



# KEEP SAFE FLORIDA

**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.

# Keep Safe Florida

## Partners and Supporters

TRUIST 





# KEEP SAFE FLORIDA



- **Building Hazards and Resident Preparedness**
  - Flooding
  - Extreme Wind
  - Extreme Heat
  - Unhealthy Housing
  - Community and Operations

# KEEP SAFE FLORIDA

Assess Your Risk



Identify Buildings with the Greatest Need



Use the Building Protect Assessment Tool



**Funding Resources Guide**  
(can be used throughout the steps)

# THE BITS AND PIECES

**KEEP  
SAFE**  
FLORIDA

## ACTION REPORT

Generated: 01/13/2022

### INTAKE INFORMATION

**Prepared for:**  
Enterprise Community Partners

**Project Type:**  
Keep Safe Miami

**Intake Performed by:**  
First Last Name

### SITE INFORMATION

**Site Owner:**  
First Last Name

**Site Representative Email:**  
email.com

**Site Representative Phone:**  
555.555.5555

### Criticality Key

		No. of Critical Strategies
<b>Critical</b>	Strategies that relate to structural and safety concerns that can lead to life and safety issues for building occupants.	5
<b>Moderate</b>	Strategies that will mitigate impact by reducing/minimizing exposure of crucial building elements to natural disasters.	0
<b>Low</b>	Strategies that will improve how occupants handle disaster aftermath and improve life cycle of building.	2

### CRITICAL STRATEGIES



Flooding



Extreme Wind



Extreme Heat



Unhealthy Housing



Operations and Community





Energy and Resilience

# PUTTING THE REPORT TO WORK

## Critical Actions

The following action items were identified during the assessment as critical considerations to your community or property. These items have the highest potential impact to structural and safety concerns that can lead to life and safety issues for building occupants.

Cat.	Strategy	Action Description	Ratings	Reference Information
	Elevated Living Space	Explore floodproofing measures and use sump pumps in low lying areas. If possible repurpose living space that is below Design Flood Elevation (DFE) or using them for non-residential purposes can minimize damage to electrical and mechanical equipment along with livable space during a flood. Some examples of repurposing spaces below DFE includes, converting the space into parking garage, storage, entryways etc.	<b>Criticality:</b> HIGH <b>Cost Rating:</b> \$\$ <b>Difficulty Rating:</b> MODERATE	<a href="https://www.climatesafehousing.org/strategies">https://www.climatesafehousing.org/strategies</a>  <a href="https://www.climatesafehousing.org/elevated-living-space">https://www.climatesafehousing.org/elevated-living-space</a>
	Structural Assessment and Prioritization	Have a structural assessment performed. The condition of a building's structure depends on continuous monitoring and frequent maintenance.  This strategy focuses on how to evaluate a structure by identifying points of weakness and implementing solutions. Be aware of the following conditions: cracks and fissures, exposed interior rebar and corrosion, loose or rusted joints, and condition in fastening of windows, doors, and other apertures. Consult with a building professional (can be a contractor, engineer, or architect) to get the most thorough inspection possible.	<b>Criticality:</b> HIGH <b>Cost Rating:</b> \$\$\$ <b>Difficulty Rating:</b> DIFFICULT	<a href="https://www.climatesafehousing.org/putting-it-all-together">https://www.climatesafehousing.org/putting-it-all-together</a>



# Hazard Strategies Guide

The strategies below address a range of potential hazards and vulnerabilities. Select a strategy to learn more and to access Resources for Action that can help make buildings and residents safer and healthier, and lead to more resilient communities.



