



# Climate Resilience: Lessons from the Field

*September 19, 2024*



## TODAY'S AGENDA

Welcome

Resilience Academy Overview

Building the Field for Climate Resilient Housing

Panel Discussion

Resources and Close Out

Climate Resilience: Lessons from the Field

## Featured Speaker:



### Marion McFadden

Principal Deputy Assistant  
Secretary, Office of Community  
Planning and Development



## Climate Resilience: Lessons from the Field

### Panelists:



**Oji Alexander**  
Executive Director  
People's Housing Plus  
New Orleans, LA



**Rachel Maas**  
Director of Climate Action  
Central City Concern  
Portland, OR



**Monica Martinez**  
Executive Director  
The Fax Partnership  
Denver, Colorado



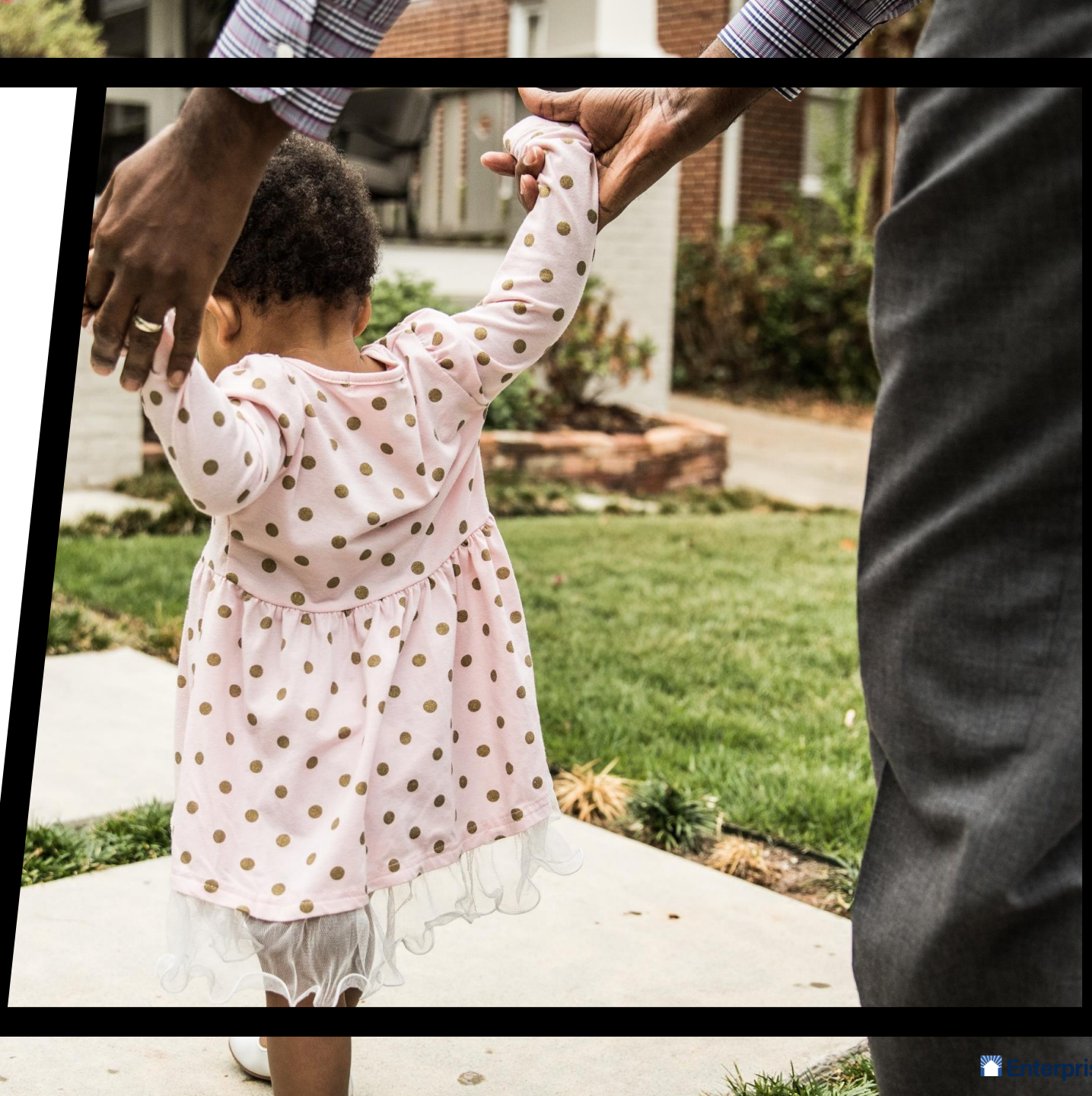
# RESILIENCE ACADEMY OVERVIEW





# Home is Where Life Happens and Futures Begin

An Introduction to  
Enterprise Community Partners



## OUR APPROACH

### THE CHALLENGE

Millions of families across the U.S. can't afford a place to call home. The system doesn't work.

### THE SOLUTION

Together with our partners, we focus on the greatest need – the massive shortage of affordable rental homes – to achieve three critical goals:



#### **Increase the Supply of Affordable Housing**

to meet the urgent need.



#### **Advance Racial Equity**

after decades of systematic racism in housing.



#### **Build Resilience & Upward Mobility**

to support residents, strengthen communities to be resilient to the unpredictable and make upward mobility possible.



