




HOUSING RESILIENCY INITIATIVES

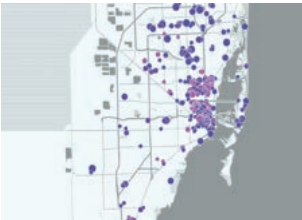
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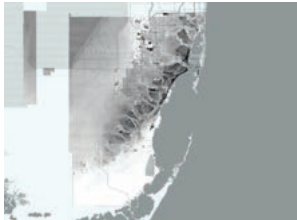
Environmental sustainability and affordable housing are two of Miami’s most pressing challenges. According to Harvard University’s Joint Center for Housing Studies, the Miami metro area has the highest percentage of renters spending more than half of their income on housing costs in the country. Additionally, Miami’s unique location in a coastal zone brings ever-increasing risks associated with climate change and sea level rise. A University of Miami study found that flooding has increased 400% in the past 10 years. While conversations about affordable housing and sea level rise have happened in parallel, the University of Miami’s Office of Civic and Community Engagement (CCE) is tackling these issues together to more effectively promote urban resilience.

-  53% cost burdened residents (spending >30% of income on housing)
-  2 to 4+ - number of feet of projected sea level rise in 2070
-  34 - number of incorporated municipalities within Miami-Dade County

Mapping Resilience: Miami Affordability Project (MAP)



Affordable Housing



Elevation



Projected SLR



Projected Storm Surge

CCE’s **Miami Housing Solutions Lab** is a suite of online mapping tools that uses big data and innovative mapping technology to visualize the landscape of housing affordability in South Florida and present a range of policy solutions. The signature tool in the Lab is the **Miami Affordability Project (MAP)**, a free, interactive online map for visualizing neighborhood-level housing dynamics. MAP combines data about affordable housing units from numerous local and national sources. The platform contains over 250 data filters to facilitate an informed analysis of the housing market supply and demand, funding programs, and risks to the preservation of affordability. MAP has been utilized by numerous local, state and national agencies to inform policy and advocacy initiatives.

CCE has augmented the powerful MAP platform by adding data related to the impacts of sea level rise, storm surge, and flooding, thereby enabling users to view simultaneously data about Miami’s two most pressing issues: housing affordability and sea level rise. The expansion of MAP to visualize sea level rise related indicators in concert with our existing affordability and equity data offers the first analytic mapping tool that examines risks associated with sea level rise on the affordable housing stock.