STRATEGY	CRITICALITY	SEA LEVEL RISE	FLOODING	EXTREME WIND	EXTREME HEAT	UNHEALTHY HOUSING	COST/COMPLEXITY	
							GARDEN-STYLE	LOW/MID RISE
Access to Potable Water	CRITICAL	✓	✓	✓	✓		\$ LOW	\$ MED
Backup Power to Critical Systems	CRITICAL	✓	✓	✓	✓		\$\$ MED	\$\$ MED
<span style="color: #0070C0;">▾</span> Backwater Valves <div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>A backwater valve is a moderately economical retrofit that can prevent significant problems from sewer line failure by blocking reverse flow from entering the building through wastewater pipes. A backwater valve should be installed in any building that has a sewer connection below the highest manhole cover on the sewer system, specifically, if the building is in the Special Flood Hazard Area (SFHA).</p> </div> <div style="margin-left: 10px; border: 1px solid #0070C0; padding: 5px;"> <p><b>Q RESOURCES FOR ACTION</b></p> <p><span style="background-color: #0070C0; color: white; padding: 2px;">KS</span> <a href="#">Prevent Wastewater Backflow in Homes</a></p> <p><span style="background-color: #0070C0; color: white; padding: 2px;">MF</span> <a href="#">Backwater Valves</a></p> </div> </div>	MODERATE	✓	✓				\$ LOW	\$ LOW
Clearing Debris on Site	MODERATE			✓			\$ MED	\$ MED
Community Resilience	CRITICAL	✓	✓	✓	✓	✓	\$ MED	\$ MED
Community Resilience Spaces	MODERATE	✓	✓	✓	✓		\$ MED	\$ MED



# BUILDING A PLAN

CRITICALITY	SEA LEVEL RISE	FLOODING	EXTREME WIND	EXTREME HEAT	UNHEALTHY HOUSING	GARDEN-STYLE	LOW/MID RISE
CRITICAL	✓	✓	✓	✓		\$ LOW	\$ LOW
LOW				✓		\$\$ LOW	\$\$ MED
MODERATE	✓	✓				\$\$ MED	\$\$ MED
CRITICAL	✓	✓				\$\$\$ HI	\$\$\$ HI

Explore foodproofing measures and use sump pumps in low lying areas. If possible repurpose living space that is below Design Flood Elevation (DFE) or using them for non-residential purposes can minimize damage to electrical and mechanical equipment along with livable space during a flood. Some examples of repurposing spaces below DFE includes, converting the space into parking garage, storage, entryways etc.

**Q RESOURCES FOR ACTION**

MF [Elevated Living Space](#)

ity or property. These items have the g occupants.

MODERATE	✓	✓				\$\$\$ MED	\$\$\$ MED
CRITICAL	✓	✓	✓	✓		\$ LOW	\$ LOW

ow Design Flood purposes can ment along with urposing spaces king garage,

Ratings	Reference Information
Criticality: HIGH	<a href="https://www.climatesafehousing.org/strategies">https://www.climatesafehousing.org/strategies</a>
Cost Rating: \$\$	
Difficulty Rating: MODERATE	<a href="https://www.climatesafehousing.org/elevated-living-space">https://www.climatesafehousing.org/elevated-living-space</a>

# BUILDING A PLAN – STRATEGIES FOR MULTIFAMILY BUILDING RESILIENCE

Enterprise CLIMATE SAFE HOUSING  
**Strategies for Multifamily Building Resilience**  Select Language

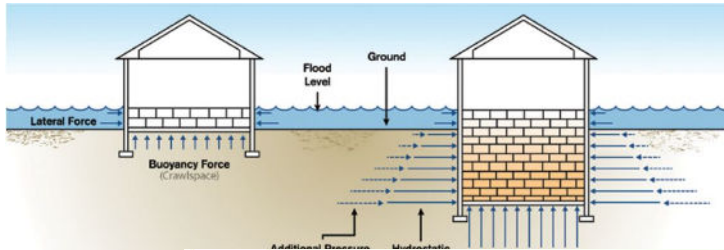


**9 Elevated Living Space**

Abandoning floors below the DFE or using them for a non-residential purpose can limit damage to critical equipment or living space during a flood.

## For every identified strategy

- Theory – why is this important
- Descriptions and Functions
- Strategy into Action
- Tied to Operations and Maintenance Plan
- General Cost
- Resources
- Case Studies



### CASE STUDY

## Elevated Housing Development

### Background

The Carolina and Connecticut Crescent developments in Atlantic City, NJ are two new affordable housing complexes constructed by Community Investment Strategies, a leading NJ-based affordable housing developer. Located in the the AE flood zone, were rebuilt after Sandy to be resilient to future flood damage.

