Housing serves as more than just shelter. Research has shown that affordable and stable housing can be a platform for families’ education, health, and economic well-being (Brennan 2011; Brennan and Lubell 2012; Cohen 2011). An adequate supply of housing affordable to all residents contributes to a sustainable and diverse community. Because needs for lower-cost housing generally are not well served by the market, local governments, along with their private-sector and nonprofit partners, play a critical role in building and preserving affordable housing.

A natural disaster highlights the difficulty local governments face in providing affordable housing. A natural disaster can destroy large portions of a community’s housing stock, which, of course, devastates all affected. Low-income households are most vulnerable to displacement and have fewer resources to rebuild and recover. As part of recovery efforts, local elected officials and planners must proactively facilitate the repair and rebuilding of affordable housing. Decisions on where and how to rebuild affordable housing should be guided by the goal of greater resilience in the future, along with recognition of the particular needs of the community’s low-income residents.

**KEY POINT #1**
Low-income households are vulnerable to displacement and are least able to access safe and affordable housing after a disaster.

**KEY POINT #2**
Displaced low-income households must be quickly rehoused in temporary, safe housing while communities plan for permanent, sustainable housing.

**KEY POINT #3**
Extensive community engagement contributes to a shared vision of recovery and fosters broad support for rebuilding affordable housing.

**KEY POINT #4**
Partnerships are key to funding and building the capacity of affordable housing providers to be more resilient in future disasters.
Residents of these neighborhoods have the biggest challenges following a disaster. Low-income households often lack resources to repair or replace their housing. Finding new housing is difficult when much of the local housing stock may have been damaged and affordable options limited. Federal assistance or insurance payments for home repairs can take many months to be distributed, putting added pressure on home owners who cannot afford to complete repairs on their own. Temporary rental assistance for impacted renters often expires before a household can find an affordable home. Housing in communities that were not impacted by the disaster can become unaffordable due to reduced housing supply as a result of the disaster and as upgrades are made to improve the resiliency of unaffected homes.

Local governments play an important role in facilitating the repair and replacement of the affordable housing stock through disbursement of federal recovery funds and guidance of the recovery process. If a local government does not prioritize replacement of damaged affordable housing, it risks the permanent displacement of low-income households.

Even without the complications of damage and displacement resulting from a disaster, building affordable housing is difficult. In many housing markets, land and development costs result in home prices and rents that are not affordable to low-income families. In order to build lower-cost housing, developers usually must secure multiple and often complicated sources of government and private funding. Local zoning codes can also be an obstacle to developing affordable housing by requiring certain lot or unit sizes, limiting density, or requiring a lengthy and costly approval process. Streamlining and expediting permitting processes, reducing community benefit and other requirements, or allowing for greater density are ways that local governments can support affordable housing development. These strategies can also be effective after a disaster to help rebuild affordable housing in the community.

After a disaster, communities are faced with the challenge to quickly house displaced households. Low-income households often have few options in securing housing immediately given their limited resources and the delays associated with receiving insurance payments or federal disaster assistance. It is essential not only to immediately house displaced households but also to realize that temporary housing solutions often end up serving households for months or, in some cases, years.

In the aftermath of Hurricane Katrina in 2005, hundreds of thousands of homes suffered extensive damage and were uninhabitable. The Federal Emergency Management Agency (FEMA) dispatched thousands of mobile homes to shelter displaced families. Many households spent several years living in the “FEMA trailers” as they waited for insurance payments or federal disaster assistance and public infrastructure to be rebuilt. The FEMA trailers were designed to house families for only a month or two. However, it became apparent that the widespread reliance on the poor-quality FEMA trailers was an inadequate housing solution while recovery was under way.

Discussions at the 2006 Mississippi Renewal Forum, a gathering of architects, housing design experts, and community leaders, revolved around finding more adequate temporary housing solutions for impacted households. Out of these discussions emerged a model for quickly constructed modular housing that was attractive, high-quality, and affordable. These “Katrina cottages” are hurricane-resistant, designed to meet

**KEYPOINT #1:** Low-income households are vulnerable to displacement and are least able to access safe and affordable housing after a disaster.

**KEYPOINT #2:** Displaced low-income households must be quickly rehoused in temporary, safe housing while communities plan for permanent, sustainable housing.
In the wake of a natural disaster, local governments face urgent competing needs to deal with the immediate chaos as well as to plan for long-term recovery. Affordable housing development decisions, often contentious under the best of circumstances, can be even more controversial following a disaster as local governments are tasked with distributing disaster recovery funds and reconsidering zoning and building codes to reflect new understanding of risk. Recovery plans that guide decisions on the rehabilitation of damaged affordable housing should be developed with extensive public participation, not only to reflect the needs of community members but also to build broad-based support for recovery efforts.

In 2008, more than 5,000 homes in Cedar Rapids, Iowa, were damaged when the Cedar River flooded the city. Many of the damaged homes were occupied by low-income households. The city quickly commissioned a flood management plan to assess the future flood risks and to recommend mitigation strategies. The city immediately engaged residents, business owners, developers, and local nonprofit organizations in a series of conversations on redevelopment of impacted areas. During these “open house” meetings, the city presented information on the city’s flood risks and flood management strategies, along with an assessment of the city’s housing and other needs resulting from flood damage. Over 2,500 people attended the open houses and participated in small group discussions where they commented on and reacted to the proposed strategies. The city posted all the comment sheets and notes from the open houses to the city’s website for the public to access and review.

