Homeowners' Loan Corporation's historical redlining in New Haven, CT. Source: University of Richmond's Digital Scholarship Lab, GIS feature layer by dianaclavery_uo

Due in part to systemic policies and practices limiting residential mobility, the majority of households in historically redlined neighborhoods are still non-white.[45] These communities experience a disproportionate share of the economic burden associated with flooding.[46] Homes in floodplains often have lower property values, and are often not prioritized by government programs or insurance companies for aid or investment. This impacts the ability of these residents to sell their homes and relocate. Lower adaptive capacity due to decades of disinvestment, combined with the high costs of water damages born by residents, may make it harder for these communities to prepare for and recover after flooding and storm events than it is for affluent coastal communities. ***(continued on next page)***

Image 10: *New Haven, CT with 20 inches of sea level rise and a 100-year flood event. Source: Connecticut Institute for Resilience and Climate Adaptation.*

Without intervention, these problems will only get worse. Image 10 shows New Haven with 20 inches of sea level rise and a 100-year flood event (severe floods that have a 1% chance of occurring in any given year), with blue representing areas that would be inundated by the high waters.[47] Climate change will increase the severity and frequency of the hurricanes and tropical storms that cause these floods.[48] **Image 10** shows terminals (circled in red) storing large volumes of oil and petroleum. These reservoirs are located in areas that would be inundated during a flood, and damage to these facilities could expose surrounding communities to dangerous pollutants. If no action is taken, many low-lying neighborhoods—such as Fair Haven (circled in yellow), which has a population that is 21 percent Black and 64 percent Latino—will continue to experience some of the worst impacts associated with climate change.[49]

Other climate threats, such as extreme heat, will similarly exacerbate underlying social and economic conditions. For example, neighborhoods with lower tree canopy cover, a factor that has also been linked with redlined neighborhoods, will experience higher temperatures.[50]

☑	**Identify communities' demographics using resources outlined and other resources**
☑	**Complete appendices and worksheets**
☑	**Identify groups and people most impacted by climate threats**

Step 5: Establish the Community-led Planning Team

<u>Recruit CPT Members</u>

In Step 5, the **Oversight Team** will assemble the **Community-led Planning Team (CPT),** a larger group of community leaders, partners, and representatives of people closest to the climate threats. The **Oversight Team** must inform representatives of all groups identified in Step 4 about the municipality's intention to develop a *Resilience Assessment and Prioritization Plan*. The **Oversight Team** should make sure potential **CPT** members from these groups have at least six weeks to respond to and process this information.

The **CPT** should include at least **60% representatives from the identified people of concern, with intentional representation of people of color**. Depending on the size and distribution of people of concern, it may be necessary to bring in representatives from outside the community (e.g. members of organizations representing disability rights).

> ### Paying the Community-led Planning Team
>
> Members of the **Community-led Planning Team** should also be paid for their time. While looking for **CPT** members, the **Oversight Team** should clearly communicate how participating community members will be paid. By paying community members for their time, municipalities recognize community members' expertise and may reduce some barriers to participation.

When recruiting members for the **CPT**, it is important the **Oversight Team** stress that the involvement of individuals and organizations, especially those representing people of concern, is critical to ensuring that the final *Resilience Assessment and Prioritization Plan* reflects the priorities of the most impacted community members and avoids placing additional burdens on these community members. The **Oversight Team** should also consider residents' exclusion from past processes or concerns about privacy, and design outreach to address these potential barriers to participation. When recruiting **CPT** members, the **Oversight Team** should talk with a range of community members and not assume all residents represented by a community leader in this discussion hold the same opinions. In addition to those people identified in Step 4, **the Oversight Team should also reach out to representatives of local schools and youth organizations to recruit youth voices to join the CPT**. Youth voices are key to planning for the future they will inherit. **Tables 3** and **9** (in "Planning for the Future" and Step 9 respectively) offer additional resources and ideas for how to widely share this opportunity and address common barriers to public participation.

In the process of reaching out to representatives of identified groups, the **Oversight Team** should simultaneously reference **Appendix 6**, which includes considerations for disaster and evacuation planning. In these conversations, and later in **Community-led Planning Team** meetings, the **Oversight Team** should compile a list of emergency and evacuation plans and protocols (e.g. the evacuation plan

for a senior center) to start to understand where there are overlaps and where there may be contradictions between municipal and non-municipal evacuation protocols.

To ensure plans are informed by all of the most impacted groups, the CPT members need to participate in the remaining steps of the planning process.

Plan Joint CPT and Oversight Team Meetings

The **Oversight Team** will need to work with the **CPT** to plan meetings that both teams can attend. This time will allow the **Oversight Team** to share its findings about local climate threats and gather additional insights on threats from **CPT** members. Both teams will determine when, where, and how often to hold these meetings, as well as what resources will be needed to facilitate the meetings. The frequency, size and format of the meetings will depend on the size, needs, and desires of the community. The **Oversight Team** must take steps to ensure that these meetings are accessible to all team members.

Questions to Consider

What times and days will facilitate the most participation?

Are you missing input from team members that work night shifts vs. day shifts? How will you adjust for this?

Will people need childcare in order to attend? Do people need transportation? Will food be provided?

What locations are geographically most convenient for attendees? Are these spaces safe and comfortable for attendees? Are there any other barriers to attendance?

Create an Agenda for the First Joint Meeting

Depending on the size of the group and other factors, the two groups may meet together once or multiple times. Throughout the meeting(s), the **Oversight Team** and **CPT** should aim to complete the following actions:

- *Review the Process:* The **Oversight Team** will discuss the **CPT**'s role and responsibilities, the timeline for developing the *Resiliency Assessment and Prioritization Plan*, and the **CPT**'s participation in scheduled meetings. The **Oversight Team** will also answer questions from the **CPT**.
- *Identify Potential Partners:* Building climate change resilience is a complex and comprehensive task, so the **CPT** and **Oversight Team** should work together to identify partners with staffing, expertise, or funding resources. These include other municipal committees, nonprofits, community-based organizations, and stakeholders that are familiar with different aspects of resilience planning and/or promoting equity in the community. Groups in the community or greater

surrounding area already supporting climate adaptation work or promoting equity-centered practices should join the **CPT**. The **CPT** and **Oversight Team** will benefit from their insights, and may also learn about already initiated community projects. The **Oversight Team** and **CPT** may also choose to discuss the option of collaborating with other communities that are in the process of planning for climate resilience. In some cases, it may be appropriate for the municipality's Council of Government to participate in the process and provide assistance.