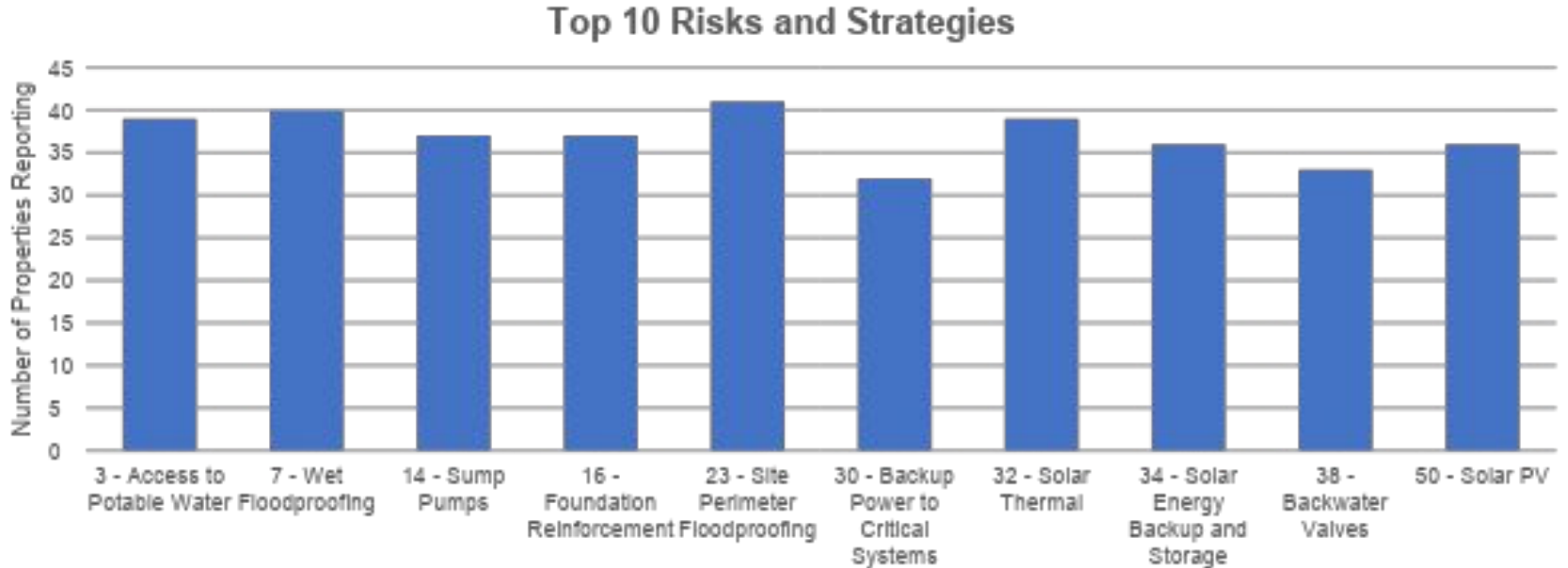
### Strategy

Residential areas were elevated 8 ft. above grade, raising them 2 to 3 ft. above the BFE. Wheelchair lifts were



