



## COMPLETING THE BUILD IT BACK PROGRAM

As we approach the fifth anniversary of Hurricane Sandy, New York City is nearing the completion of the Build It Back program. Through Build It Back, the City has prioritized homeowners and waterfront communities – ensuring that these New Yorkers have the resources necessary to recover and make their homes and communities more resilient. Funded by the US Department of Housing and Urban Development (HUD) Community Development Block Grant disaster recovery funds (CDBG-DR), Build It Back provides assistance to homeowners after all other forms of disaster assistance have been exhausted.

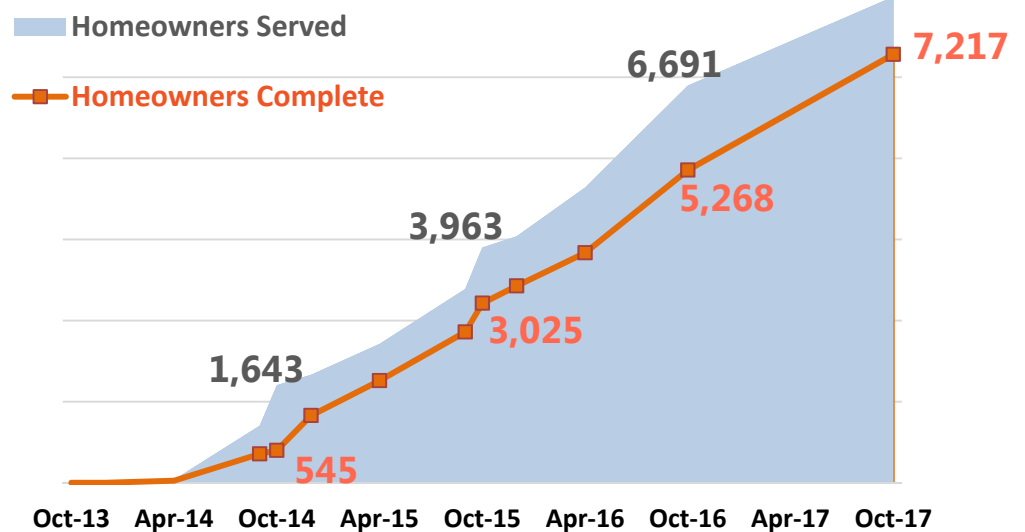
Build It Back is helping 8,300 homeowners and landlords of 1-4 unit homes, housing a total of 12,500 families. In the hardest hit waterfront communities, Build It Back is rebuilding and elevating almost 1,400 homes to today’s stringent regulations for flood compliance. Another 6,500 homeowners with moderate Sandy damage are being assisted with repair and reimbursement - helping neighborhoods that were not in the floodplain when Sandy hit and homeowners who did not have flood insurance. Build It Back has served 99 percent of all active homeowners by starting construction, reimbursement of repairs, or acquisition of their homes. For 87 percent of homeowners, Build It Back has completed construction, reimbursement, and acquisition of homes.

### Build It Back Program Progress

2013 - 2017

8,207

**OVER 7,200 OR  
87 PERCENT OF ALL  
8,300  
HOMEOWNERS  
ARE COMPLETE AND  
99 PERCENT  
HAVE BEEN SERVED**



Build It Back provided many ways for homeowners to repair and rebuild their homes, including the direct management of construction projects by the City (“City-managed construction”). Over the last two years, the City has brought on additional resources to ensure that we can get this work done, from partnering with the Building and Construction trades unions to expand construction capacity in 2015 to adding a new modular program in 2017. As a result, the City has started 99 percent of the construction projects.

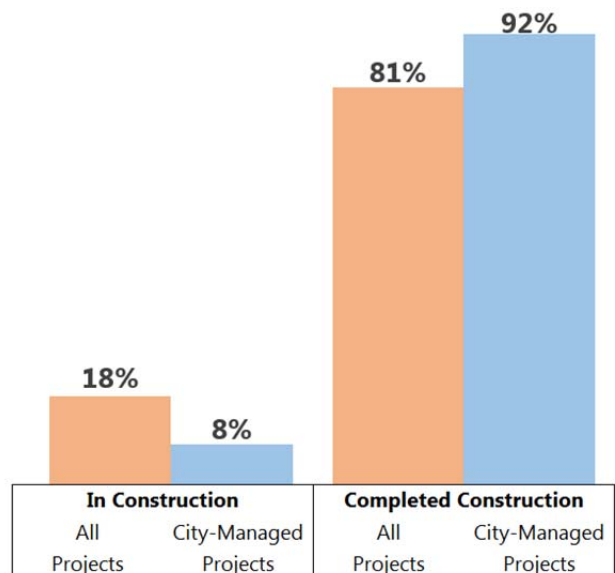
**AS OF OCTOBER 2017,  
WE HAVE SERVED OVER  
8,100 HOMEOWNERS  
(11,500 HOUSEHOLDS)**

