



## Norwalk, Connecticut: Creating Climate Resilient and Sustainable Housing through *Choice Neighborhoods*

**Ten years ago, when Superstorm Sandy struck,** the Washington Village public housing development was ill prepared to handle increasingly frequent climate disasters. Located near the coast in Norwalk, CT, Washington Village had been subject to regular flooding for years. Today, through Choice Neighborhoods, other federal funds, and strong community partners, Washington Village has been rebuilt into sustainable, resilient housing that stands ready to meet the next climate challenge.

Norwalk Housing Authority and its key partner, the City of Norwalk Redevelopment Agency, joint awardees of a \$30,000,000 FY2013 Choice Neighborhoods Implementation Grant, identified flood mitigation as a key issue to be addressed in their original Choice Neighborhoods Planning Grant. They had also highlighted the need to preserve affordable housing in South Norwalk, an area that was beginning to become more and more expensive due to the rapid growth of the adjacent Washington Street historical district.

The timing of Norwalk's Choice Neighborhoods planning process coincided with Superstorm Sandy, which caused major damage and loss to the property, and further demonstrated the need for storm-resilient housing.

In the wake of Superstorm Sandy, the Norwalk Housing Authority became eligible for and ultimately received, nearly \$12M in CDBG-DR funds to help replace Washington Village with the new, flood resilient Choice Neighborhoods housing. Their access to this funding was enhanced because 51% of the State's CDBG-DR funding had to be targeted to low-income households. With its planned development of nearly 200 affordable, low-income housing units, Norwalk was able to secure CDBG-DR funding and enable the State of Connecticut to meet its affordable housing goal. In addition to the original \$12M, the City of Norwalk directed another \$4M in CDBG-DR funds, matched with \$4M in City capital funds, for infrastructure activities specifically for the Washington Village revitalization efforts.



The city's decision to direct state and local funds to the targeted area demonstrates its commitment to the success of the Choice Neighborhoods program. Additional leverage included significant funding from the Connecticut Housing Finance Authority in the form of Low-Income Housing Tax Credits and low-interest loans was critical in addition to grant subsidies from the Connecticut Department of Housing (DOH). Private financing was provided by TD Bank and tax credit equity investors included Goldman Sachs and Red Stone. In total these funds provided over \$122 million.

Once the Norwalk team secured funding, it was ready to build sustainable, resilient housing. As part of the requirements for the CDBG-DR funds and to make the new development fully climate resilient, the new design had to meet strict standards. For example, to satisfy FEMA codes for construction within a floodplain, an adequate emergency egress had to be made available to building occupants in the event of a tidal flood. This was accomplished by elevating the public street and incorporating a dry egress through the adjacent Ryan Park. In addition, since the funds were allocated through the State of Connecticut, which has more stringent standards than FEMA, Norwalk had to rebuild based on Connecticut's 500-year floodplain standards and building codes as opposed to FEMA's 100-year floodplain standards and codes.

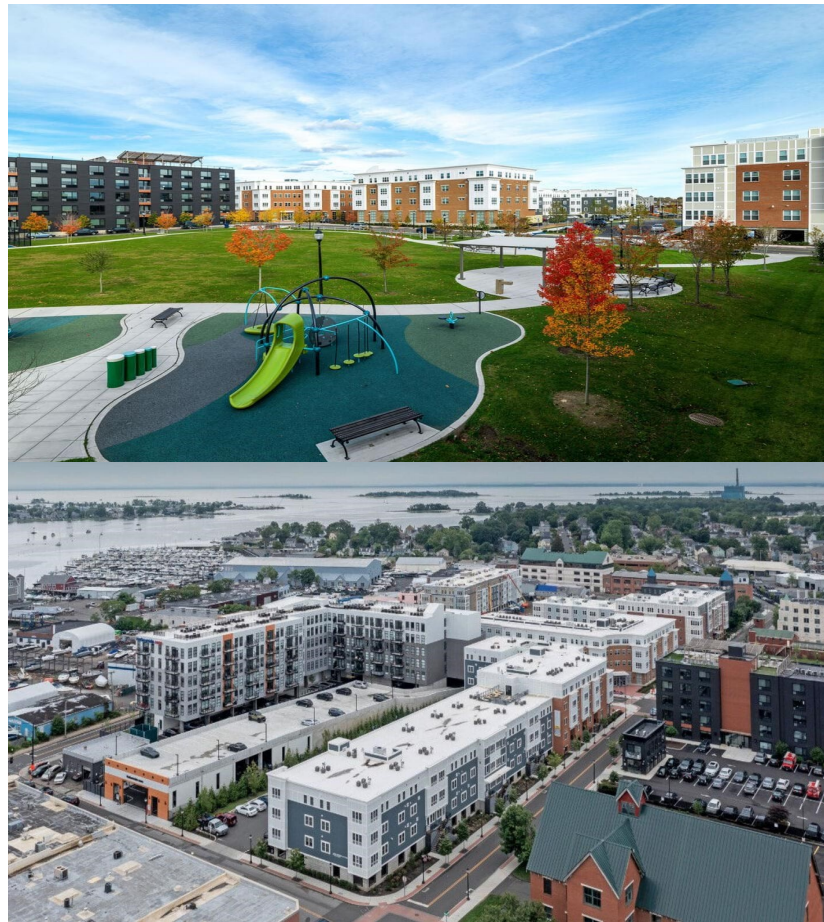
Meeting this high level of climate resiliency standards required new infrastructure and intentional design. As an example, a key strategy to addressing the floodplain issues was to raise the elevation of both the housing units and the street grade by six feet, which is two feet higher than the FEMA requirement. In addition, compliant redevelopment required construction of a temporary retaining wall around the site to establish the new grade, as well as the construction of new sidewalks, crosswalks, and street amenities. Furthermore, all overhead power and utilities lines and poles were removed, and new underground infrastructure installed.