Examples of Organizations Focused on Climate Resilience and/or Environmental Justice Work in Connecticut

- Connecticut Coalition for Environmental Justice
- Interreligious Eco-Justice Network
- NAACP Connecticut Chapter
- New London NAACP
- Greater Bridgeport NAACP
- Greater Hartford NAACP
- Sunrise Movement Connecticut
- Neighborhood Revitalization Zones in Hartford and Bridgeport
- CT Equity Now

- Green Eco Warriors
- Black Lives Matter Hartford
- Black Lives Matter New Haven
- Save the Sound
- Connecticut League of Conservation Voters
- CT YWCA
- Semilla Collective
- Unidad Latina Acción
- Mary & Eliza Freeman Center for History and Community

- *Reflect on Community Strengths*: To lay the groundwork for the assessment of climate threats, vulnerabilities, and proposed actions, the **Oversight Team** and **CPT** should discuss and list some of the strengths and attributes the community already has and how these can be built on to make the community more resilient.
- *Understand and Review Climate Change Threats*: Together, the teams will review the climate change threats identified in Step 3 and community vulnerabilities identified in Step 4. The **Oversight Team** will dedicate adequate time to clarifying key climate change terminology (e.g. greenhouse gases, resilience plan, adaptation, mitigation) and introducing new terminology from **CPT** members, as well as discussing what makes certain people more vulnerable to climate change. The **Oversight Team** will ask the **CPT** to supplement the **Oversight Team's** research on climate change impacts in the community with their own knowledge and experience. This process is called "joint fact finding", or "collaboratively generat[ing] shared sets of facts that all parties accept."[51] The "Questions to Consider" box on the next page provides several discussion questions.

- *Understand and Review Threats to Infrastructure*: Together, the teams will review the **Oversight Team**'s findings (from Step 3) about threats to the community's infrastructure (e.g. flooded or otherwise impassable roads, power outages, flooded basements, damage to homes and property).
- *Provide Questions for Reflection*: It may be helpful for the **Oversight Team** to conclude the meeting with additional framing questions for the **CPT** to think about and reflect on before beginning to meet internally as a **CPT**.

Questions to Consider

Are there roads in the community that flood during heavy rains?

Are parts of the community more prone to power outages?

If any of the climate events we talked about occurred in the community, do you or the people you represent have a plan? Do they know what to do or where to go?

Does the community or municipality alert you when these events happen? How? Are they consistent and thorough?

Are there groups in the community that experience worse health and/or financial outcomes during these events?

☑ **Conduct outreach to representatives from groups most impacted by climate change threats about plans to create CPT**

☑ **Start working through steps outlined in Appendix 6**

☑ **Form Community-led Planning Team**

☑ **Hold joint meeting between Oversight Team and CPT (discussion of process, identified climate change threats, and future steps)**

Step 6: Hold Community-led Planning Team Meetings

At this point, the **CPT** should schedule its own regular meetings. The **CPT** is composed of trusted community leaders and members of community groups, and will be primarily responsible for discussing and prioritizing the needs of the community.

CPT meetings may include the following agenda items. The number and length of meetings, and the location of meetings, will be determined by the **CPT**.

- *Establish Group Norms and Add Items to Agenda*: The **CPT** should review the following suggested steps and decide if there are additional topics for review.
- *Review Climate Threats*: The **CPT** should use this opportunity to independently review the climate threats outlined by the **Oversight Team** to ensure they reflect what the community is currently experiencing or expecting.
- *Consider Missing Community Knowledge*: The **CPT** should also review the list of people most impacted by climate change developed by the **Oversight Team** and consider whether additional voices need to be brought into the **CPT**
- *Reflect Further on Community Strengths*: The **CPT** might also take some time to identify and discuss existing community strengths that can be built on to make communities more resilient.
- *Identify Community-Level Priorities*: The **CPT** will identify the community-specific, climate vulnerability issues that it would like to see addressed in this plan. The **CPT** will likely identify several areas of concern in the community, including critical infrastructure concerns and institutional vulnerabilities, however, the team should aim to agree on 10-15 primary issues. If more than 15 issues are identified, the **CPT** will first determine if any of the issues are similar enough to be acceptably lumped together. If lumping does not sufficiently reduce the number of issues, the **CPT** will vote and retain the top 15 issues.
- *Choose Decision-Making Process*: Voting will take place even if it is not needed to narrow down the list of issues. The results of voting will help to inform the **Oversight Team** about which issues are most concerning to CPT members. The **CPT** will decide on the best method for voting. Possible methods include the "dotmocracy" method or methods best suited to virtual platforms.
- *Draft Actions to Address Community-level Priorities*: The **CPT** should then draft a list of 15-30 potential actions, which may include infrastructure, education, or emergency communications changes, for example. Team members should consider solutions that also help to address existing environmental injustices or equity challenges faced in the community. The team should also be critical of solutions that are maladaptive, meaning they could result in additional harm to the most impacted members of the community. Team members should develop proposals for solutions they would like to see addressed in the plan. Proposals should provide a 2-3 sentence description of the solution complete with a summary of its pros and cons. Each proposer will also briefly field any questions. Solutions may be grouped where sufficient similarities exist. This proposal process is intended to not be overly time consuming, while also ensuring that all team members understand each proposed solution. The **CPT's** list of potential solutions will later be categorized by the **Oversight Team** and then voted on by the **CPT**. This process is detailed in Step 7.

The **CPT** will also need to brainstorm potential barriers to climate resilience assessment and prioritization efforts as well as solutions to overcome these barriers. Barriers may include conflicting political beliefs, lack of community awareness, or funding and staffing limitations throughout the planning and implementation process.

To overcome community hesitation to climate change resilience efforts, the **CPT** might start by:

- choosing climate resilience solutions that address other community goals (e.g. improving housing quality bolsters climate resilience and promotes equity, and in turn reduces insurance rates for those homes); and

- starting with solutions that are highly visible and can definitely be accomplished. This helps to create tangible evidence of the shared commitment by community members and municipal planners to address climate change.

The **CPT** will need to determine how to share the process and document with the broader community. This process, which is detailed in Step 9, will involve brainstorming ways to trade information with the community and to engage through communication channels relevant to a range of community members.

☑	**Schedule and hold regular Community-led Planning Team meetings (addressing items outlined)**
☑	**Identify community-level priorities**
☑	**Identify actions to address community-level priorities**
☑	**Identify potential barriers to proposed actions**

Step 7: Prioritize Community-Identified Issues and Actions

In a standalone meeting, the **Oversight Team** will review the full list of actions drafted by the **CPT** and categorize them based on feasibility and cost of implementation.