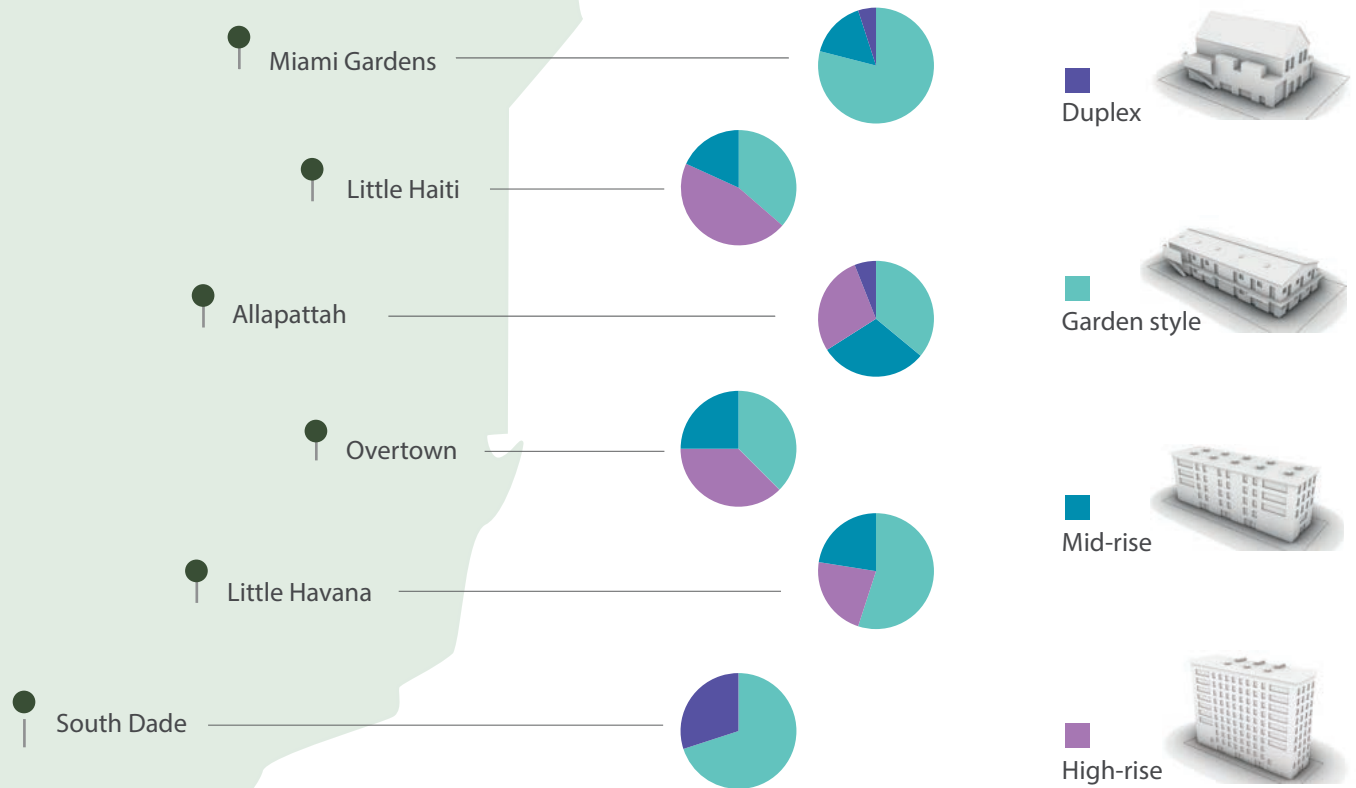
Resilience Policy Toolkit

Much like our **Housing Policy Toolkit**, which outlines innovative policies, programs, and strategies that prevent displacement and promote affordable housing, the **Resilience Policy Toolkit** explores groundbreaking resilience policies and programs that have been successfully implemented nationally and globally that could be adapted to the particular circumstances and needs of South Florida. The Resilience Policy Toolkit can facilitate conversations about creating inclusive, data-driven housing and development strategies to support Miami’s most vulnerable populations as they confront climate risks.

-  Resilient Development Checklist
-  Energy-Efficient Building Standards
-  Equitable Buyouts
-  Adaptation: Cost-Benefit Analysis
-  Outreach and Coordination: Community Calendar

Neighborhood-level Cost Benefit Analysis

Please note: the positions of these areas are relative and approximate rather than actual positions



As impacts of climate risk vary by specific geography, so too do adaptation strategies based on the type of building. A comprehensive analysis of climate risk and the costs/benefits of climate-related building interventions began with an assessment of the prevailing building typologies at the neighborhood level. Four primary categories of multifamily affordable housing buildings were identified for this analysis: duplex, garden-style apartment building, mid-rise apartment building, and high-rise apartment building.

By combining flood risk vulnerability with building typologies for the neighborhoods of study within Miami, CCE was able to establish location-specific models to help guide an analysis of potential building interventions. This information can help guide building owners and managers with assessing their own risk profiles and offer a basis for estimating cost effectiveness and feasibility.

Climate and Equity Mapping Platform (CAMP)

The **Climate and Equity Mapping Platform (CAMP)** builds on the momentum of CCE's housing resilience work, seamlessly integrating and continuing its efforts addressing the intersections of affordable housing, climate change, and equitable community development. CAMP is expanding CCE's work on neighborhood-level housing dynamics and resilience issues by developing next-generation innovative and accessible tools to inform a dynamic community engagement approach that can be replicated in other communities facing similar vulnerabilities.

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