PREV

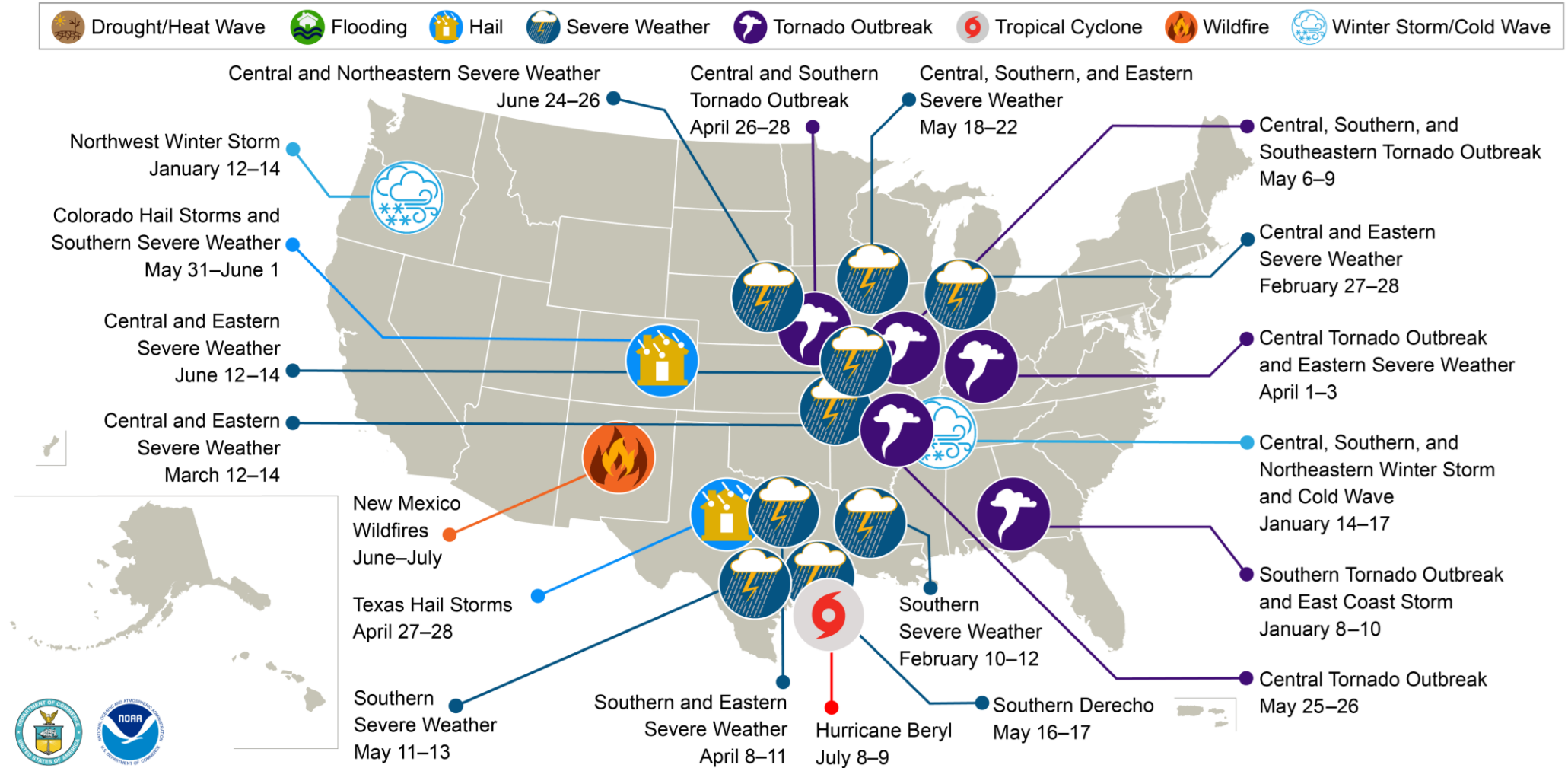


NEXT



# Climate Resilience: Lessons from the Field

## US 2024 Billion-Dollar Weather and Climate Disasters



This map denotes the approximate location for each of the 20 separate billion-dollar weather and climate disasters that impacted the United States through August 2024.

## Climate Resilience: Lessons from the Field

# The Challenge

- Due to its age, physical conditions and maintenance needs, most of the country's affordable housing stock cannot withstand our changing climate.
- Low-income communities have less economic resources to prepare for and recover from climate hazards including heat waves, poor air quality, flooding, and other impacts.
- The pace, and expense, of disasters has increased dramatically.
- As temperatures and sea levels rise, so do the number of low-income households that are at risk.