# Top Ten Risks Identified

Keep Safe Florida Cohort One – 43 responses



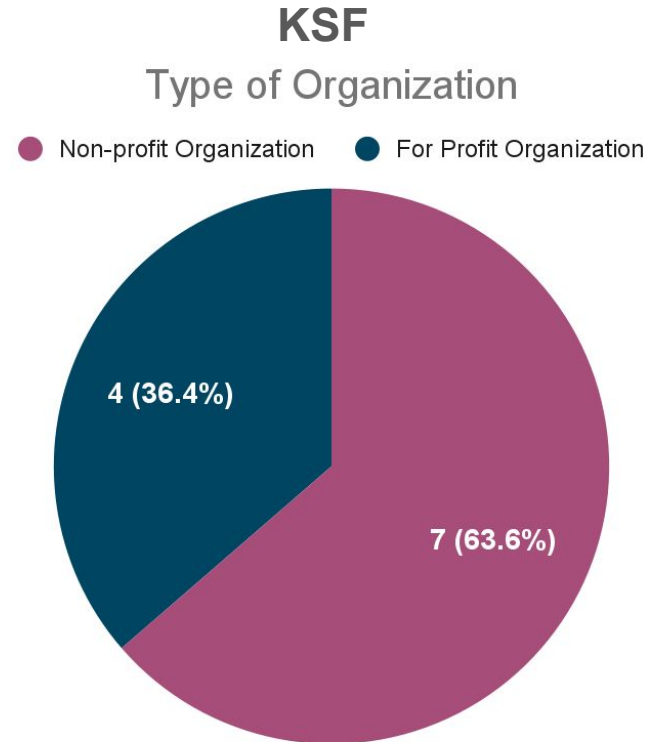
# Key Takeaways

<b>1</b>	Funding	Subsidy and grant dollars are critically needed to address resilience vulnerabilities in affordable housing. A pathway to funding should be clear.
<b>2</b>	Resilience = Preservation of Affordable Housing	Ensuring resilience of affordable housing ahead of a disaster is preserving critical affordable housing stock.
<b>3</b>	Building + Operations	Owners and operators must address both building level vulnerabilities and operational realities.
<b>4</b>	Insurance Costs are Rising	Rising insurance costs are putting affordability at risk –can resilience improvements lead to reductions in premiums?

# RESPONDENT CHARACTERISTICS

## KSF

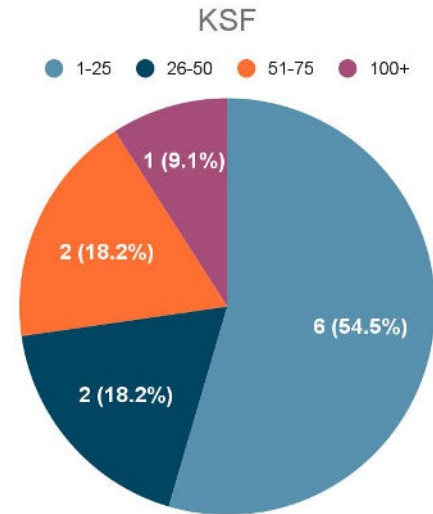
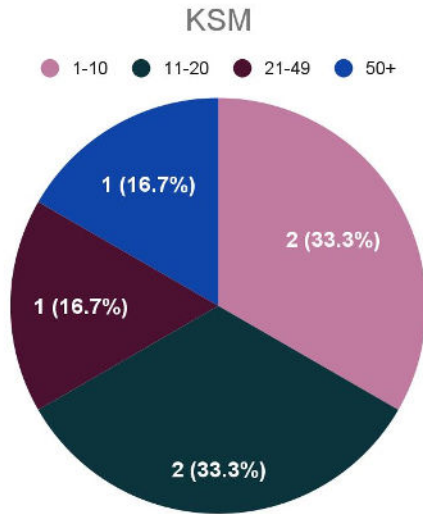
- 63.6% identified as non-profit organizations
- 36.4% identified as for profit organizations



# PORTFOLIO COMPOSITION

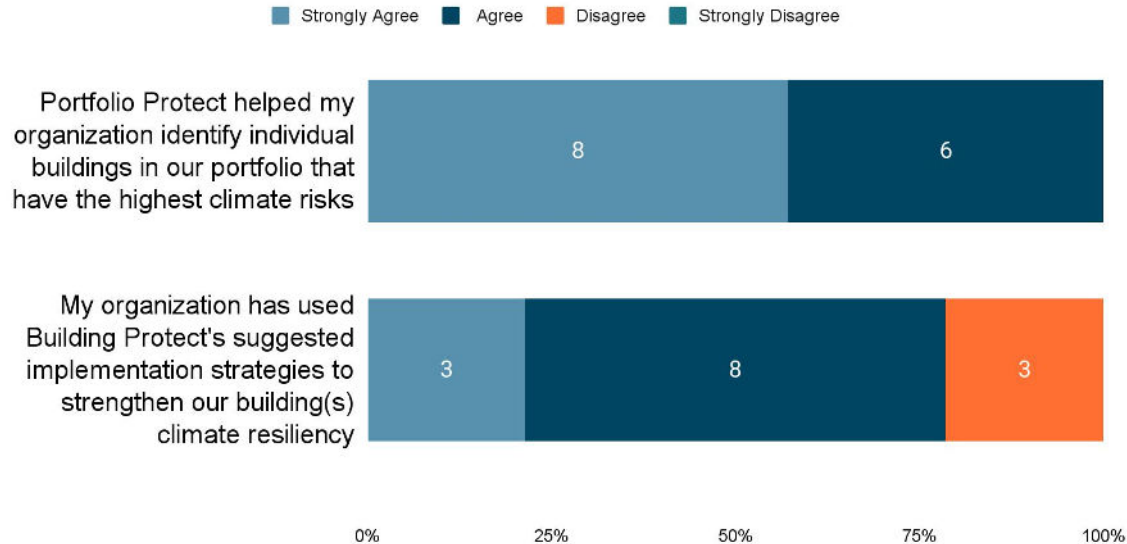
Both Keep Safe Programs served organizations that ranged in size in terms of their affordable housing portfolios.

