



Addressing Housing and Climate Impact

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POLICY INNOVATION

LENDING

DEVELOPMENT

ENERGY SOLUTIONS

Addressing Housing and Climate Impact

Jared Lang
Assistant VP, Sustainability
National Housing Trust



About NHT

The National Housing Trust protects, improves and maintains existing affordable housing so that low-income families can live in quality neighborhoods with access to opportunities.

Policy Innovation

Lending

Real Estate Development

Energy Solutions



Two Approaches to Climate Impact

1. Reducing Impact through Carbon Reduction
 - Energy Efficiency
 - Renewable Energy Generation
2. Resilience/Preparation for Changing Climate

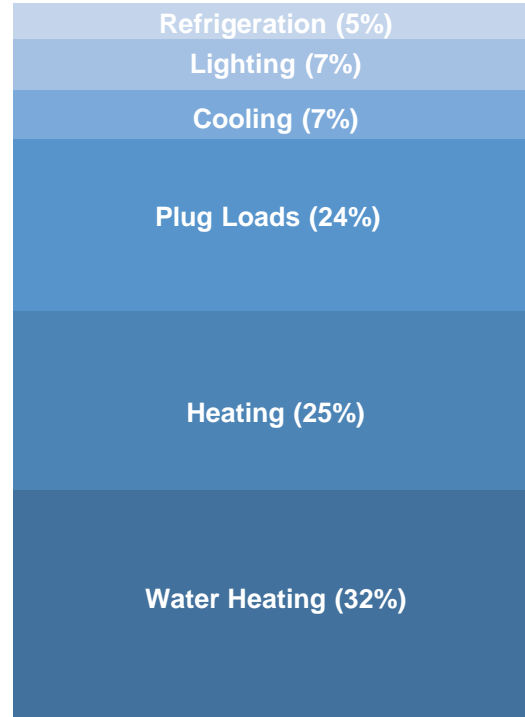


Carbon Reduction:

Energy Efficiency

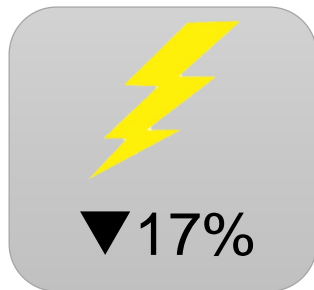


Multifamily Rental Energy Usage



Better Buildings Challenge

Energy (2018)



Water (2018)



\$175,000 A YEAR IN SAVINGS
\$1.75 MILLION OVER 10 YEARS



Carbon Reduction:

Renewable Energy Generation



NHT Renewable

Garden Apartments with Pitched Roofs

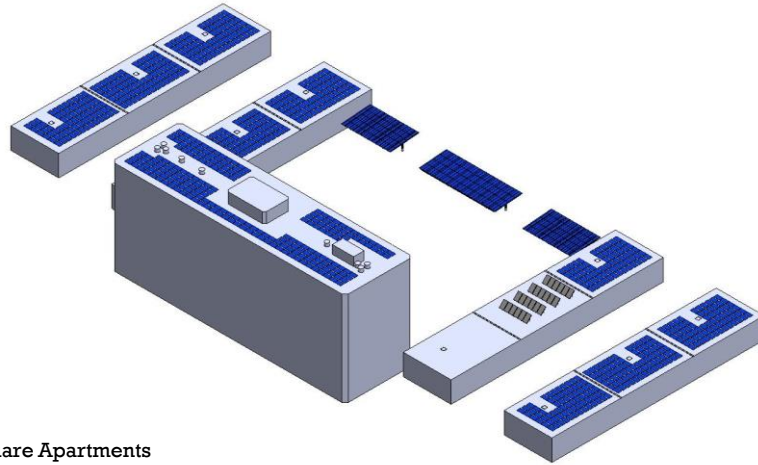


City Gardens
Santa Anna, California



NHT Renewable

Highrises and Townhomes with Flat Roofs



Channel Square Apartments
Washington, D.C.



NHT Renewable

Flat Roofs on Structural Supports



R Street Apartments, Washington, D.C.



NHT Renewable

Carports and Canopies



Channel Square Apartments
Washington, D.C.



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Fields



Denver Housing Authority Community Solar Field, Aurora, Colorado



NHT Renewable

Walls



Nixon Peabody Law Office, Washington, D.C.