Climate Resilience: Lessons from the Field

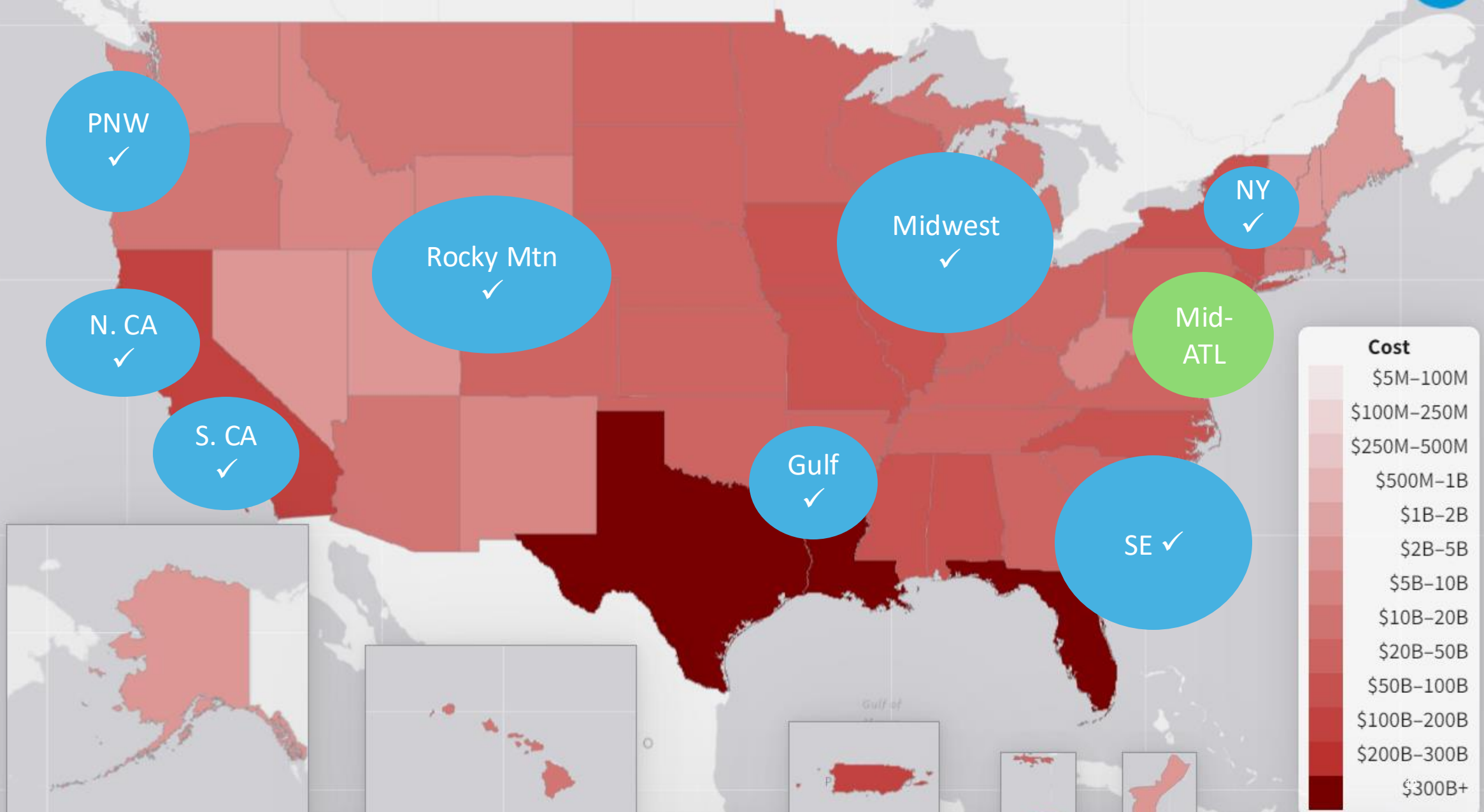
# Climate Impacts on Housing

- Higher Insurance Premiums
- Resident Safety
- Reduced Land Availability
- Costly Retrofits
- Loss of Affordable Housing Stock
- Higher Property Costs
- Energy and Utility Shortages
- Organizational Preparedness and Operations
- Impacts on Homes, Dwellings, Communities





# 1980-2024\* Billion-Dollar Weather and Climate Disaster Cost (CPI-Adjusted)



Climate Resilience: Lessons from the Field

# Enterprise Resilience Academy



- Training Series
- Project Site Visit
- Peer-to-Peer
- Technical Assistance
- Guide to Funding and Finance
- Grants

<https://www.enterprisecommunity.org/blog/enterprise-climate-resilience-academies>



Climate Resilience: Lessons from the Field

# Enterprise Resilience Academy

- 7 Resilience Academies (Southeast, Gulf Coast, New York/NJ, West Coast, Rocky Mountain, Midwest, Mid-Atlantic)
- 130 affordable housing owner/operator cohort members
- 23 states represented
- 37 academy sessions
- \$525,000 in grants to cohort members





# FEATURED SPEAKER

Climate Resilience: Lessons from the Field

## Featured Speaker:



## Marion McFadden

Principal Deputy Assistant  
Secretary for Community Planning  
and Development



# Enterprise Climate Resilience: A Look at the Past as We Move Towards the Future

Marion McFadden, Principal Deputy Assistant Secretary, Office of Community Planning and Development