## Number of Affordable Housing Properties



# ACCESSING TOOLS AND RESOURCES

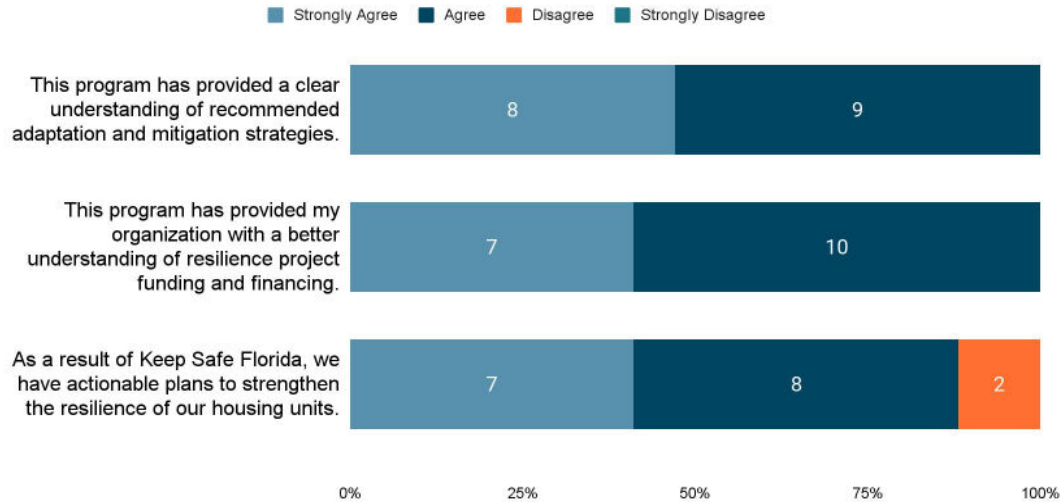
Of those who used Portfolio Protect and Building Protect, most found the information helpful and applied strategies to their buildings.



# USEFULNESS OF KEEP SAFE CONTENT

As a result of participating in the Keep Safe Program

- All respondents gained a clear understanding of recommended adaptation and mitigation strategies
- All respondents had a better understanding of resilience project funding and financing
- Most respondents had actionable plans to strengthen the resilience of their housing units





# IDENTIFYING AND INTEGRATING MITIGATION/ADAPTATION STRATEGIES

**Emergency Preparedness, Water Management and Natural Disasters** were recurring mitigation strategies identified across both programs.