Resiliency:

Preparing for a Changing Climate



Multifamily Resiliency Assessment Tool

RESILIENCE AND SOLAR ASSESSMENT TOOL USER MANUAL

DC DOE Resilience Assessments/Solar for Affordable Housing
SOLAR FOR ALL



★ ★ ★ DEPARTMENT
OF ENERGY &
ENVIRONMENT

Enterprise

DC

NEW ECOLOGY

CleanEnergy Group
Institute of Energy, Environment & Policy



Threats Identified

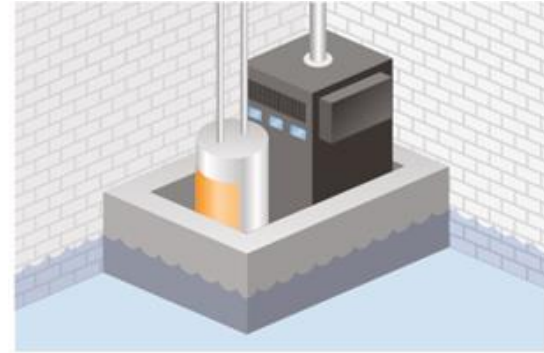
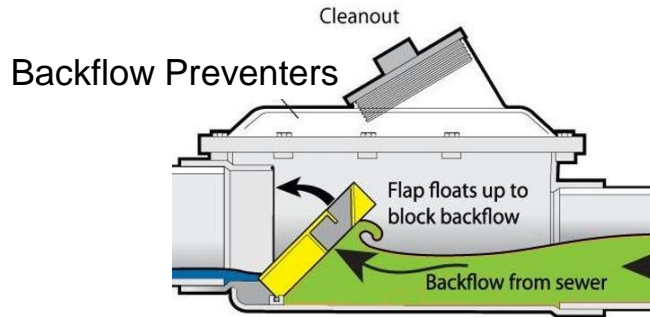
Stormwater flooding					
Extreme heat					
Electric & Water outage					
Sewer backup					
Carbon monoxide					
Pests					



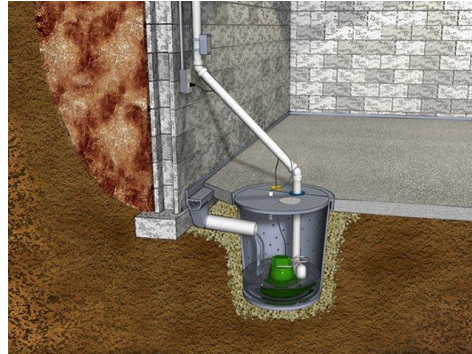
Mitigation: Emergency Planning



Mitigation: Flood Management



Walling off Equipment



Sump Pumps



Mitigation: Solar & Battery Storage

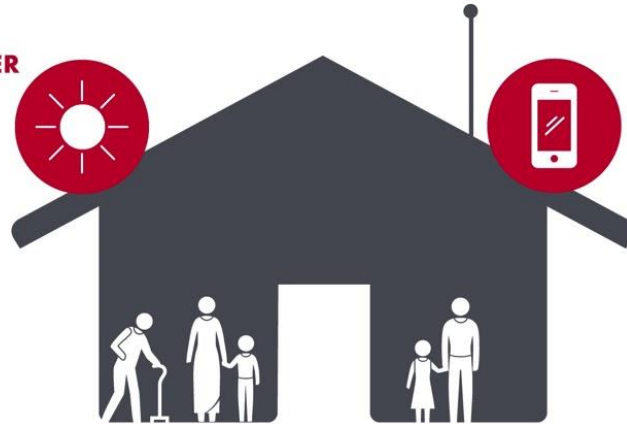


Mitigation: Resilience Hub

WHAT IS A RESILIENCE HUB?

OFF GRID SOLAR POWER

Designed to provide power during an emergency, and reconnect to the grid once power is restored.



COMMUNICATION HUB

A single point for access to news and information during and after an emergency.

EXISTING COMMUNITY CENTER





Jared Lang

AVP, Sustainability

Email: jlang@nhtinc.org

Phone: 202-333-8931*115

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www.nhtinc.org



Low Income Investment Fund

Building Healthy, Vibrant Communities



December 3, 2019

LIIF's Climate Resilience Work

Strong, Prosperous, and Resilient Communities Challenge (SPARCC). SPARCC is an initiative to expand the capacity of communities to shape the built environment so that people of all races and incomes benefit and thrive. This initiative is located in Atlanta, Chicago, Denver, Los Angeles, Memphis and SF Bay Area and includes LIIF, Enterprise Community Partners, the Federal Reserve Bank of San Francisco, and the National Resources Defense Council.

