

# Climate Resilience

## Promoting Sustainability and Decarbonization



There are new funding opportunities to improve climate resilience for communities and buildings. This guide provides background information on key funding and resources to help HUD program participants prepare for natural disasters and extreme weather events by:

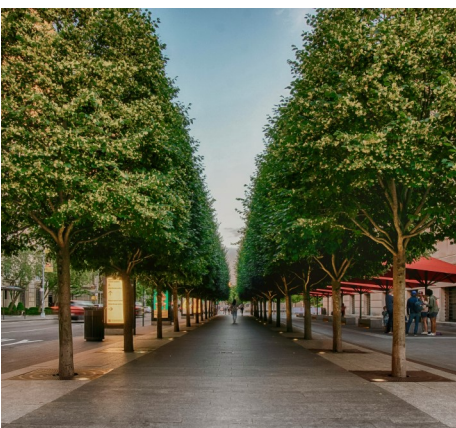
- Describing the importance of climate resilience and connecting climate resilience to other sustainability and decarbonization concepts;
- Providing resources and best practices for how to improve climate resilience; and
- Identifying funding that can be used to make climate resilience related improvements.

### ***Why is climate resilience important?***

Extreme weather results in risks to communities, people, and property from events such as storms, fires, floods, erosion, extreme heat, and drought. Climate resilience includes actions to proactively mitigate these risks and respond to, or recover from, their impacts. As weather events become more severe and more communities are impacted, climate resilience measures are increasingly important. Proactive investments in climate resilience improvements can also reduce the financial impacts of natural disasters and extreme weather events. Climate resilience takes many forms, such as:

- **Building improvements** to mitigate the impacts of a specific hazard like wind or fire;
- **Plans** for how to react to extreme weather at the building or community level;
- **Activities** to recover from an extreme weather event; and
- **Infrastructure improvements** to reduce the impact of losing critical systems, such as energy independence to reduce impacts from power outages.

Climate resilience is directly connected to broader sustainability and decarbonization efforts. **Benchmarking** and working to meet **building energy standards** helps building owners identify **energy conservation measures** to reduce a building's energy usage, putting less strain on the electrical grid. **Renewable energy systems** enable buildings to maintain power during a power outage. The sum of these actions can make buildings and communities more climate resilient.



### ***Climate Resilience in Action: New York City, New York***

New York City's *NYC CoolRoofs* and *Millions Trees NYC* are two initiatives contributing to the city's climate resilience and sustainability. *NYC CoolRoofs* is an entry level workforce development program focused on cooling rooftops through reflective painting, which reduces internal building temperatures by up to 30% during the summer months. *Million Trees NYC* is a partnership between the city and a local nonprofit that focuses on tree planting, promoting resilience by increasing cooling, reducing stormwater runoff, and reducing erosion.

## Climate resilience resources for HUD supported communities

### Best Practices to Prepare for Climate Resilience:

The following best practices are a great starting point when considering how to enhance climate resilience at the building or community level.

- **Understand resilience measures** to identify what to prioritize. The [HUD Community Resilience Toolkit](#) describes actions to take for specific hazards. The [FEMA resource on nature-based solutions](#) describes how to use nature-based resources to improve the resiliency of the built environment.
- **Assess hazards and develop plans** by evaluating the resources and infrastructure in your area for vulnerabilities to [natural hazards or other risks](#). After analyzing potential risks, targeted solutions can be developed at the building and community levels.
- **Develop relationships** with local stakeholders such as nonprofits, government agencies, and community leaders. Relationships strengthen resilience planning by helping local stakeholders learn about the resources and support each partner provides, including financing programs. Check with local, state, and federal offices to identify ongoing and planned climate resilience work.
- **Use mapping tools** developed by federal agencies to help plan. The [US Climate Resilience Toolkit](#) provides background information and an assessment tool; [Heat.gov](#) has resources on extreme heat and an equity mapping tool; and FEMA has a [flood map](#) and a [resilience analysis planning tool](#).

### Funding Opportunities:

Resilience funding opportunities are generally connected to specific focus areas.

- **Natural Disasters:** FEMA’s [Building Resilient Infrastructure and Communities \(BRIC\)](#) program funds hazard mitigation activities in areas that have had a major disaster declaration within the past seven years. FEMA’s [Flood Mitigation Assistance Program](#) funds projects that reduce the risk of repetitive flood damage. The [WaterSmart Programs](#) and the [Emergency Watershed Protection Program](#) also fund a variety of activities related to protecting watersheds before and after natural disasters. The USDA Forest Service’s [Community Wildfire Defense Grants](#) fund firefighter training, fire management, planning, and equipment acquisition.
- **Urban Forests:** USDA Forest Service’s [Urban and Community Forestry Program](#) funds tree planting which helps mitigate the impacts of extreme heat conditions.
- **Environmental Justice:** The Inflation Reduction Act (IRA) has funded a suite of environmental justice grants at the Environmental Protection Agency (EPA) including the [Community Change Grants](#), [Thriving Communities Program](#), [Brownfield Cleanup Grants](#), and [Government-to-Government Program](#). These environmental justice grants are flexible and accept a wide range of projects that benefit a community, including climate resilience projects.
- **For more funding opportunities, visit the [Build for the Future Funding Navigator](#) on HUD Exchange and select the “Resiliency” project type in the first drop-down box and project subtypes that best suit your needs in the second drop-down box.**

These resources are just the start!

Look for other information that matches your needs here:

[Build for the Future](#) — A wealth of technical resources on energy efficiency and resilience

[Build for the Future Funding Navigator](#) — A user-friendly searchable database for IRA and BIL grants