- *6,400 homes have received repairs and reimbursement for Sandy storm damage*
- *Almost 200 homes have been purchased*
- *Over 600 homes have been elevated or rebuilt to new flood elevation standards; 720 homes are under construction*

### Build It Back Progress Year by Year

	<b>Oct-13</b>	<b>Oct-14</b>	<b>Oct-15</b>	<b>Oct-16</b>	<b>Oct-17</b>
<i>Homeowners Complete</i>	0	545	3,025	5,268	<b>7,217</b>
<i>Homeowners Served</i>	0	1,643	3,963	6,691	<b>8,207</b>
<i>Homes Elevated &amp; Rebuilt</i>	0	1	30	109	<b>618</b>
<i>Repair &amp; Reimbursement</i>	0	544	2,955	5,027	<b>6,411</b>
<i>Homes Acquired</i>	0	0	40	132	<b>195</b>

**92 PERCENT OF  
CITY-MANAGED CONSTRUCTION  
PROJECTS ARE COMPLETE**



## BUILD IT BACK CONSTRUCTION

### *Modular Home Installation, Midland Beach, Staten Island*



In early 2017, the City began exploring a modular option for 100 homes slated for construction in Staten Island and Queens. A modular team was established which issued procurements and vetted sites for modular viability and logistics. Selection of modular vendors occurred in April, with over 100 design meetings and approvals over the course of May through July. Demolition of sites has started on 66 homes, with 35 demolitions completed, in Staten Island and Queens and already six new modular homes have been set on new foundations.

This pilot program is anticipated to reduce traditional reconstruction costs by 25 percent and cut the construction schedule in half to as short as four months.



# COMPARING DAMAGE IDENTIFIED BY FEMA AND NYC DEPARTMENT OF BUILDINGS IN 2012-2013 WITH WHO WE ARE SERVING

## EARLY ESTIMATES OF SANDY DAMAGE

*(Source: PlaNYC, A Stronger More Resilient City,  
June 2013)*

**More than 2,000 homes were significantly damaged** and needed to be completely rebuilt or substantially improved

Per FEMA inspections around 5,600 owner-occupied housing units sustained damage in excess of \$30,000

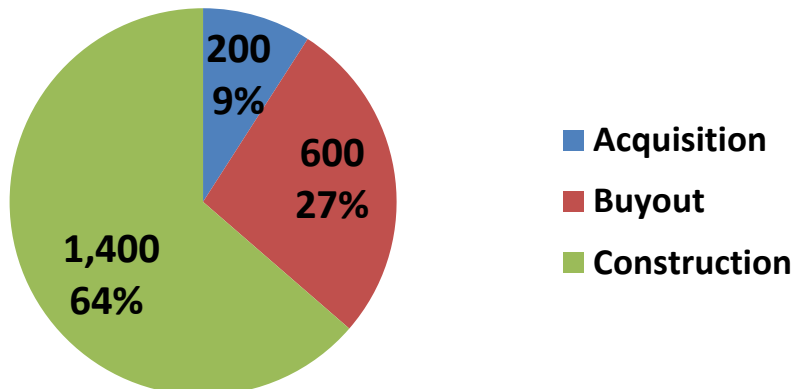


**2,200 substantially damaged homes are being elevated, rebuilt, or acquired** through Build It Back and NYS buyout and acquisition programs



**6,500 homes are receiving moderate repair and reimbursement assistance from Build It Back**  
*(9,000 others who initially registered with Build It Back but didn't continue in the program received assistance from one or more sources including FEMA IA Assistance, Rapid Repairs, NFIP, or SBA)*

**Of the 2,200 substantially damaged homes receiving assistance  
2/3 are receiving construction assistance and 1/3 are being purchased**  
*Purchased homes are either redeveloped (acquisition) or returned to nature (buyout)*



## IMPACT OF FEMA FLOOD ZONES AND FLOOD INSURANCE

Hurricane Sandy was an unprecedented storm impacting neighborhoods outside FEMA’s 100-year floodplain. As a result, Build It Back’s repair and reimbursement program provided much needed support for homeowners who didn’t have flood insurance, many of whom were outside the floodplain.