In addition to addressing floodplain issues, the Norwalk team discovered brownfields contamination on the neighborhood's revitalization site. Previous uses of the planned revitalization area resulted in petroleum-based contamination; textile industry solvent residue; large quantities of Polychlorinated biphenyls (PCBs), which had been dumped and paved over; an underground oil leak; and piping wrapped in asbestos, all of which required extensive mitigation strategies. The investigation also showed that the neighborhood used to be a marsh area that had been filled at some stage in the past, but there was still considerable underground water movement that was constantly bringing contaminants directly into the revitalization site from other contaminated areas.

*Cover photo:* An aerial view of Soundview Landing after the revitalization of Washington Village.

*Previous:* Soundview Landing includes ground floor parking to elevate units, with the new homes and streets raised six feet to further mitigate flood risk (*left*). Interior photos show Soundview Landing built to a market standard, with affordable housing units indistinguishable from other apartments (*right*).

*This page:* Soundview Landing surrounds the revitalized Ryan Park; New apartments are just a short walk from the Norwalk Harbor.



Norwalk received brownfields funding to remediate the area through Connecticut’s Department of Economic and Community Development and the U.S. Environmental Protection Agency. The remediation strategy included an intricate process of constant pumping to remove excess water in the marshy area; properly handling and disposing of the hazardous material, which could not be disposed of in the storm sewer system and instead had to be disposed in the sanitary sewer system so it could be treated; and using frac tanks to remove contaminated soil prior to discharge. This process was compounded by daily limits on how many gallons could be discharged and was dependent on dry weather and work being performed only during low tide. In some areas, they needed to dig over 17 feet deep to address PCBs. Despite these challenges, Norwalk worked diligently to successfully create a clean and safe environment for its residents and the neighborhood.

Through Choice Neighborhoods and integrated leverage from CDBG-DR, Brownfields, and City investments, Washington Village is now Soundview Landing a new, 273-unit mixed-income development on three adjacent parcels – more than double the original size, comprised of 136 Choice Neighborhoods Replacement Units, including public housing and project-based Section 8 Voucher units, 72 Low-Income Housing Tax Credit units, and 65

market rate units. Each of the original public housing units were replaced one-for-one, preserving affordable housing in an increasingly affluent area.

Now the affordable housing is not only preserved but is also able to withstand climate-based challenges. To top things off, the revitalized housing is sustainable and energy efficient. The housing redevelopment was recently awarded the Leadership in Energy and Environmental Design Silver Certificate, in which all buildings were certified to Enterprise Green Communities and Energy Star standards. This globally recognized symbol of sustainability achievement and leadership means that Norwalk’s Choice Neighborhood residents reside in some of the best and most sustainable housing units in the country.

Ten years after Superstorm Sandy, Norwalk’s example demonstrates how a dedicated community can leverage Choice Neighborhoods and braid other federal funding to preserve affordable housing by creating resilient, healthy, and sustainable mixed-income housing. This process required strong collaboration between the Housing Authority and the City and commitment from both entities to target investment in this neighborhood. The ability of these partners to integrate funding from Choice Neighborhoods, CDBG-DR, and EPA’s Brownfields Grants also shows the impact that collaboration between federal agencies and layered federal resources can make.