Climate Focus:

Develop climate-smart communities to reduce the pollution that causes climate change (mitigation), reduce threats introduced or exacerbated by climate change (adaptation), and strive for equitable benefits of the policies and investments being implemented.

Early Care & Education (ECE). LIIF uses capital, capacity building and public advocacy to build sustainable community-based systems to support child care facility financing and development.

Climate Focus:

After a series of fires in Northern California, LIIF partnered with Sonoma County to help replace nearly 500 licensed early care and education spaces. This successful response has prompted LIIF to identify best practices for replication, in addition to post disaster ECE supply building and framing our work on adapting to climate change and including ECE in future disaster plans.

LIIF's Green Investments

LIIF acknowledges that sound development has a three-fold benefit for communities in which we lend: environmental (reduced carbon emissions); financial (reduced energy costs); and wellness (positive health benefits). Projects designated as Green include sustainable and regenerative development approaches or components such as:

- **Transit Oriented Development:** intentionally located near public transportation for reduced transportation related energy use and emissions, while providing access to affordable housing and quality jobs
- **Energy Retrofitting:** LIIF's retrofitting projects strive to reduce energy costs and usage by 10-30% on average
- **LEED Certifications:** Many of the projects in LIIF's overall portfolio would qualify for a LEED Silver designation, and some would qualify for LEED Gold or Platinum designations

LIIF's July 2019 Sustainability Bond Transaction

On July 25, 2019 LIIF closed on a \$100 million sustainability bond. Highlights of the transaction included:

- A 10x oversubscription, with 4x attributable to ESG (Environmental, Social, Governance) motivated investors
- Final issuance was \$25 million of 7 year notes maturing in 2026 and \$75 million of 10 year notes maturing 2027 through 2029.
- No financial covenants

Benefits of the transaction to LIIF:

- Fixed the interest rate on over \$80 million of variable rate debt, eliminating interest rate risk
- Extended the term of debt, enabling LIIF to better asset/liability match its debt portfolio to loans receivable
- Provided flexible capital with no geographic or programmatic restrictions
- Diversified LIIF's sources of capital, moving beyond CRA-motivated investors



Montgomery County
GreenBank

Your partner for clean energy TM

Solutions for Sustainability

Rosemarie Sabatino
Director of Business Operations

December 3, 2019



Montgomery County **GreenBank**

Your partner for clean energy TM

- Purpose: to accelerate investment in energy efficiency and renewable energy in Montgomery County
 - Chartered by Montgomery County in June 2015
 - Independent, 501(c)3 corporation
 - Initial capitalization via the Pepco-Exelon merger
- Not a Bank, **a nonprofit financial enterprise**
 - Target: Leverage investment to attract private capital into clean energy marketplace; target 6:1
 - Strategy: Find and fill gaps in energy efficiency and renewable financing markets by co-investing with private lenders to reduce perceived risk
- 13 other Green Banks across the US