- About half of the housing flooded by Sandy was outside of FEMA’s 100-year floodplain
- 2/3 of Build It Back homeowners receiving repair and reimbursement lived outside FEMA’s 100-year floodplain in 2012
- Less than 50 percent of housing in the pre-Sandy 100-year floodplain had flood insurance
- Only 1/4 of Build It Back homeowners receiving reimbursement and repair received National Flood Insurance Program (NFIP) payments

### *Top neighborhoods with moderate damage receiving repair & reimbursement*

<b>Queens</b>	<b>Brooklyn</b>	<b>Staten Island</b>
Howard Beach 725 homes Belle Harbor 400 homes Rockaway Park 300 homes Far Rockaway-Bayswater 280 homes	Canarsie 850 homes	Midland Beach 490 homes

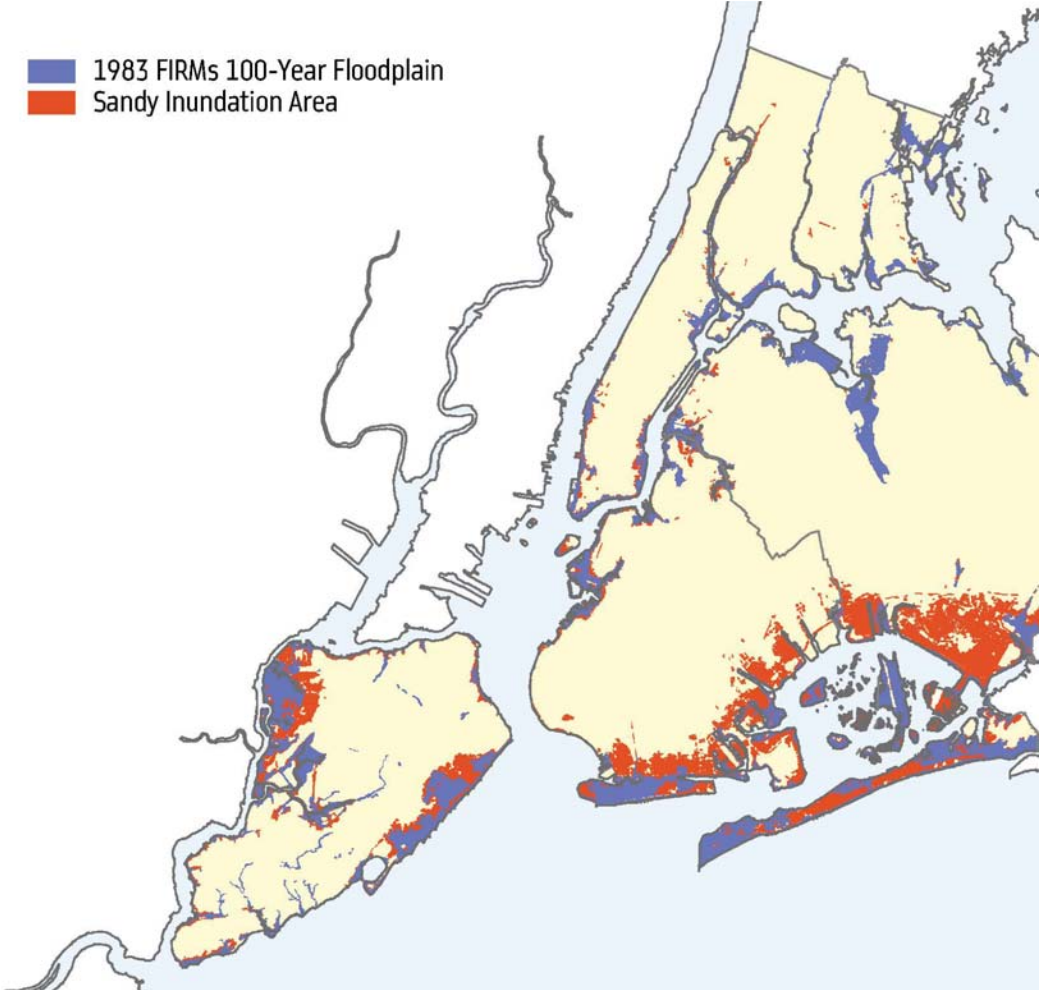
### **Flood Insurance Counseling**

Build It Back launched a Flood Insurance Counseling Program to help homeowners learn how flood insurance rates are calculated and how the Program may assist them in demonstrating reduced flood risk and decreasing their flood insurance costs. To date, over 160 homeowners have participated in flood insurance counseling.

