Policy objective: Enhancing resilience to flooding and other climate-related threats

Hurricanes and tropical storms, wildfires, and other climate-related threats have had devastating impacts on communities. All indications are that the effects of natural and man-made disasters will worsen in coming years as hurricanes intensify, wildfire seasons grow longer and hotter, and sea levels continue to rise. These trends promise to dramatically reshape how we live. To mitigate the destructive potential of climate-related threats, many communities will need to make major changes in where and how people live and homes are built.

Enhancing resilience with the housing policy toolkit

Significant direct investments in infrastructure and building improvements will be needed to strengthen resilience in disaster-prone areas. Communities can also incorporate measures to promote resiliency into regular program operations.

For example, local jurisdictions can consider climate-related threats and resilience when deciding how to allocate funding for the development of affordable housing. Cities can amend policies for awarding housing trust fund money and other local funds to reflect resilience goals or work with the state housing finance agency to encourage these types of modifications to the Qualified Allocation Plan that guides Low Income Housing Tax Credit awards. Changes can include removing from consideration projects located in areas that are prone to flooding or wildfires, or giving priority to projects located on less vulnerable sites. Properties that will include disaster resilience and sustainability features can also be given a preference for funding.

Local jurisdictions can also allocate funds to improve climate resilience in existing homes and communities. General obligation bonds can be used to fund large-scale improvements to infrastructure or to large housing developments that enhance flood resistance or other climate adaptation measures. On a smaller scale, localities can use homeownership rehabilitation assistance programs and programs that provide assistance for the renovation of rental properties to support modifications that make buildings more likely to successfully withstand a disaster. Home inspections and code enforcement can help to identify those properties most in need of improvements, and changes to zoning and housing rehabilitation codes can be made to remove regulatory obstacles to these upgrades.

In some areas, the most expensive properties are also the most exposed to climate-
related threats, such as homes built on the seaside or near wooded areas where fires can spread. Often, however, low-income neighborhoods experience the worst devastation in the wake of disasters. Where building renovations or upgrades will be insufficient to address the risk, local jurisdictions can use a combination of tenant-based rental assistance and mobility counseling to help these families relocate to parts of town that are outside of high-impact zones. Transfer of development rights programs are another approach that may be used to re-direct development away from areas determined to be too hazardous for continued habitation. These programs can enable the owners of properties in flood-prone areas, for example, to sell their development rights to the owners of properties outside of the floodplain, thereby compensating the seller for the unused development capacity and steering growth to higher ground.

This exhibit describes how policy tools in all four categories in the Housing Policy Library can be used to enhance resilience to flooding and other climate-related threats. The policies listed here are illustrative options within each of the four categories. Please see the Housing Policy Library for a full listing and explanation of policy options.

I. Create and preserve dedicated affordable housing units
**Logic/mechanism:**
By prioritizing funding for affordable housing projects located outside of areas at risk of environmental damage, communities can improve resilience.

**Specific policies:**
Issue **general obligation bonds** to support development of affordable housing outside of flood plains, or improvements that enhance resilience in existing housing.

Prioritize projects that incorporate resilience features or are located outside of vulnerable areas when making decisions about how to allocate **Low-income Housing Tax Credits** or **capital subsidies** for affordable housing development.

Use **transfer of development rights programs** to facilitate relocation of households from at-risk areas when necessary.

**II. Promote affordability by reducing barriers to new supply**
**Logic/mechanism:**
Land use policies and building codes can create a regulatory environment that supports the incorporation of resilient features to create resilient homes and communities.

**Specific policies:**
- **Revise the zoning code** to require or encourage construction of flood-resistant buildings and remove technical barriers that make it difficult or impossible for owners of damaged buildings to rebuild their properties in a manner that complies with new standards that reduce vulnerability to flooding.

Adopt **housing rehabilitation codes** that require owners who rehabilitate their buildings to comply with flood-resistance standards and other major safety issues, but do not otherwise require renovated properties to meet all current code requirements. Facilitating renovation will promote resilience.

## III. Help households access and afford private-market homes

**Logic/mechanism:**
Tenant-based assistance and mobility programs help low-income families relocate to areas at lower environmental risk.

**Specific policies:**
- **Housing choice vouchers** and other forms of **tenant-based rental assistance** can help households relocate to areas that are less vulnerable to natural flooding and other climate-related threats.

**Energy-efficient standards** and **retrofits** help to promote the development of housing that is less likely to contribute to climate change.
## IV. Protect against displacement and poor housing conditions

<table>
<thead>
<tr>
<th>Logic/mechanism:</th>
<th>Specific policies:</th>
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<tbody>
<tr>
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<td>Modify <strong>housing and building codes</strong> to ensure an appropriate balance between short-term cost considerations and the need to promote resilient construction.</td>
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<td>Use <strong>code enforcement</strong> as a vehicle to identify at-risk homes and make referrals to rehabilitation and retrofit assistance programs. Expand eligible activities for <strong>homeowner rehabilitation assistance programs</strong> to include resiliency measures.</td>
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### Combining policies to enhance resilience

The specific polices highlighted in the exhibit often can and should be used in combination, as illustrated in the following scenario:

A large number of buildings in a coastal city experienced moderate property damage during a recent tropical storm. Anticipating the potential for more severe storms in the future, the mayor and city council instruct all departments to prepare and implement action plans to enhance resilience to flooding and other climate-related threats. The director of the housing department and the executive director of the public housing agency convene an inter-agency working group that includes staff from both departments as well as representatives from the departments of planning and buildings and key stakeholders. The group ascertains that many of the hardest-hit residential buildings are part of an older subsidized housing complex, and commissions an assessment to determine the cost and feasibility of the various options for repairing and retrofitting the property to improve resilience and compare these options to replacing the development with new construction in a lower-risk part of town. Based on findings, the working group will make a recommendation to include funding for the retrofits or redevelopment as part of an upcoming general bond package.

The housing department also expands the list of eligible activities under its
homeowner rehabilitation assistance program to include installation of a sewage water backstop and platforms to elevate boilers and other HVAC equipment. A new public education campaign will promote the availability of these measures to eligible households. The housing department also begins an initiative in partnership with the department of buildings to evaluate building and rehabilitation codes and identify opportunities to either insert resiliency measures or streamline rehab requirements for non-safety issues to encourage owners of existing properties to make upgrades that include resiliency measures.