# Hurricane Sandy (2012)

- Storm
  - Category 1-3 hurricane
- Deaths
  - At least 159 deaths in U.S. (direct/indirect result)
- Damage
  - Left 200,000 people without shelter
  - 8.5 million people lost power
  - Estimated \$71.4 billion in property damage
  - Damaged/destroyed more than 650,000 homes
- Amount allocated
  - CDBG-DR: \$12,083,017,000
  - Rebuild By Design: \$930,000,000



# Hurricane Sandy Rebuilding Task Force

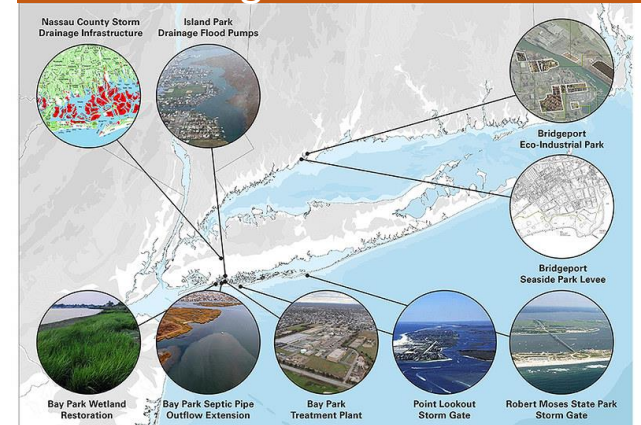
- White House created task force to collaborate with local and state governments and nonprofits throughout the Northeast including 23 federal agencies and offices
- Dispensed nearly \$50 billion appropriated by Congress for disaster recovery
- Highlights of the task force:
  - Allowed owners to make emergency repairs quickly
  - Prevented homeowners from being forced out of their homes due to short-term financial hardship
  - Streamlined process for small businesses to access loans and contracting opportunities
  - Worked with HUD to release toolkits on how to utilize disaster funding to help communities design effective home rehabilitation and buyout
  - Launched the Rebuild By Design competition
  - Developed a wide-ranging rebuilding strategy that included 69 recommendations for long-term disaster recovery