The categorization process will be primarily resource-dependent. The two teams will need to consider the following questions:

- Does this action bring resources to typically under-resourced areas of the community?

- Can this solution be addressed using existing resources or will new resources need to be acquired from outside sources (e.g. state and federal grants)?

- Will funding and resources be difficult to acquire?

- Does the expertise necessary to address this solution exist within the community?

- Will this require political backing? If so, whose?

Each community's **Oversight Team** may use a different method for categorizing solutions, but the general concept is to establish both which solutions will be difficult and/or costly to implement and which solutions will require fewer resources and less funding to implement. The **Oversight Team** should then give the list to the **CPT,** whose members will vote on which solutions they would like to see prioritized.

At a meeting, the **CPT** should vote, using the method it deems most appropriate, on the categorized solutions, and then review the results as a team. The **CPT** will vote on two categories of solutions: the difficult and/or costly solutions and the solutions requiring fewer resources. The **Oversight Team** will use these results to understand which solutions the **CPT** sees as most impactful and important.

☑ **Hold Oversight Team meeting to review and categorize actions proposed by CPT**

- -

☑ **Vote to determine community preference of both difficult and/or costly actions and actions requiring fewer resources**

Step 8: Draft *Resilience Assessment and Prioritization Plan*

The **Oversight Team** will use the results of the **CPT's** vote and choose the most popular 3-5 difficult and costly priority solutions for inclusion in the draft plan. These are intended to represent the communities' top climate resilience priorities. The exact number of priorities the **Oversight Team** chooses to include will depend on estimated funding resources, staffing capacity, and the level of community engagement and support for the implementation process. It will be important to prioritize solutions as resilience plans that try to do too much all at once may become overwhelming and ultimately achieve fewer community-identified goals. However, the **Oversight Team** will also include a ranked list of all of the community-identified solutions so that they can revisit these ideas in the implementation process.

Tips for Successful Resilience Planning

- The community's resilience planning efforts must be reflected in all levels of government to avoid conflicting policies

- Collaborate with the efforts of community members and their representatives, municipal committees, and other stakeholders in the community whenever possible, encouraging maximum community participation in the planning and implementation process

- Build political will for climate adaptation in the community, obtaining support from trusted local political leaders

- Keep the public aware of the resilience plan and what is happening with it, drafting reports tracking planning progress that are free and accessible to the community in all forms of public participation, physically and virtually.

- Define the budget and staffing needs early, allocating resources carefully and deliberately within the expected timeline of the planning and implementation process

[Adapted from Barriers and Drivers of Planning for Climate Change Adaptation Across Three Levels of Government in Canada (Oulahen et al. 2018)]

✓ **Complete draft *Resilience Assessment and Prioritization Plan***

Step 9: Circulate Plan and Seek Public Comment

The draft *Resilience Assessment and Prioritization Plan* should be circulated to key leaders on the **Oversight Team** and **CPT**, who will aid in disseminating the plan to residents and community-based organizations. Before the plan can be finalized, the teams should allocate time for a wider public comment period. The plan must be publicized and made free and accessible in both physical and virtual formats.

Particular attention should be paid to understanding and addressing barriers people of concern may face in attending meetings or accessing the draft document. The GC3 Environmental Justice and Equity Working Group developed principles for public participation, a checklist for public participation at different stages of the planning process, and specific guidance on equity-based remote engagement methods. These may serve as useful guidance as the teams determine how to share the plan with as many community members as possible. The *Community-Centered Climate Resilience in Connecticut* report also summarizes the barriers that frontline community members identified to their full participation in planning processes. Some of residents' recommendations to address these barriers are summarized in the table below.

Recommendations for Public Participation	
Design outreach strategies to reach wider audiences	Communication methods identified by participants include: ● Social media including Facebook, Instagram, NextDoor, and Twitter. ● Physical fyers at people's doors, as well as public and frequently visited places in the community including public libraries, clinics, community centers, and places of worship. ● Newsletters and independent newspapers, including the *New Haven Independent, La Voz, InnerCity*, and other Black/Latinx-run publications. ● Radio stations. ● Tables at farmers' markets and other local events, particularly in rural areas.
Address participation barriers through inclusive practices	Inclusive practices identified by participants include: ● A combination of virtual meetings, accompanied by training sessions and information on how to use Zoom, and in-person meetings, particularly in and around neighborhoods most affected by climate change. ● Holding events in locations easy to access through public transportation or within easy walking distance of affected communities. ● Childcare, or providing activities suitable for children. ● Compensation for participants including money, gift cards, hearty meals, diapers for families, and other necessities. ● Translation and interpretation solutions for non-English speakers, including sessions held in their native language. ● Use of accessible language, with attention to the readability of written materials, lack of acronyms and translation of technical jargon into plain language. ● Scheduling events at a variety of days of the week and times of day.

Table 9: *Source:* This table is adapted from *Community-Centered Climate Resilience in Connecticut: Summary for Communities and Policymakers (Davis et al.)*

The **Oversight Team** should compile all public feedback, and hold at least one additional combined **CPT/Oversight Team** meeting to review the plan in the context of new comments and to incorporate feedback as appropriate. Both teams should also work together to establish suggested timeframes for the completion of solutions.

The plan itself should be a living document, and should be revised and updated as needed on a regular schedule determined by the **Oversight Team** and **CPT**. While finalizing the plan, both teams should determine who will be involved in next steps. This will ensure that the key community members identified throughout this process continue to play an ownership role and that the relationships formed throughout the planning process continue to grow. For example, the **Oversight Team** might decide to transition into a more permanent committee, or the town may follow up regularly with interested members of the **CPT**.

The *Resilience Assessment and Prioritization Plan* should include:

- A list of the potential climate threats in the region

- A list of the community's specific physical and social vulnerabilities to identified climate change threats

- A list of existing community-identified strengths

- A ranked list of all proposed actions and a list of the 3-5 prioritized difficult and/or costly solutions

- Guidance on how the plan's performance will be assessed and how often the municipality will revisit the plan

- A timeline for implementing the plan

- Guidance for updating local evacuation plans and other critical municipal or institutional resources to reflect the realities of climate change threats

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In addition to preparing the municipality to act, the document will serve several purposes. These include educating residents about expected climate change threats and providing residents the opportunity to build individual resilience.[52] Widespread education is needed to explain the causes and implications of climate change. This document presents an important opportunity to increase public awareness about climate change.