Energy Insecurity

Sustainability in Home

Sustainability of the Environment

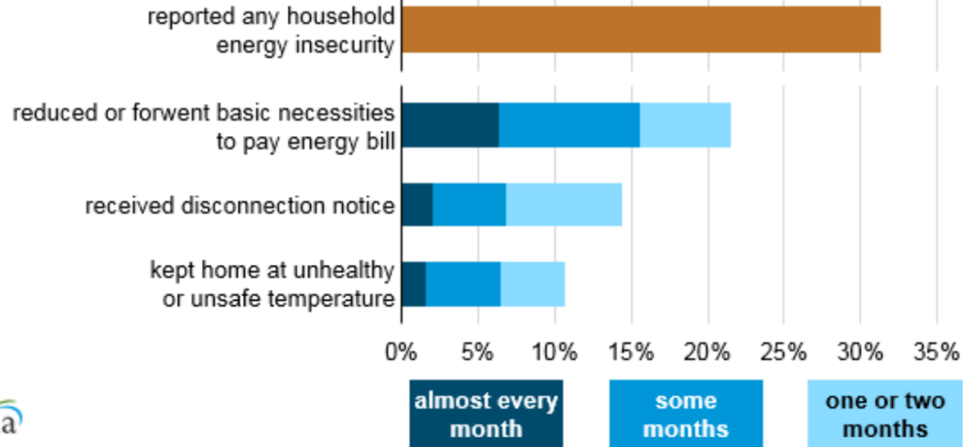


Opportunities for Energy Efficiency

One in three U.S. households faces a challenge in meeting energy needs

Households that experienced energy insecure situations, 2015

percent of households



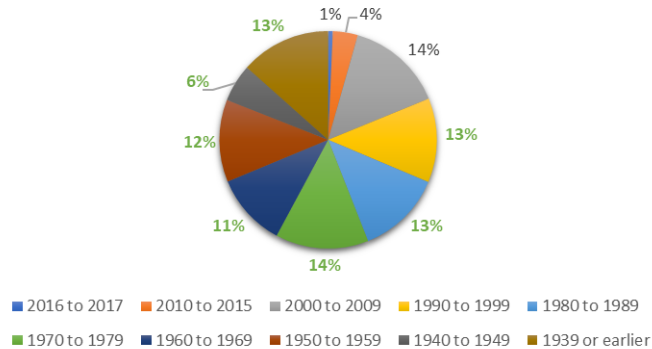
Source: U.S. Energy Information Administration, [Residential Energy Consumption Survey 2015](#)