Resilient Bridgeport



Living Breakwaters



Atlantic Ocean: Eco-government Strategies



# Hurricane Maria (2017)

- Storm
  - Category 5 hurricane
  - Strongest storm to hit the island in 90 years
- Deaths
  - Responsible for nearly 3,000 deaths
- Damage
  - Infrastructure
    - Damage to electric grid caused 11-month blackout
    - Additional damage to roads, hospitals, schools, and water systems
    - Puerto Rico's government estimated it would need \$132 billion to repair and replace damaged infrastructure
  - Housing
    - Destroyed more than 24% of housing units (~300,000)
    - Damaged 92% of housing units (more than 1.1 million)
- Amount Allocated
  - CDBG-DR and CDBG-MIT: \$20,223,446,230

## Photos: Hurricane Maria Decimates Puerto Rico

U.S. territory's authorities warn residents they face a long, difficult and expensive path to recovery after the storm



8 of 16

Concrete power line poles fell across a highway in Luquillo, Puerto Rico, after the area was hit by Hurricane Maria. RICARDO ARDUENGO/AGENCE FRANCE-PRESSE/GETTY IMAGES

Source: The Washington Post: [Hurricane Maria Slams Into Puerto Rico - WSI](#)





# Preventative Pre-Disaster Methods

## Lessons from Puerto Rico

- Publication of *Keep Safe, A Guide for Resilient Housing Design in Island Communities* to identify practical strategies for building owners to make their properties more resilient
- Increased understanding of how to provide strategies outside of Puerto Rico



# How is HUD Taking Action?

## Climate Action Plan

- Increase climate resilience
- Reduce greenhouse gas pollution
- Pursue environmental justice

## Heat Plan

- Build awareness about the dangers of extreme heat and develop solutions to reduce the negative impacts of extreme heat on communities throughout the country
- Issue guidance and flexibility to Public Housing Authorities to increase utility allowances for cooling for the 1.6 million residents in public housing
- Provide an Extreme Heat Webpage which consolidates resources and technical assistance on heat and climate resilience
- Collaborate with Federal Partners to provide resources to communities

## Green and Resilient Retrofit Program (GRRP)

- Provide funding to owners of HUD-assisted multifamily housing to make them greener, healthier, and safer for low-income households, seniors, and persons with disabilities
- A total \$842.5 million has been awarded, and will support 182 properties and more than 22,436 homes



# How is CPD Taking Action?



Community Engagement and Resilience Toolkit



Resilience and Barriers in Consolidated Plan



Homelessness Response



Climate Communities Initiative (CCI)



Rulemaking for Resilience



CDBG-DR

# Community Engagement in Disaster Recovery

## Why is it important?

- Disasters magnify vulnerabilities and inequities
- Barriers to recovery and disaster assistance
- Collaboration with stakeholders, community members, and nonprofit organizations