While the initial plans for Bay Pines did not include disaster-resilient features, the partners soon discovered that investing in resilient features and green technology, like concrete insulated walls to withstand high winds and provide effective insulation, dramatically reduced the insurance costs of the development and the anticipated repair costs after future disasters, and kept monthly utility costs low. With insurance premiums for the National Flood Insurance Program rising, many property owners can achieve significant savings on their flood premiums, while also enhancing the safety of their buildings, by integrating flood mitigation features into their buildings.

KEYPOINT #3: Extensive community engagement contributes to a shared vision of recovery and fosters broad support for rebuilding affordable housing.

International Building Codes, range from 308 to 1,182 square feet, and can easily be moved from one site to another. These cottages are not only a promising short-term affordable housing solution following a natural disaster but also have the potential to serve as permanent affordable housing. As a community plans for the repair and redevelopment of affordable housing, it is important to incorporate resilience features to make the affordable housing stock more disaster-resistant in the future. In Bay St. Louis, Mississippi, a partnership of Enterprise Community Partners, state of Mississippi, U.S. Department of Housing and Urban Development, Bay Waveland Housing Authority, and developers collaborated on the development of Bay Pines, an affordable housing community that opened in 2011. The development, which replaced 65 public housing units destroyed during Hurricane Katrina, includes 100 affordable cottage-style rental units (34 units with Section 8 Project-Based Rental Assistance 4 and 66 public housing units) (Section 8 Project-Based Rental Assistance is a place-based housing subsidy for low-income households. Public housing authorities contract with private rental housing owners to attach a subsidy to a specific housing unit instead of issuing a voucher that a low-income household can use to move to a new unit. If a household moves out of a unit with Section 8 Project-Based Rental Assistance, the subsidy remains attached to the unit for the next eligible tenant.)

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in the list of housing redevelopment priorities. Following the adoption of the framework, the city developed 10 neighborhood plans, consistent with the framework’s flood management strategy, to guide development decisions in flood-impacted neighborhoods, as well as to direct Community Development Block Grant disaster funds, state recovery funds, and local funds to build the kind of housing most needed in Cedar Rapids. The inclusive recovery planning process and the strategic placement of community stakeholders on the Neighborhood Planning Process Steering Committee helped publicize planning efforts, increase public engagement, and head off public opposition to neighborhood redevelopment decisions.

KEYPOINT #4: Extensive community engagement contributes to a shared vision of recovery and fosters broad support for rebuilding affordable housing.

A major disaster prompts a reassessment of disaster risks in a community as local officials, planners, and residents consider how to avoid damage during a future disaster. To prevent or reduce property damage, owners must implement mitigation measures, such as raising the elevation of appliances and electrical systems to avoid damage to them during a flood, reinforcing roof structures to prevent them from blowing off during extreme wind, or stiffening floors and walls to prevent bowing during an earthquake. However, low-income home owners and affordable housing providers often lack the resources or expertise to pursue mitigation measures. Local governments can connect these home owners and building owners to organizations with funds and expertise to implement building improvements and resilience upgrades.

Hurricane Sandy devastated many communities on the eastern seaboard in 2012, destroying and damaging thousands of homes. In the New York City metropolitan area, many of the damaged homes were multifamily buildings housing thousands of low-income renters. Even more multifamily buildings remain at risk of damage if there is another major storm.

Many affordable multifamily housing providers in the New York metro area are considering how to make their buildings more resistant to flooding, but lack the funds to make upgrades. Restricted rents in subsidized buildings leave small capital reserves for improvements. In 2013 Enterprise Community Partners created the Hurricane Sandy Recovery and Rebuilding Program to partner with 12 affordable housing providers, including nonprofit affordable housing providers, housing authorities, and supportive service providers in New York and New Jersey to assess the disaster risks of 300 affordable housing buildings. Enterprise and its partners developed disaster response protocols and completed retrofits, such as relocating boilers and electrical systems to the roof, to make the buildings more flood-resistant.

After Hurricane Sandy, FEMA technical guidance on disaster-resistant retrofits focused mostly on single-family housing with little information on how to retrofit multifamily buildings. To provide useful guidance to multifamily building owners and affordable housing providers in particular, Enterprise is compiling a technical guide with recommendations for disaster mitigation upgrades for multifamily buildings, as well as guidance on developing action plans for responding to resident needs during a disaster to limit the impact of the disaster on residents.

Local governments should partner with local affordable housing providers to help them build their capacity to repair and retrofit affordable housing by connecting them to federal disaster recovery funds as well as offering flexible local funding. Local governments can also serve as a distributor of disaster resilience information to ensure that housing is rebuilt to be resistant during future disasters or connect affordable housing providers to organizations like Enterprise that can offer technical assistance or funding for disaster mitigation measures.

CONCLUSION

Affordable housing is at great risk of damage during a natural disaster, and low-income households are particularly vulnerable to displacement. Repairing and replacing damaged affordable housing is key to economic recovery.

Local governments must develop short-term and long-term strategies for rehousing displaced low-income households. Community engagement in the recovery plan can create broad support for the replacement of affordable housing.
Partnerships help build capacity and increase funding to build affordable housing that will be resilient in future natural disasters.

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This briefing paper was written by Janet Viveiros, senior research associate and Lisa Sturtevant, vice president for research, of the National Housing Conference. Contact Viveiros at Jviveiros@nhc.org and Sturtevant at lsturtevant@nhc.org.

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