☑	**Develop plan to disseminate plan to broader community**
☑	**Implement outreach plan (including public comment period)**
☑	**Incorporate public input into plan**
☑	**Establish process for incorporating future input ("living document")**

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Appendices

Appendix 1 - People of Concern

People of Concern disproportionately experience social and economic stressors and will likely disproportionately experience risks to their health and safety as a result of climate change.

Using Appendix 1, the **Oversight Team** should identify the people most likely to be impacted by climate change threats in their community, where these people are located, and the relevant climate impacts they face. See **Table 10** below for a list of commonly identified people of concern as well as resources on how to identify and reach these people in a specific community.

Special Considerations: In order to engage with people in the community who are most impacted, the **Oversight Team** should identify and reach out to the local leaders and community based organizations that represent these groups. The **Oversight Team** should begin by reaching out to community based organizations that the municipality has worked with in the past and with which the municipality has established mutual trust. If members of the **Oversight Team** are members of any community based organizations, this may be a helpful place to start. The **Oversight Team** should ask its existing connections to help in identifying other organizations (religious, nonprofits, charities, etc.) that serve or represent the community's most impacted residents. They should be able to identify authentic representatives of the most impacted communities. **The goal is to create a web of organizations and individuals who understand the needs and vulnerabilities of the entire range of community members, especially those most impacted by climate change threats.**

Learn More: In addition to identifying community groups through municipal and **Oversight Team** connections, the **Oversight Team** can conduct anonymous surveys of community leaders, looking for consistent names/organizations in individuals' responses. A survey template can be found in **Appendix 5**. The **Oversight Team**, with input from community organizations and local leaders that have already been identified, should decide on the most effective method of distributing and collecting these surveys. The **Oversight Team** may choose to use one or a combination of the following methods.

- Conducting surveys in a heavily trafficked area of the community (e.g. town hall, community centers, libraries, malls, farmer's markets)

- Posting an electronic survey on the social media pages of community groups and businesses (e.g. Facebook page of a local newspaper or charity)

- Distributing the survey during town meetings

- Providing a gift card to a local store or coffee shop to incentivize completion of the survey

Table 10: People of Concern.

People of Concern	Vulnerability	Resources to Identify People of Concern in the Community
People of color (including Black or African American, Latina/o or Hispanic, American Indian, Native American, Alaska Native, Asian, Native Hawaian and other Pacific Islander)	• Structural racism • Decreased access to information services and resources • Racial/ethnic health disparities • Risks to cultural heritage practices and traditions • Cultural and language barriers • Inadequate community or housing infrastructure • Multiple and cumulative exposures to environmental threats • Multiple and cumulative exposure to other vulnerabilities • Distrust of the system	• Ethnic social organizations • Ethnic religious organizations • Ethnic media (e.g. radio stations & Newspapers) • Civil rights organizations (e.g. NAACP & Urban League) • CT DEEP Office • US Census • EPA EJScreen Mapping Tool • Connecticut Environmental Justice Mapping Tool (in progress) • City/town hall • Local health department • Local school district • Neighboring tribal governments • Indigenous-led organizations (e.g. Rhode Island Indian Council) • Northeast Climate Adaptation Science Center Tribal Liaison • Northeast Indigenous Climate Resilience Network
People who are immigrants/migrants	• Limited English proficiency • (Perceived and actual) Inability to access state/federal resources due to legal status • Fear of deportation preventing access to critical institutions • More likely to be low income • Delayed/mixed response to emergencies due to communication barriers • Discrimination, leading to psychosocial stress and social and economic barriers	• All of the above, as well as: • Catholic charities • Integrated Refugee & Immigrant Services • Legal services*
People with limited English proficiency	• Delayed/mixed response to emergencies due to communication barriers	• All of the above
People who are low-income	• Limited access to transportation • Impaired evacuation capabilities • Inadequate infrastructure	• Varying definition (poverty level, 2x poverty level, 4x poverty level) • EPA EJScreen Mapping Tool • Census Bureau QuickFacts Mapping Tool • School District Free and Reduced Price Lunch Program • SNAP Food Assistance Program • Local social service agencies • Trailer parks • Low-income/ state or federally subsidized housing

Elderly people (65 years and older)	● Weaker immune systems ● Chronic/ pre-existing conditions that increase health risks ● Reduced mobility ● Medications may increase vulnerability to heat-related illness	● EPA EJScreen Mapping Tool ● Census Bureau QuickFacts Mapping Tool ● Local social service agencies ● Area Agency on Aging (AAA) ● Senior centers ● Senior housing ● Assisted living/senior nursing facilities ● "Community Choices"
Young children (under 5 years)	● Breathe more air and drink more water by body weight ● Immune systems and organs not fully developed ● More time spent outside ● Highly dependent on adults	● EPA EJScreen Mapping tool ● Census Bureau QuickFacts Mapping Tool ● Local daycares and day homes (licenced by state Dept of Public Health) ● Headstart ● Local health departments (vaccination records, birth certificates)
People who are homeless	● Health disparities ● Poorly controlled chronic diseases ● Uncertain shelter	● Local social service agencies ● Local charities ● Local police department ● Local religious institutions ● Food pantries/ soup kitchens ● Local shelters
People with mental disabilities	● Reduced capacity to respond to disasters ● Heavily reliant on medical infrastructure and personnel ● Reduced mobility impeding evacuation ● Medications may increase vulnerability to heat-related illness	● School districts ● Care institutions (e.g. hospitals, nursing facilities ● Alcohol/ substance abuse treatment or rehabilitation centers ● Local police department ● "Community Choices" (Connecticut's Aging and Disability Resource Centers) ● Disability Rights CT (DRCT) ● Faith-based organizations
People with physical disabilities	● Reduced capacity to respond to disasters ● Heavily reliant on medical infrastructure and personnel ● Reduced mobility impeding evacuation ● Medications may increase vulnerability to heat-related illness	● School districts ● Care institutions (e.g. hospitals, nursing facilities) ● Police department ● "Community Choices" ● Disability Rights CT (DRCT) ● Faith-based organizations
People who are pregnant	● Specific medical needs and considerations during disaster and extreme heat events ● Additional financial burdens resulting in reduced capacity to respond to disaster ● Possible reduced mobility impeding evacuation	● Planned Parenthood ● Women's Recovery, Access, Engagement, Coaching & Healing (REACH) Program ● Women's health clinics and OBGYN clinics ● Local Health Departments

Appendix 2 - Environmentally Exposed People

> **Environmentally exposed people** experience increased risk to their health, safety, and wellbeing from climate change based on factors not necessarily related to race/ethnicity or socioeconomic status. Factors affecting a person might include occupation, location, or infrastructural quality of a home or workplace.