“Revamping our emergency response plan” -KSM

“Newest rehab will adhere to the 40 year certification process”-KSM

“Water usage” -KSF

“Hurricane Crisis plan” -KSF

Stormwater management/Reduce Flooding’ -KSF

“Adopting landscaping barriers to mitigate the effect of flooding” -KSM

“Structural fixes to protect from flooding and wind storms” -KSM

“Flood proofing, elevation” -KSM

“Natural disaster preparation (hurricane, tornado, earthquake)” -KSF

# IDENTIFYING AND INTEGRATING MITIGATION/ADAPTATION STRATEGIES

**Energy Efficiency** was a recurring mitigation strategies identified across both programs

“Improving HVAC” -KSM

“Energy Efficiency” -KSF

“Purchasing some energy star appliances”  
-KSM

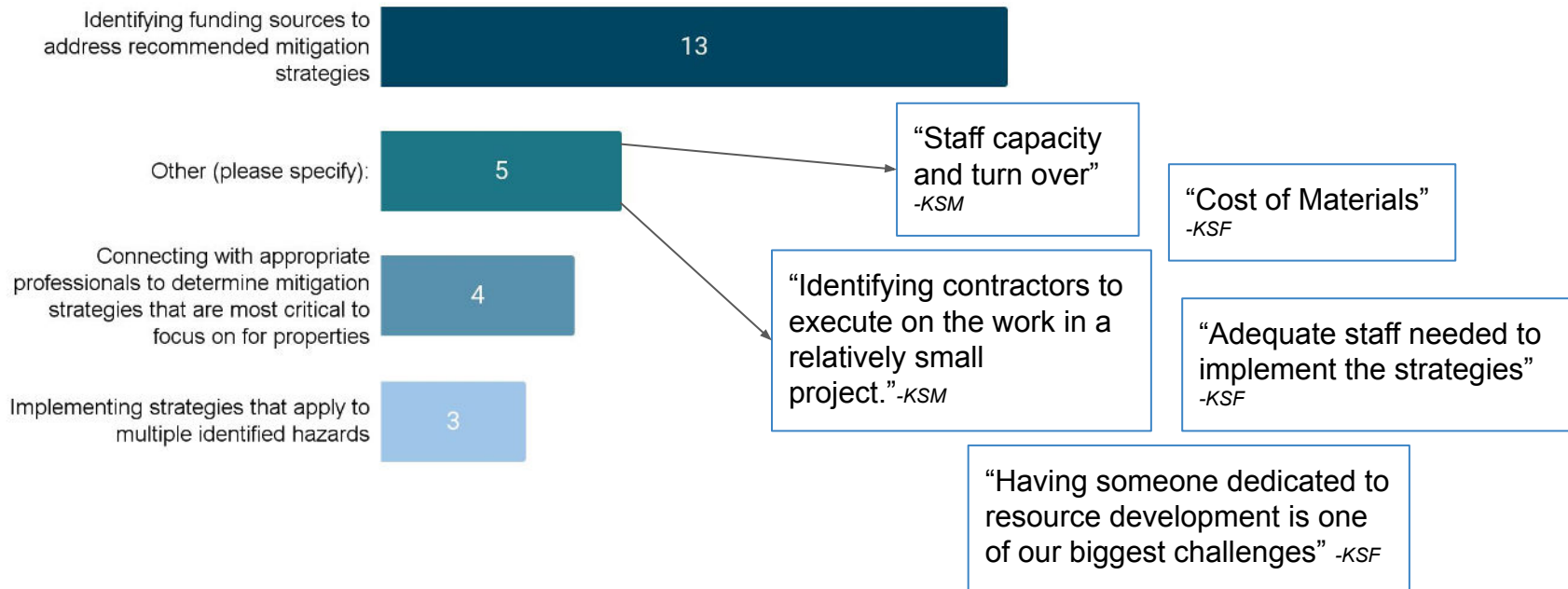
“Energy Efficient Windows, Water Heater, & A/C  
units” -KSF

“Structural Fixes to protect from increasing  
energy costs” -KSM

“Proper sizing and replacement of HVAC system”  
-KSF

# KSM CURRENT CHALLENGES

Respondents are currently facing the following challenges related to addressing resilience needs and climate risks in their portfolio



# ONGOING SUPPORT/INFORMATION NEEDS

What support and/or information does your organization still need to address the recommended strategies identified through the Program?

**Funding & Resources** were the recurring support and information needs across both programs.

“Finding supplemental funding to implement the things discovered” -KSM

“Apply for and secure funding to implement strategies” -KSM

“Identify further sources of funding or guidelines on how to obtain them” -KSM

“Follow up on funding recommendations” -KSM

“Easier access to financing” -KSF

“Finding contractors willing to work on smaller projects” -KSM

“Loaning” a knowledgeable staff member from enterprise to housing agencies.” -KSM

“Staff/Consulting resources to flesh out strategies” -KSM

“Specific Technical Assistance in applying tools to asset management and new construction” -KSF

“A list of recommended materials that should be used for making our buildings more energy efficient or types of roofs” -KSF

<http://EnterpriseCommunity.org/KeepSafeFlorida>

**KEEP  
SAFE  
FLORIDA**

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# Thank You

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 Enterprise