## The primary goal of citizen participation:

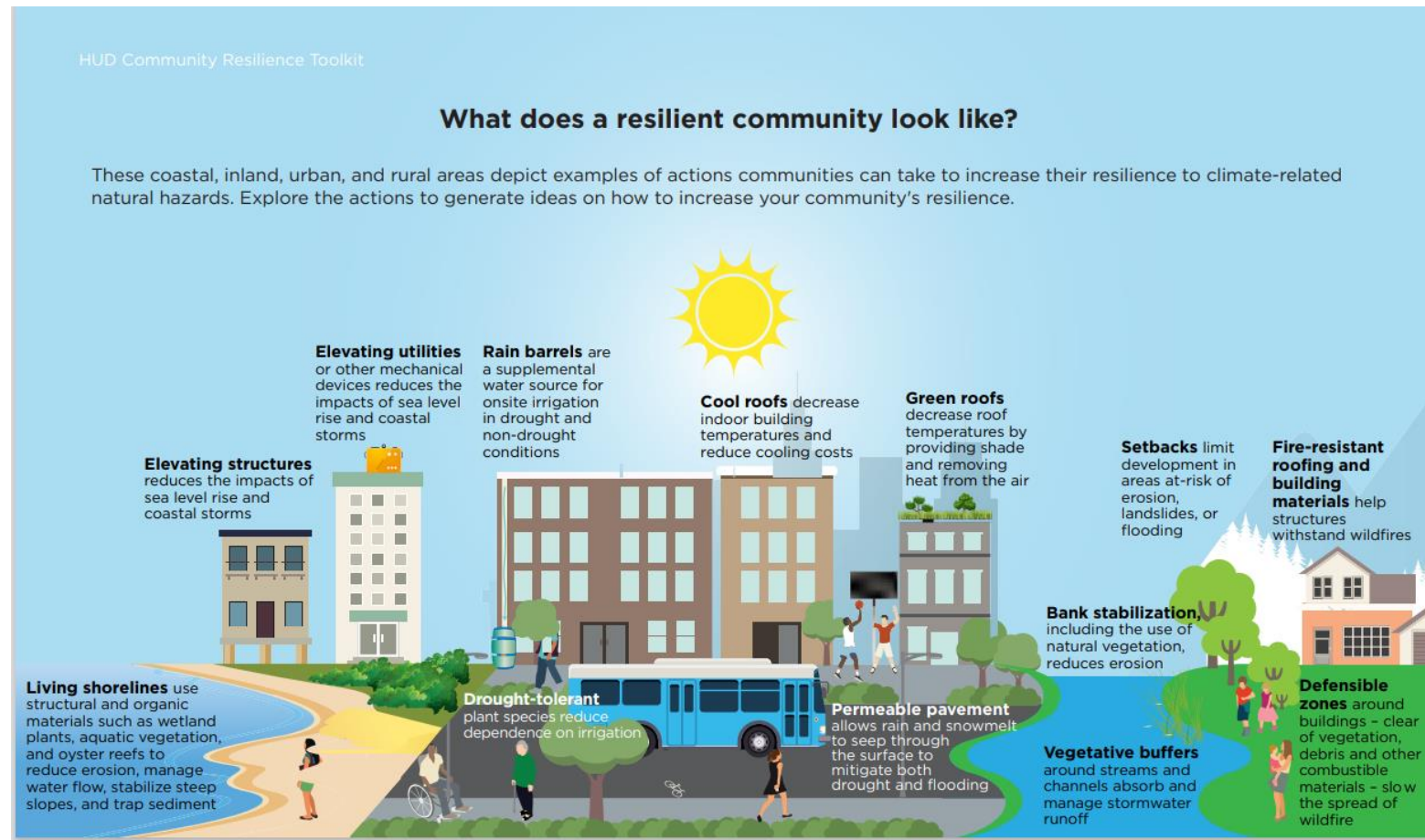
- To provide low- and moderate-income (LMI) residents of the community the opportunity to actively participate in the planning, implementation, and assessment of the programs and projects where CDBG-funded activities will take place





# Resources for Resilience

- **The HUD Community Resilience Toolkit** provides innovative strategies and tools communities can adopt to enhance resilience to climate-related natural hazard risks such as extreme heats  
(Link: <https://www.hudexchange.info/resource/5981/community-resilience-toolkit/>)
- **The Resilient Building Code Toolkit** provides guidance to CDBG-DR and CDBG-MIT grantees on rebuilding to more resilient codes and higher standards  
(Link: <https://www.hudexchange.info/resource/6701/resilient-building-codes-toolkit/>)
- **The Citizen Participation & Equitable Engagement (CPEE) Toolkit** aids CDBG-DR grantees in centering equity in disaster recovery programs through an enhanced citizen participation process  
(Link: <https://www.hudexchange.info/programs/cdbg-dr/cpee-toolkit/introduction/>)