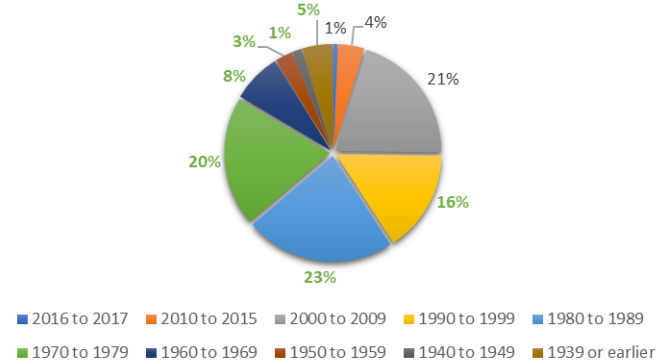
SF Housing Stock Needs Attention and Different Strategies

- 81% of all 1-unit attached and detached housing units were built at least 20 years ago
- 76% of all condominium units are in buildings built at least 20 years ago

Age of 1-Unit Housing Units



Age of Condominium Units

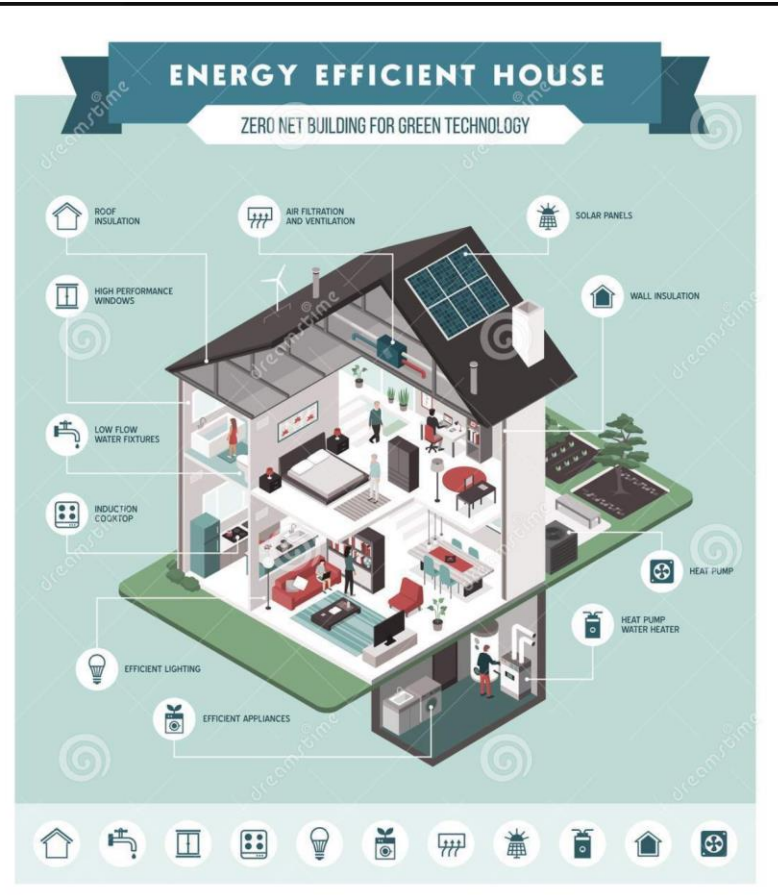
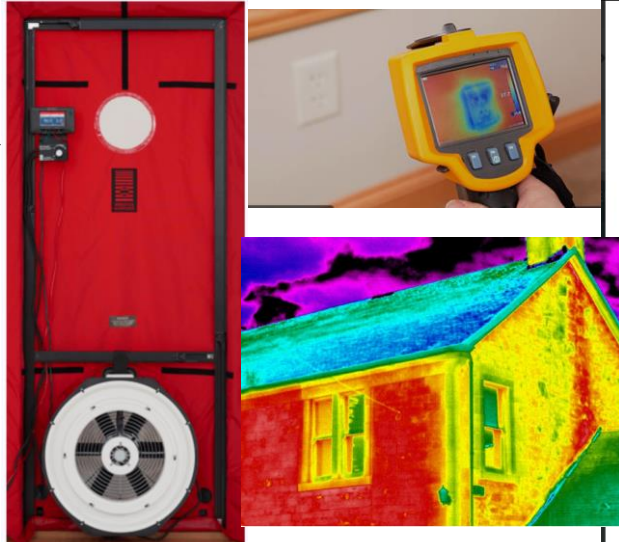