While there may be overlap between people of concern and environmentally exposed people, these groups differ in their capacity to cope with and adapt to climate change stressors. For example, a low-income family living in a floodplain does not have the same resources to adapt or evacuate as a higher-income family that is vulnerable to storms and floods because they own a home on the coast. However, environmentally exposed people still experience elevated risks to their health and security from climate change, and will likely be motivated to help brainstorm and implement solutions that address these challenges.

Special Considerations: Table 11 provides a list of commonly identified environmentally exposed people as well as resources the **Oversight Team** can use to identify these populations in a specific community. After creating a list of these groups in the community, the **Oversight Team** should contact their representatives and identify points of contact within each organization. The goal of connecting with representatives of environmentally exposed people is to create a network of groups and individuals who best understand the needs and vulnerabilities of the people they serve in the community. These groups will not only have important insight into their populations, but may also know of other organizations that the **Oversight Team** should contact.

Table 11: Environmentally Exposed People.

Environmental Exposures	Vulnerability	Resources to Identify Environmentally Exposed People in the Community
People working outdoors	● Outdoor occupations put workers at risk of exposure to climate change-related impacts (e.g. flooding, extreme heat, severe storms, and vector borne disease)	● Occupations vulnerable to climate change-related hazards include: ○ Emergency responders, ○ Outdoor laborers, ○ Postal workers ○ Construction workers, ○ Utility workers, and ○ Farmers and farm laborers. ● Contact local labor union
People working in hazardous indoor spaces (ex. HVAC or	● Indoor workers can be exposed to extreme conditions depending on their work environments	● Occupations vulnerable to extreme conditions including: ○ Energy efficiency workers, ○ HVAC workers, ○ kitchen and restaurant staff,

kitchens)		○ Manufacturing line workers
People living in flood zones or floodplains	• Communities and businesses located in flood zones are at greater risk of experiencing negative respiratory health outcomes due to presence of mold and mildew • Flood events also place individuals at risk of acute injury, drowning, and death • Ability to evacuate may be compromised and residents may become isolated from emergency services	• FEMA Flood Map Service Center website • ClimateCentral • Great Lakes Integrated Sciences and Assessments • CIRCA
People living in substandard housing	• Difficult to keep cool in warm conditions, increasing risk of heat-related illness • Not structurally sound • Unable to protect against rain, flooding, and wind	• Town housing department • Building inspectors • Abandoned buildings that may periodically be occupied by the unsheltered
People living in urbanized Areas	• Heat island effect • Increased risk of flash flooding • High percentage of impervious surfaces • Food Insecurity	• US census definition: Areas with populations greater than 50,000 people
People living in close proximity to shoreline	• Highly susceptible to storm surges and flooding • Humidity raises the perceived temperatures and makes it harder to cool the body	• UCONN CT ECO Mapping tool ○ Past hurricane surge inundation information shows floods zones under varying hurricane severity
People living in remote areas	• Climate change causes more mild winters and larger tick populations, increasing the risk of exposure to vector borne diseases (e.g. Lyme disease) • Warmer temperatures make CT more habitable to insects carrying other diseases, including: Zika, Malaria, West Nile Virus • Isolation in extreme events and accompanying challenges such as food insecurity, power outages and access to emergency services	• List of rural towns can be found at CT State Office of Rural Health website • US Census definition: areas with populations less than 2,500 people

APPENDIX 3: Vulnerable Institutions

Appendix 3 - Vulnerable Institutions

Vulnerable institutions directly serve people of concern. Their roles range from providing child care to health care to housing management. People of concern, and the wider community, rely heavily on these institutions, and impacts to these institutions may therefore have wide ranging effects.

Special Considerations: The **Oversight Team** should work to identify these institutions in their community, who relies on these institutions, and what climate change impacts they are most vulnerable to. **Table 12** provides a list of commonly identified vulnerable institutions, their vulnerabilities, and resources on how to identify them in a specific community. Using **Table 12**, the **Oversight Team** should generate a list of institutions and reach out to representatives of these institutions to establish points of contact. The **Oversight Team** should inform the institutions of the community's intention to plan for climate change resilience and ask if these institutions already have ongoing plans to build resilience against climate change, respond to a climate emergency, or evacuate their residents/patients/students, and how those plans intersect with or differ from other state and local plans.

Table 12: Vulnerable Institutions.

Vulnerable Institutions	Vulnerability	Resources to Identify Vulnerable Institutions
Daycare centers	• Young children are highly dependent on caretakers • High child to adult ratio and children spending more time outdoors increases the risk of exposure to climate related health harms (e.g. heat) • Early exposure to climate change-related stressors increases risk of long term adverse mental health outcomes	• 211 Childcare website (locates daycares by town) • Local health department
Schools	• Elevated classroom temperatures negatively impact academic performance • Children experience increased risk of heat-related illness • Children are highly dependent on adults • Schools may be located in floodplains and other environmentally hazardous areas • School infrastructure may be outdated and pose health risks (ex. lead paint or asbestos exposures)	• List of CT schools can be found on the CT Data website • Local health department
Homeless shelters	• Shelters may not be equipped to handle increased occupancy needs as more homeless seek shelter from harsh outdoor conditions • Elevated levels of people living with preexisting medical conditions and substance abuse disorders, increasing risk of negative health outcomes if transportation and emergency medical infrastructure is compromised by severe weather/flooding	• List of homeless shelters by town can be found at the homeless shelters directory CT website • Map available on 211 CT website by searching "homeless"