# Homelessness Response

## Rapid Unsheltered Survivor Housing Program (RUSH)

- The RUSH program was first launched in 2022, and to date nearly \$28 million has been awarded to disaster impacted areas to support people who were experiencing homelessness before disasters
- Supports activities benefiting:
  - Individuals and families experiencing homelessness;
  - Those living in an emergency shelter, transitional housing, or a place not meant for human habitation;
  - People at risk homelessness; and
  - Those who have below 30 percent of area median income and either live in severe overcrowding, face eviction in the next 21 days, or have another risk factor for homelessness.
- Eligible Activities:
  - Outreach assistance
  - Emergency shelter
  - Rapid re-housing
  - Homelessness prevention assistance and supportive services

## Recovery Homelessness Toolkit

- Provides guidance to address gaps in local disaster planning and response to ensure an inclusive disaster response that protects people experiencing homelessness



# Climate Communities Initiative



- In 2023, HUD and Enterprise launched the 18-month Climate Communities Initiative (CCI) to support CDBG entitlement communities with planning and implementing long-term equitable climate resilience through technical assistance.
- 44 CDBG grantees received technical assistance through peer community cohorts, one-on-one direct TA, and core topic sessions. The communities are split into seven cohorts based on their unique needs and climate vulnerabilities.
- One cohort focused on sunbelt cities that face an increased risk of extreme heat. Technical assistance delivery focuses on incorporating strategies on extreme heat resilience.
- Participants stated that CCI had helped them realize the importance of incorporating resilience more thoroughly into their CDBG planning processes.





# Pre-Disaster Housing Planning Initiative

- In this first-of-its-kind partnership between FEMA, HUD and states, the initiative was created to help build local capacity and ensures states, Tribal Nations and territories adopt a proactive approach to housing recovery. The first cohort included the states of Louisiana, Montana, New Jersey, and Washington
- Highlights from this initiative were published in the Pre-Disaster Housing Planning Initiative report. Key findings in the report include the importance of identifying and addressing housing recovery challenges in a non-disaster environment, the benefit of information sharing among states and the value in tailoring federal support and resources to the unique needs and challenges of each state
  - Louisiana used the Initiative to revise its 2019 Disaster Housing Strategy and Montana updated its Disaster Housing Strategy Framework. New Jersey created a Housing Recovery Support Function (RSF). Washington revised its existing RSF plan for housing and formed a Disaster Housing Committee to continue the work the State began under the PDHI
- Due to the success of this partnership, both agencies will be initiating a second cohort with new state partners later this month!



# Rulemaking

## **Federal Floodplain Risk Management Standards (FFRMS)**

- Increases elevation requirements for new construction and substantially improved structures and ensures residents are aware of and prepared for potential flooding by strengthening the notice standards for buyers and renters in floodplains

## **Minimum Energy Standards (MES)**

- Published final energy standards for new construction and substantial rehabilitation projects
- Will yield significant annual and lifetime cost savings to renters, improve resident health and comfort, and increase the climate resilience of both single family and multifamily housing
- The updated standards are expected to save families more than \$950 per year, with homeowners saving almost \$25,000 over a 30-year mortgage or \$15,000 after financing, and will reduce emissions that is the equivalent of removing 46,000 cars from the road annually

## **Updated Radon Policy**

- Radon is the number one cause of lung cancer in non-smokers and is responsible for about 21,000 lung cancer deaths every year
- HUD increased its commitment to radon awareness and the importance of addressing the risk of residential radon exposure. HUD is requiring that radon be considered as part of the HUD environmental review process



# Strengthening the Office of Disaster Recovery

## Permanent Authorization

- Achieving Permanent Authorization will allow for consistent budget allocations to the Office of Disaster Recovery
- Allow the Office of Disaster Recovery to create rules and regulations
- Streamline the process for delivering funding to grantees

## CDBG-DR Universal Notice

- HUD will soon publish a comprehensive notice that would standardize the CDBG-DR process and requirements
- The Notice will be informed by public comments received through the first ever Request for Information on disaster recovery, which solicited feedback on how the Department can modify, streamline, and reduce administrative burden