- Residential metering
- Home Performance with Energy Star Programs

- Commercial metering – utilities often all paid by condo association
- Commercial and Industrial Programs



Better Home Performance is Possible



Ways to Help Homeowners

- 1) Learn about:
 - The **utility programs** serving your communities – and keep knowledge current
 - **Local resources**:
 - Departments of Environmental Protection – State, County, City
 - Tax rebates/local incentives
 - Weatherization Programs
 - Sources of Financing, such as Green Banks
 - The **specialized players**:
 - Home Performance Contractors (<https://www.building-performance.org/>)
 - Public Service Commission
 - Utility Consumer Advocates (<https://www.nasuca.org/>)
- 2) **Form new partnerships**
- 3) Develop **new affordable financing products** targeted to this task
- 4) **Enhance homeownership counseling programs** to include energy improvement info







Opportunities for Energy Efficiency



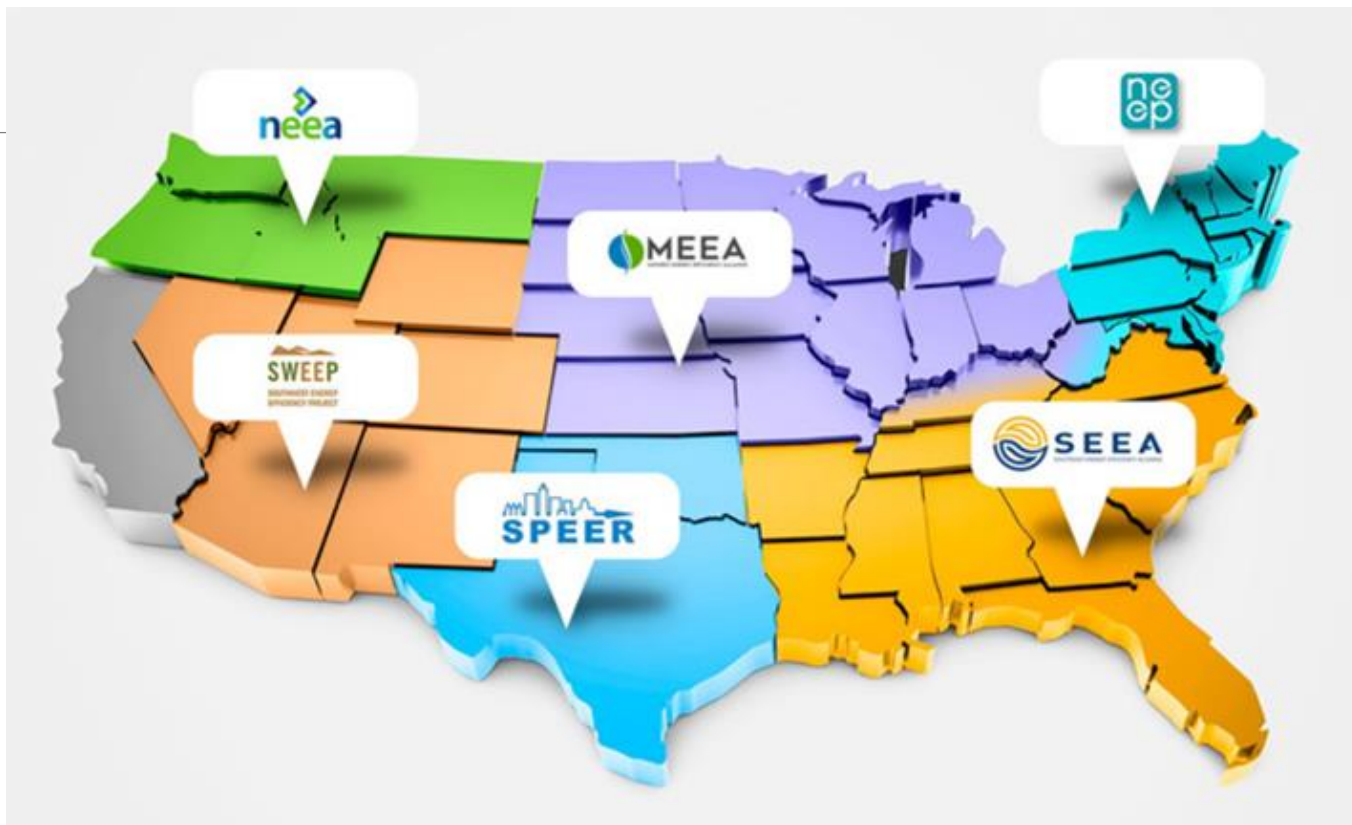
Leverage Existing Resources

- * The Energy Efficiency Partnerships
- * The Green Banks
- * US Department of Energy
- * American Council for an Energy Efficient Economy (ACEEE)
- * The Alliance to Save Energy

North Carolina Clean Energy Technology Center	Montgomery Energy Connection
Nationwide Resource by Zip Code	Montgomery County, MD
https://www.dsireusa.org/	https://montgomeryenergyconnection.org
	
	
	



The Energy Partnerships



Work with a Green Bank Near You – Or Think About Creating A Structure Like One

Climate Access Fund (MD)