Hospitals	• Patient health may be impacted by climate change-related disasters through several pathways, including:
	  ○ power outages,
	  ○ flooding and washed out roads that disrupt the medication and medical equipment delivery network, and
	  ○ psychological stress
	• Climate change-related disasters may impact patient health by
		• Official USA website, CT State
		• Local health department

	pushing hospitals over capacity, delaying patient care	
Community health clinics	● Patient health may be impacted by climate change-related disasters through several pathways, including: 　○ power outages, 　○ flooding and washed out roads that disrupt the medication and medical equipment delivery network, and 　○ psychological stress ● Climate change-related disasters may impact patient health by pushing clinics over capacity, delaying patient care	● Official USA website, CT State ● Local health department
Psychiatric & behavioral health centers	● Patients mental health may be negatively impacted by climate change-related psychological stress ● Many medications used to treat mental health disorders may increase the risk of heat related illness, making mental institutions especially vulnerable to power outages	● Local health department
Substance rehab centers	● Patients are especially vulnerable to disruptions in the care delivery system, increasing chances of relapse, greater substance use, and risk of substance use-related mortality	● Local health department
Prisons	● Rising temperatures increases the risk of heat related illness and mortality in facilities that are often poorly ventilated/air conditioned ● Increased frequency of extreme weather events may require changes to existing emergency plans ● Mental health disorders are widespread in prisons, climate change may worsen mental health outcomes	● List and interactive map can be found on CT State Department of Correction website
Nursing homes	● The elderly are at significant risk of poor health outcomes and mortality as a result of prolonged exposure to high temperatures ● Care for residents with compromised immune systems, making them especially vulnerable to infectious disease (e.g. waterborne diseases associated with flooding)	● List and interactive map can be found at CAHCF/CCAL website
Senior housing & assisted living facilities	● Same vulnerabilities as nursing homes, but residents are more independent	● Housing around CT can be found on the Residential Options for Older ● Adults page of the 211 CT website and following the links to the interactive map
Emergency shelters	● Buildings where community members gather in case of emergency are open to all, including high-risk populations	● Information in Regional Hazard Mitigation Plan
Community centers	● People may use the space for after-school child-care, as cooling/warming centers, and more.	● See local listings
Public housing	● Residents are at risk during extreme weather events. Power outages might lead to loss of medicine, and food supplies. ● Low-income residents may not be able to afford the increased utility costs during high heat or severe winter storm events	● U.S. Housing and Urban Development Field Office
Libraries	● Libraries are open to the public, including high-risk populations. They often serve people who are homeless as well as low income families and children who are at a higher risk to climate impacts.	● Local library

Appendix 4 - Community Lifelines

> **Community lifelines** are the critical infrastructure that uphold the health, safety, and overall function of the community, ensuring safe drinking water, heat, means for travel and evacuation, and electricity. Climate change may increase the likelihood that these systems fail. Community lifeline failures–resulting in food and medication spoilage, isolation from emergency services, and failure of lifesaving medical devices–will likely disproportionately threaten community members facing systemic social and economic barriers.

Climate change can impact these systems in several ways: storms and rising sea levels may cause floods that submerge low-lying roads and isolate areas in the community. High winds and the resulting debris can knock out power lines. Severe storms may damage cellular service towers. Storm surges and groundwater may compromise sealing on hazardous waste sites and spread toxic chemicals to nearby residences.

Damages to infrastructure impede community members' ability to evacuate or request help, and also hinder emergency responders' ability to act. It is crucial that these systems be prepared to withstand many of the impacts of climate change so that the community's most important resources do not become its greatest vulnerabilities. It is important to recognize that "critical infrastructure supports critical infrastructure" and therefore the loss of one component of critical infrastructure can make other components more vulnerable. Examples of specific challenges experienced by community members can be found in **Table 13** below.

Special Considerations: Several tools are available to identify community lifelines. The Hazard Mitigation Plan for a municipality will list the critical facilities and infrastructure that are important to the community and its emergency management offices. Critical facilities and infrastructure are also identified in the *Resilient Connecticut* vulnerability assessment report (2021) and the Connecticut Natural Hazard Mitigation Plan (2019). Other tools include CIRCA resources, the Critical Infrastructure Resilience Institute, and your regional Council of Government's Hazard Mitigation Plan.

The **Oversight Team** should identify the critical infrastructure that serves the community and identify the agencies and businesses that are responsible for maintaining this infrastructure. **Table 13** provides a list of common categories of critical infrastructure as well as examples that can be found in a community. The **Oversight Team** should reach out to the groups responsible for maintenance, inform them of the community's intention to plan for climate change resilience, establish points of contact, and find out if they currently have plans to harden their infrastructure against the effects of climate change and back-up plans for infrastructure failure and if those plans are consistent with other state and local plans.

Table 13: Community Lifetlines.

Community Lifelines	Example Hazards to People of Concern
Transportation Systems ● Pedestrian walkways and access-ways ● Bike lanes ● School Buses, Transit Buses, Routes and Bus Hubs ● Roads, Tunnels and Bridges ● Railways and Rail Stations ● Airports ● Elevators and Vertical Transportation	● Flooded bus terminals or roads isolating people from accessing food, help, or health care ● Extreme weather can shut down public transportation systems, including railways and buses, isolating people who do not own or cannot operate a vehicle ● Inability to access education, daycare, or child care
Electric Systems ● Power Lines ● Power Stations ● Substations ● Battery Storage Systems (solar, commercial and residential) ● Microgrids, if available	● Loss of refrigeration causing food and medication to spoil ● Failure of lifesaving medical devices ● Inability to charge electrical devices, including cell phones and computers ● Loss of power for elevators and vertical transportation, isolating people within their homes
Communication Systems ● Radio Station Towers ● Television Station Towers and Cables ● Telephone lines ● Cellular/Internet Towers ● Areas of community access to technology and devices	● Damage to radio or cell towers can prevent people from contacting emergency services or other forms of help ● Damaged communication infrastructure can exacerbate language barriers, and hinder people with limited english skills from accessing or being aware of emergency messaging ● Damaged/destroyed power lines and substations can isolate large areas of the community, making it difficult to identify and get urgent help to vulnerable community members ● Elderly people and other groups who are less likely to own laptops or cellphones may be completely isolated by downed telephone lines
Emergency Response Systems ● Police Stations ● Fire Stations ● Ambulance Bays ● Emergency Communications (Satellite telephones) ● Emergency Shelters ● Cooling and Warming Centers	● Emergency services such as local fire departments, police, and ambulances may be spread thin and have limited capacity to respond to all community needs in the event of a natural disaster, with greatest consequences faced by those who are unable to leave their homes ● Emergency Shelters that do not have adequate language services make it difficult for people with limited english skills to communicate their needs ● Damaged/destroyed/inaccessible cooling and warming centers place people who do not own or cannot afford thermal appliances (i.e. AC, space heaters, etc.) at greater vulnerability to extreme hot and cold conditions
Healthcare Systems ● Hospitals ● Nursing Facilities ● Assisted-Living Facilities ● Mental Institutions	● Inability to access pharmacies represents a serious health threat to community members on life saving medications ● Residents or nursing and assisted-living facilities require a greater degree of direct care and would suffer in the event of staffing shortages caused by impassable roads

