

RESILIENCY IN ACTION

This brief is part of Housing Virginia's exploration of the impact of severe weather on the State's affordable housing supply. Jurisdictions around the country are incorporating resiliency planning into their building code, infrastructure and master planning efforts. The lowest income residents of our communities are often the most at risk in weather-related disasters and have the most difficulty recovering after disaster. Understanding what their exposure and their needs are enables us to explicitly plan for them in our resiliency work.

//////////////////// The Challenge

Climate change and extreme weather occur all over Virginia. The impact is costly and draws resources away from other efforts such as affordable housing preservation and creation.

400k

Number of homes in Virginia at risk for storm surge. That's roughly equal the number of homes in Fairfax County.

\$92B

Projected reconstruction costs to these homes if flood damaged.¹ That's double the annual state budget of Virginia.

33%

Increase in extreme precipitation events since 1948.

7 of 10

Seven out of 10 of the most significant storms affecting Virginia since 1933 have occurred in the past 13 years.²

¹ Howard Botts et al., 2014 CoreLogic Storm Surge Report, (July 2014) www.eenews.net/assets/2014/07/10/document_cw_01.pdf

² Virginia Institute of Marine Science. (2013) *Recurrent Flooding Study for Tidewater Virginia*. Retrieved from ccrm.vims.edu/recurrent_flooding/Recurrent_Flooding_Study_web.pdf

Climate change is a *'threat multiplier'* that exacerbates equity issues already faced by people of color and immigrant communities as the result of long-standing economic, social and racial factors. Housing disparities are potentially the single most dramatic example of where these inequities have taken root.

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³ Special Contributor. (2018) *What does affordable housing have to do with climate change?*
Retrieved from www.cooldavis.org/2018/08/22/what-does-affordable-housing-have-to-do-with-climate-change/

What is resiliency?

Extreme weather is only one type of "shock" to our housing markets. While it has a swift and extreme impact, big changes such as economic recessions, major real estate redevelopments and others also place stress on our systems. That is why resiliency is more than just creating a community resilient to a flood. It's about creating a community with economic, environmental and social resiliency.

Where Does Climate Change Impact Our Affordable Housing Stock?

Property values

VA lost **\$280 million** in total property value from 2005-2017 due to sea level rise. ⁴

Tax base decrease

Homes in areas prone to floods were statistically **worth less** in 2017 than in 2007. ⁵

Equity in rebuilding

After a disaster, white households were found to increase wealth by **\$126k** on average. Black and Latino household wealth decreased by **\$27k** on average. ⁶

Additional Areas

- + Insurance
- + Landlords
- + Retrofit costs
- + Mortgage access
- + Rural areas
- + Health impacts

^{4&5} floodiq.com

⁶Junia Howell, James R Elliott, Damages Done: The Longitudinal Impacts of Natural Hazards on Wealth Inequality in the United States, Social Problems, doi.org/10.1093/socpro/spy016

////// Solutions - Better Planning

Inclusive, regional, inter-disciplinary planning

Examples such as the City of Norfolk's Resiliency Plan⁷ highlight the connection planners are making between climate change, poverty and building new economy. The City's climate initiative places affordable housing, workforce development and the alleviation of poverty front and center to their resiliency efforts.

Building an Equitable FEMA Buy Out Program

Buy out programs around the country have resulted in over 40,000 property acquisitions since 1989 through the use of local and FEMA funds.⁸ Recent studies have indicated that these buyouts have reinforced race and class discrimination. Structuring equitable buyout programs that prioritize low income residents and people of color is important.

Continued Support for Transit-Oriented Developments

Long considered a planning best practice, Transit-Oriented Development (TOD) is also aligned with creating resilient, low carbon emission communities. It reduces auto dependency, leads to better integration of housing & jobs, and promotes denser housing (leading to lower costs / more affordability).

⁷ www.norfolk.gov/DocumentCenter/View/27258

⁸ Benincasa, Robert. (March 5, 2019). *Search The Thousands of Disaster Buyouts FEMA Didn't Want You To See.* {Radio Broadcast episode}. www.npr.org/2019/03/05/696995788/search-the-thousands-of-disaster-buyouts-fema-didnt-want-you-to-see

////// Solutions - Better Building

Increased density for Climate Resiliency

Zoning and master planning measures to increase density can decrease the cost of resiliency and provide affordable housing opportunities. Jurisdictions like Virginia Beach are taking a holistic approach to considering new housing types in specific neighborhoods. Planners work with design experts and the community to make comprehensive, realistic plans.

Case Study: Living with Water Hampton

In 2017 the Hampton City Council adopted Resilient Hampton, a set of guiding principles and unifying goals for the City of Hampton to address sea level rise and resiliency. The report is the next step on the path for strategies and solutions to build a more resilient Hampton.⁹

⁹ Waggoner & Ball Architecture / Environment. (2017) *Living with Water Hampton: A Holistic Approach to Addressing Sea Level Rise and Resiliency.* Retrieved from www.hampton.gov/DocumentCenter/View/20644/Resilient-Hampton-Phase-I-Report?bidId=