Colorado Clean Energy Fund

Connecticut Green Bank

DC Green Bank

Florida Solar & Energy Fund

HAWAII Green Infrastructure Authority

Inclusive Prosperity Capital

Maryland Clean Energy Center

Michigan Saves

Montgomery County Green Bank

Nevada Clean Energy Fund

New York City Energy Efficiency Fund

New York Green Bank

Rhode Island Infrastructure Bank





Montgomery County
GreenBank

Your partner for clean energy TM

Tom Deyo, CEO: tdeyo@mcgreenbank.org

Rosemarie Sabatino: rsabatino@mcgreenbank.org

<https://mcgreenbank.org>



DISASTER HOUSING RECOVERY SOLUTIONS

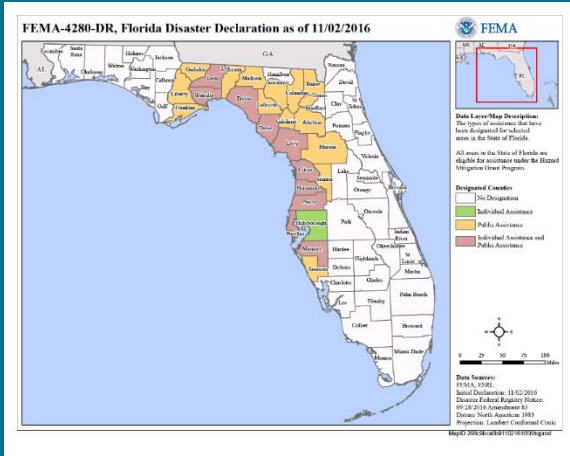
DECEMBER 3, 2019

HOUSING CONFERENCE SOLUTIONS 2019

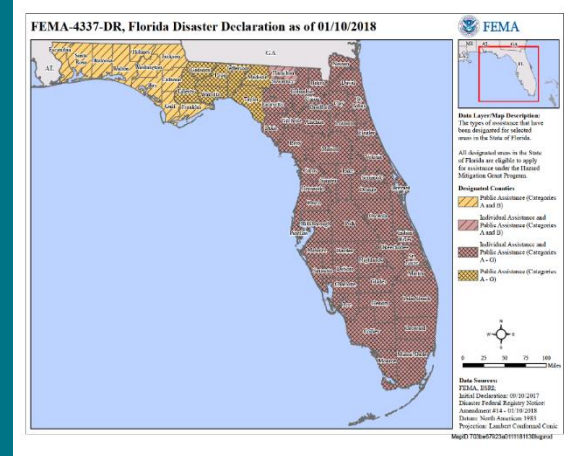
FLORIDA HOUSING COALITION

Presented by Gladys Cook
Disaster Resiliency and Recovery Director

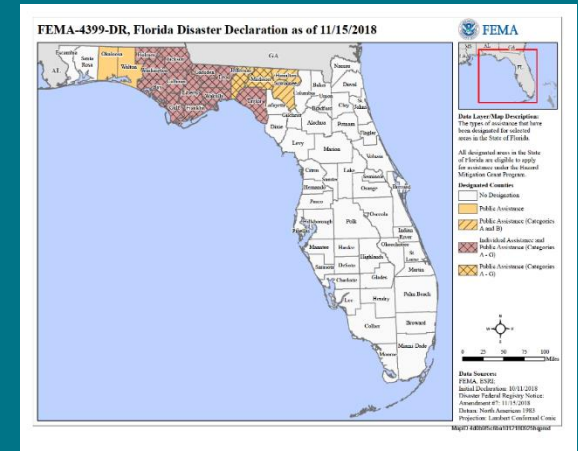
2016 Hermine and Matthew



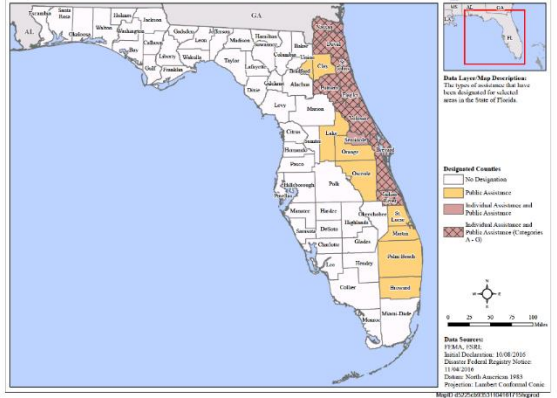
2017 Irma and Maria



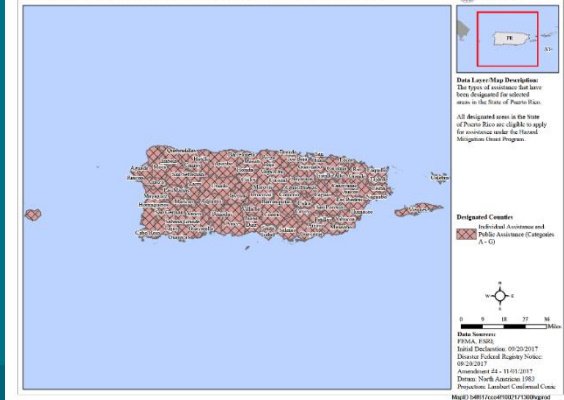
2018 Michael



FEMA-4283-DR, Florida Disaster Declaration as of 11/04/2016



FEMA-4339-DR, Puerto Rico Disaster Declaration as of 11/01/2017



2019 Dorian



[Click Here for a Printer Friendly Graphic](#)

How is Climate Migration Affecting Florida?

- Hurricane Irma- 600,000 evacuated from S. Florida
- 20,000 evacuated from Bay County pre- Hurricane Michael- 25, 000 Bay Countians will not return
- 350,000 passenger arrivals in Florida from Puerto Rico post Hurricane Maria -20,000-50,000 will resettle permanently in Florida
- Irma- shelters remained open longer
- Displaced workforce in Monroe County- commuting from Florida City
- Hotel vouchers extended for Maria, Irma and Michael
- Bahamian displacement double UN estimate



Are Low Income Populations More Vulnerable to Natural Disasters?

- Evacuation Decision
- Housing Condition
- Information delay
- Preparation challenges
- Need special assistance
- Access to Transportation
- Money for gas and hotels
- Civil Rights Issues- accessibility, evictions



What are the Primary Disaster Related Funding Sources?

Storm related or not...