Water and Sewage Systems • Water Treatment Facilities • Water Pumping Stations and Tanks • Sewage Treatment Facilities • Sewer Pumping Stations • Stormwater Collection and Conveyance Systems	• Heavy rains and storm surges can flood sewer drains and increase exposure to contaminated water, especially risking the safety of those with compromised health • Heavy rains can increase the amount of harmful bacteria in open water and cause water-borne disease, which would be especially dangerous for young children • Heavy rains and storms can flood water treatment facilities and pump stations, contaminating the surrounding environment with harmful bacteria
Food Systems • Grocery Stores • Food Markets • Emergency Food Reserves • Farms	• Extreme weather events can disrupt food transportation networks and cause shortages at grocery stores and impact emergency food reserves • Low income and communities of color are more likely to live in food deserts and the closure of a grocery store due to weather may cut them off from accessing fresh food
Flood Protection Systems • Levees • Flood walls • Flood control dams • Floodplains • Wetlands	• Extreme storms or rains can damage or overwhelm flood protection systems such as levees, dams, and flood walls • Vulnerable community members may lack the resources to repair flood damage causing mold to grow • Young children, elderly, and people with pre-existing medical conditions are more susceptible to mold that can grow in their home after a flood

Appendix 5 - Community Leader Survey Template

Use this survey to identify community leaders who may want to be a part of this process

1. Who are community leaders or religious/spiritual leaders in the area? List up to 6 names.

_____   _____

_____   _____

_____   _____

_____   _____

2. What are major community events? Who hosts/sponsors them? List up to 3 events and hosts.

_____

_____

_____

3. Do you attend public meetings? What public meetings do you want to attend on a regular basis in the community? List up to 3.

_____

_____

_____

4. Where do you go to get valuable information about community news?

_____

_____

_____

5. What are the neighborhood/community organizations that are most active in the community?

_____   _____

_____   _____

_____   _____

_____   _____

Other than your friends and family:

6. If someone needs help with (translation, advice, support, school recommendations, finding a job, housing) who would they go to? Please list up to 5 names.

_____

_____

_____

7. Who do you rely on to provide information about the community? Where would you go to get it? (organizations, newspaper, radio, social media websites [Twitter, Facebook])

_____

_____

_____

8. Who would you trust to represent your community?

_____

_____

_____

9. Who do you rely on to get things done in your community?

_____

_____

_____

Appendix 6 - Community Disaster/Evacuation Planning

An important piece of building climate resilience is making sure that the community's evacuation plans and infrastructure are prepared for the potential impacts of climate change. The community needs to update evacuation plans so that they are accessible and responsive to all community members, especially those identified in **Appendices 1-3**. In the case of evacuation, power outages, or other community disaster scenarios, certain groups will be particularly vulnerable. These groups might include:

- residents who rely on refrigeration for medication, or power to access supplemental oxygen

- residents with physical disabilities unable to independently evacuate from a residence

- residents who lack English language proficiency to understand evacuation communications

- prisons, hospitals, nursing facilities, and other institutions which may have internal emergency planning documents that conflict with wider community plans

- undocumented residents hesitant to seek community resources out of fear of authorities, arrest, being deported, or victimization

- hearing-impaired residents excluded from certain emergency alert systems

The community must establish clear criteria that determines when evacuation is necessary. This includes having guidelines on how and when the community will be informed when it is time to evacuate. Communications must be available in the appropriate languages for the community. Evacuation orders should be delivered with as much notice as possible once the appropriate community body becomes aware of a threat.

If the **Oversight Team** identifies a group with limited English proficiency, it will need to identify the best method to reach members of this group. Community evacuation messaging should be delivered in appropriate languages and through trusted outlets, including:

- linguistically and culturally appropriate trusted messengers and organizations such as community leaders, religious institutions, radio shows,

- town halls, emergency television or radio broadcasts,

- alert text messaging,

- reverse 911 calls,

- emergency lights and sirens.

Having clear, consistent evacuation criteria will help community members have an expectation of what they need to prepare for and when. In addition to developing evacuation plans the community must develop contingency plans for those who cannot or will not evacuate.

Resources with Guidance on Equity-Based Emergency Management Communications
[A People's Guide to Transforming Crisis and Advancing Equity in the Disaster Continuum (NAACP)](#)
[An Inclusive Guide for People with Access and Functional Needs (Montana Disability and Health Program](#))
[Alerting People with Disabilities and Access and Functional Needs (FEMA)](#)
[Guidance for Contacting Children, Faith-Based Organizations, Elderly Populations, and Other Groups During Emergencies (Florida Department of Public Health)](#)

Table 14

The community needs to have infrastructure ready and plans for evacuation, and community members must be made aware of all services they have access to. Questions the **Oversight Team** should answer include:

- Does the community have emergency shelters? Do they have enough capacity to secure the safety of all residents that may need to use them?

- Are there plans for more emergency shelters?

- Are these shelters capable of withstanding worsening climate impacts?

- Do the shelters have linguistically appropriate services?

- Are residents aware of these services?

Resilience Hubs

"Resilience Hubs use a physical space - a building and its surrounding infrastructure - to meet numerous goals, both physical and social. Resilience hubs are an opportunity to efficiently improve emergency management, reduce climate pollution and enhance community resilience. These spaces also provide opportunities for communities to become more self-determining, socially connected, and successful in the long-term."

Potential locations commonly include:
- sites where community members already go and trust (community centers, health centers, places of worship)
- underutilized community assets including emergency shelters, food pantries, and/or soup kitchens.
- sites with access to grid load information and feasibility for interconnection

Information adapted from Developing Resilience Hubs *(Urban Sustainability Directors Network 2019)*
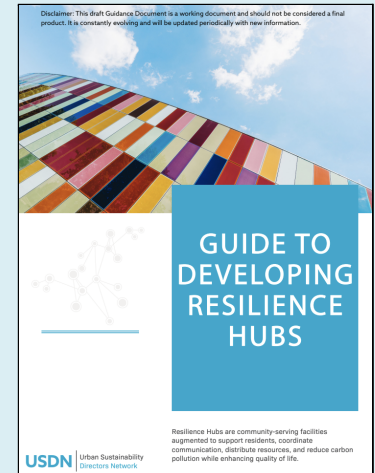
It is critical that there is consistency between institutions and levels of government to avoid conflicting policies. Community institutions should post evacuation plans that are consistent with local plans, which in turn must be consistent with state and regional plans. Planners should create a resource that lists all critical emergency and evacuation plans for the community. This list should include where to find the plan, who is responsible in each organization or committee for maintaining that plan, and their contact information. This document should include:

- Evacuation/emergency plans for vulnerable institutions (e.g. hospitals, schools, daycares, nursing care facilities)

- Local and state evacuation/emergency plans (e.g. transportation routes, shelter in place orders)

- Emergency plans for critical infrastructure (e.g. emergency transportation)

- Other plans related to climate adaptation and resilience building (e.g. State Plan of Conservation and Development, Hazard Mitigation Plan)

As part of the planning process, participating community members should develop a plan for how to routinely disseminate evacuation procedure updates to all residents.