**Thank you!**

**Questions?**



**PANEL**

## Climate Resilience: Lessons from the Field

### Panelists:



**Oji Alexander**  
Executive Director  
People's Housing Plus  
New Orleans, LA



**Rachel Maas**  
Director of Climate Action  
Central City Concern  
Portland, OR



**Monica Martinez**  
Executive Director  
The Fax Partnership  
Denver, Colorado





## Climate Resilience: Lessons from the Field

# People's Housing Plus

New Orleans, LA



**Oji Alexander**  
Executive Director



- **Year Founded:** Incorporated in 2022 through a strategic merger between 3 New Orleans based affordable housing CDCs that had been around since hurricane Katrina.
- **Staff Size:** 7
- **Portfolio:** 256 single family homes for homeownership (14 under Community Land Trust) and 2 rental units, 12 single family under construction, 1 mixed use and 4 plex of rental housing in predevelopment
- **Primary Climate Hazards:** hurricane/tornadoes, sea rise/land loss, localized flooding
- **Climate/Resilience Projects:**
  - All new single-family homes built to Fortified Roof, Energy Star standards with green infrastructure incorporated into all.
  - Completed 30 Fortified Roof retrofits on older homes
  - Exploring solar with battery backup

## Central City Concern

Portland, OR



**Rachel Maas**

Director of Climate Action



- **Year Founded:** 1979
- **Staff Size:** 1400
- **Portfolio Size:** 34 properties, 2600 units of housing
- **Primary Climate Hazards:** Seismic, extreme temperatures, storms, outdoor air quality, wildfires, power outages
- **Climate/Resilience Projects:**
  - Development of a Climate Hazard Vulnerability Assessment and Database
  - Development of a Climate Emergency Resident Readiness Guide

## The Fax Partnership

Denver, CO



**Monica Martinez**  
Executive Director



- **Year Founded: 2004**
- **Staff Size:** 9, five languages on staff
- **Portfolio Size:** Emerging
- **Primary Climate Hazards:** Wildfires, Drought, Flooding, Extreme Heat, Severe Winter
- **Mission:**
  - Strengthen and support those that live and work on the East Colfax corridor while advancing a vision of equitable development
  - Business Support Office
  - Resident Support Office
  - Equitable Development Office



# RESOURCES

## Climate Resilience: Lessons from the Field

# Climate Resilient Affordable Housing Resources



### Lessons Learned

Implementation of the first few Academy cohorts has provided valuable insights related to both program implementation and outcomes that supported Enterprise's goal of continuous improvement. These insights were gained through the survey findings, as well as Enterprise staff reflections as part of the program implementation and evaluation processes. The architects and administrators of the program, Enterprise's Building Resident Futures team, were able to use these insights to make several modifications to the model that enhanced the experience for participants. A few examples of these lessons learned are described below and will be further explored in the final evaluation report at the conclusion of the Academies.

One lesson learned during the implementation of the program pertained to the inclusion of specific types of organizations as participants in the Academy. A few of the organizations in the early cohorts did not own or operate affordable housing at the time of their participation. This meant that a large portion of the Academy content, such as assessing portfolio risk and retrofitting units and buildings, was not directly relevant to them. The Building Resident Futures team determined that to achieve maximum benefit in remaining Academies, participants must be active owners or operators of affordable housing. This became a requirement for participation in future cohorts, making the Academy content more directly relevant and applicable to all participants.

<https://www.enterprisecommunity.org/resources/enterprise-resilience-academies-report>

Climate Resilience: Lessons from the Field

## Climate Resilient Affordable Housing Resources

- [Climate Risk Resource Reduction Hub](#)
- [Power Forward Communities Interest Form](#)
- [Inflation Reduction Act Funding for Affordable Housing](#)
- [What's Possible](#)



# Thank you!

## Contact Us:

### **Elizabeth Richards**

Sr. Program Director, Building Resilient Futures

[erichards@enterprisecommunity.org](mailto:erichards@enterprisecommunity.org)

### **Krista Egger**

Vice President, Building Resilient Futures

[kegger@enterprisecommunity.org](mailto:kegger@enterprisecommunity.org)

### **Shivali Gowda**

Resilience Fellow, Building Resilient Futures

[sgowda@enterprisecommunity.org](mailto:sgowda@enterprisecommunity.org)