- FEMA- temporary repairs, rental assistance
- SBA- repair loans
- *CDBG- repair and buyout
- *CDBG-DR – repair, rental, infrastructure, economic revitalization
- *CDBG-MIT-
- *HOME- single and multifamily acq, construction, rehab
- State Housing Trust Funds



What are some of the tools that can be deployed in preparation, response and recovery?

- Accurate and prompt damage Assessments coordinated with the work write up
- Case Management – a smooth handoff from FEMA to Long Term Recovery
- Connect Case Management to Housing Counseling



Recovery Solutions ...

- Home Repair - expedite
- Rental Assistance- temporary and long term
- Flexible land use regulations for RVS
- Rapid – Temporary Repairs to allow returning home ex. FEMA STEP or RAPIDO
- Small Scale Rental Repairs- CDBG



Long Term Recovery Solutions...

- Multifamily Workforce Housing Development – ex. Tax credits
- New Homeownership- financing
- Surplus Land and Land Banking
- Community Land Trust



Preparation tools...

- Mitigation 365
- Legal Advocacy
- Heir Title Resolution
- Innovative Designs-tiny homes, shipping containers, modular designs



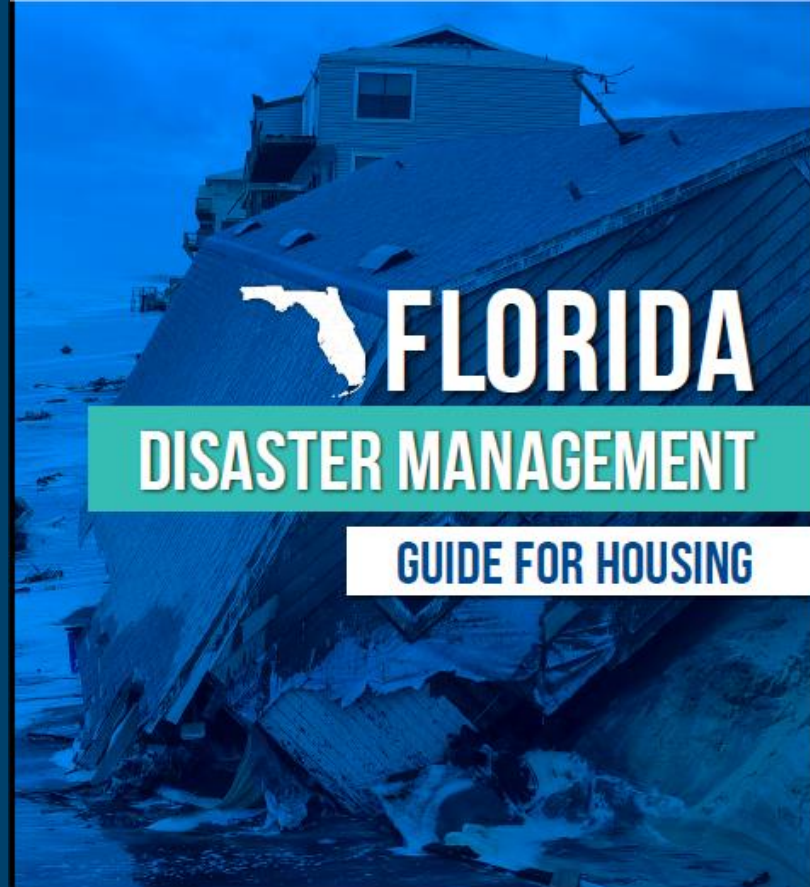
What Systemic Changes are needed in Disaster Housing Recovery?

- Do **not** rely on State Housing Trust Funds for Disaster Recovery
- Establish an agreement with HUD to allow eligible activities to start in 30-60 days post disaster instead of 2+ years
- Use state rainy day funds or others with HUD reimbursement
- Establish Statewide Disaster Housing Recovery Agency
- Establish Housing Disaster CDC and Community land Trust

FHC is here for you!

<https://www.flhousing.org/disaster-recovery/>

- Weekly Disaster Recovery Update Webinars
- Disaster Management Guidebook
- Technical assistance
- Housing Needs Assessments
- Governors Hurricane Conference
- Community Land Trust Institute



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JUNE 2018

Gladys Cook
cook@flhousing.org
813-830-3450



The Florida Housing Coalition
info@flhousing.org
850.878.4219
www.flhousing.org





Q&A

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