This section samples worksheets your team can use in discussions to arrive at lists of people to contact and interventions to recommend. These worksheets are a starting point to help you identify needed areas of research and relationship-building.

Appendix 7 - Worksheet 1: People of Concern

People of concern disproportionately experience social and economic stressors and risks to their health and safety due to climate change. These include, among others:

- People of color
- People who are immigrants/migrants
- People with limited English
- People who are low-income
- Elderly people (65 years and older)

- Young children (under 5 years)
- People who are homeless
- People with mental disabilities
- People with physical disabilities
- Pregnant people

Who are the people most at risk of climate change threats in your community?

_____

_____

_____

Where do they live, work, or spend time?

_____

_____

How are they impacted by climate change?.

_____

_____

_____

What are organizations that can help you identify and engage people of concern? What steps can you take to build or grow relationships with the identified organizations?

Ex. Ethnic organizations and media, civil rights organizations, local health department, school district, social service agencies, daycare centers, day homes (See Appendix 1 for more)

_____

_____

_____

Appendix 8 - Worksheet 2: Environmentally Exposed People

Environmentally exposed people experience increased risk to their health, safety, and wellbeing from climate change based on factors not necessarily related to race/ethnicity or socioeconomic status. Factors affecting a person might include occupation, location, or infrastructural quality of a home or workplace. People facing higher risk include:

- People working outdoors
- People working in hazardous indoor spaces (ex. HVAC or kitchens)
- People living in flood zones
- People living in substandard housing
- People in urbanized areas
- People living close to the shoreline
- People living in remote area

Who are the environmentally exposed people in your community?

_____

_____

_____

Where do they live, work, spend time?

_____

_____

_____

How are they impacted by climate change?.

_____

_____

_____

What organizations can help you identify/engage environmentally exposed people?

Ex. Local labor union(s), community organizations, employers, state agencies, housing department, building inspectors, mapping tools (See Appendix 2 for more)

_____

_____

Appendix 9 - Worksheet 3: Vulnerable Institutions

Vulnerable institutions directly serve people of concern. Their roles range from providing child care to health care to housing management. People of concern, and the wider community, rely heavily on these institutions, and impacts to these institutions may therefore have wide ranging effects.

- Daycare centers
- Schools
- Homeless shelters
- Hospitals
- Community health clinics

- Psychiatric and behavioral health centers
- Substance rehab centers
- Prisons
- Nursing homes
- Senior housing & assisted living facilities

- Emergency shelters
- Community centers
- Public housing
- Libraries

What are the vulnerable institutions in your community?

_____

_____

_____

Who relies on these institutions?

_____

_____

_____

Do these institutions have climate change/disaster plans? Are they adequate and consistent with those of the municipality?

_____

_____

What organizations can help you identify and engage vulnerable institutions?

Ex. 211 CT, local health department, CT data website, local directories, institution websites, regional hazard mitigation plan, mapping tools (See Appendix 3 for more)

_____

_____

Appendix 10 - Worksheet 4: Community Lifelines

Community lifelines are the critical infrastructure that uphold the health, safety, and overall function of the community, ensuring safe drinking water, heat, means for travel and evacuation, and electricity. Climate change may increase the likelihood that these systems fail. Community lifeline failures–resulting in food and medication spoilage, isolation from emergency services, and failure of lifesaving medical devices–will likely disproportionately threaten community members facing systemic social and economic barriers.

Transportation Systems
- Buses, railways, bike paths, roads and bridges

Emergency Response Systems
- Emergency shelters, ambulance bays

Food Systems
- Grocery stores, markets, farms

Electric Systems
- Power lines, substations, power stations, solar grids

Healthcare Systems
- Hospitals, nursing facilities, mental institutions

Flood Protection Systems
- Dams, levees, floodplains, wetland

Communication Systems
- Radio towers, telephone lines, cellular towers

Water and Sewage Systems
- Treatment facilities, pump stations

What are the community lifelines in each category that serve your community?
See Appendix 4 for more examples

_____

_____

_____

Which people would be most impacted by failures of each of these systems? How?

_____

_____

How can each of these systems be made more resilient to the impacts of climate change?

_____

_____

_____

Meet the Research Team

Ian Reilly, Yale Center for Environmental Justice Lead Researcher for GC3 Equity and Environmental Justice Working Group

Ian Reilly (he/him) is a graduating Master of Public Health candidate at Yale School of Public Health studying health policy and the projected impacts of climate change on health and the environment. Other notable roles he has held include providing environmental justice education to CT municipalities at Save the Sound and working closely with CT residents living with opioid use disorder at Yale School of Medicine. He has a passion for education and has held Teaching Assistant positions for multiple courses at Yale University, including Social Justice and Health Equity. Ian moved to New Haven, CT four years ago after graduating from the University of Vermont in his home state.

Molly Johnson, Yale Center for Environmental Justice Research Assistant for GC3 Equity and Environmental Justice Working Group

Molly Johnson (she/her) is a Yale School of Environment '23 Master of Environmental Management Candidate studying solutions that address climate change and environmental and climate justice issues while encouraging healthy communities. As a student, Molly is also an Agroforestry Berms Manager for Yale Farm and is a Student Associate for Yale Center for Climate Change and Health. Prior to graduate school, she helped to plan the National Adaptation Forum, which supports climate change adaptation practitioners in North America. She also served as a Tribal Resilience AmeriCorps VISTA at Fond du Lac Tribal and Community College where she helped advance food sovereignty efforts. She grew up in North Branford, CT.

Emma Zehner, Yale Center for Environmental Justice Research Assistant for GC3 Equity and Environmental Justice Working Group

Emma Zehner (she/her) is a Master of Environmental Management candidate at the Yale School of the Environment studying urban climate adaptation, coastal resilience, and environmental and climate justice in planning processes. Emma previously worked on the communications and publications team at the Lincoln Institute of Land Policy. She has also held positions at Vera Solutions, DataHaven, and Slate. She is also currently a student research assistant with the Yale Program on Climate Change Communication and an intern with the Regional Plan Association. Emma is from New Haven, CT, and graduated from Williams College with a degree in English and American Studies.