### **Alternative Mitigation Measures**

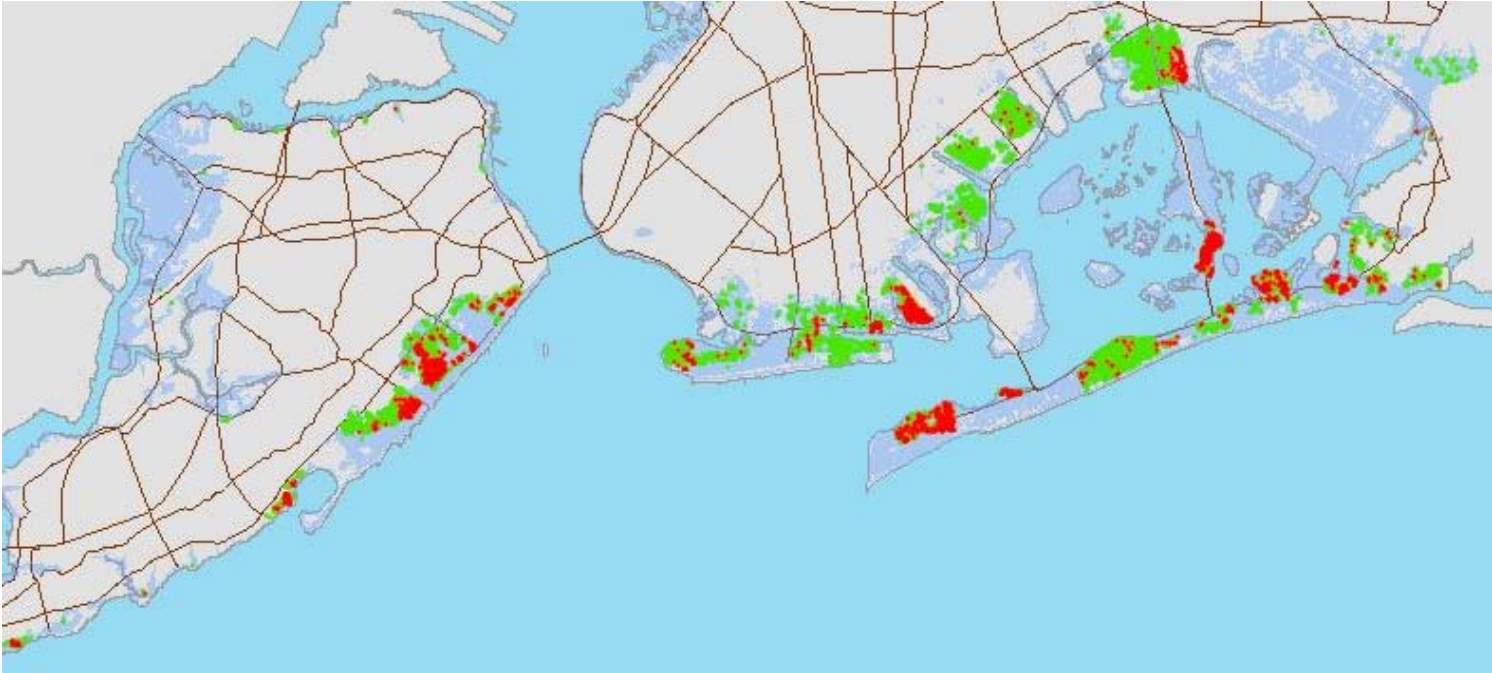
Expanding on its repair of storm damage, the program has evaluated how to best assist homeowners who did not meet strict federal requirements for elevation. The program evaluates mitigation measures that eliminate subgrade space with fill, installing certified flood vents in foundation walls, and elevating utilities above the Base Flood Elevation. These elements have been incorporated into hundreds of repair projects. These added measures increase the home’s storm resilience and ensures the property is compliant with NFIP standards, thereby keeping flood insurance affordable for homeowners without structural elevation.

# COMPARISON BUILD IT BACK - FLOOD ZONES & INUNDATION



## Build It Back Homes

- Substantially Damaged – Elevation & Rebuild & Acquisition
- Moderate Damage – Reimbursement & Repair



## PREDICTORS OF SANDY'S IMPACT ON BUILDINGS BUILDING AGE AND PHYSICAL CHARACTERISTICS

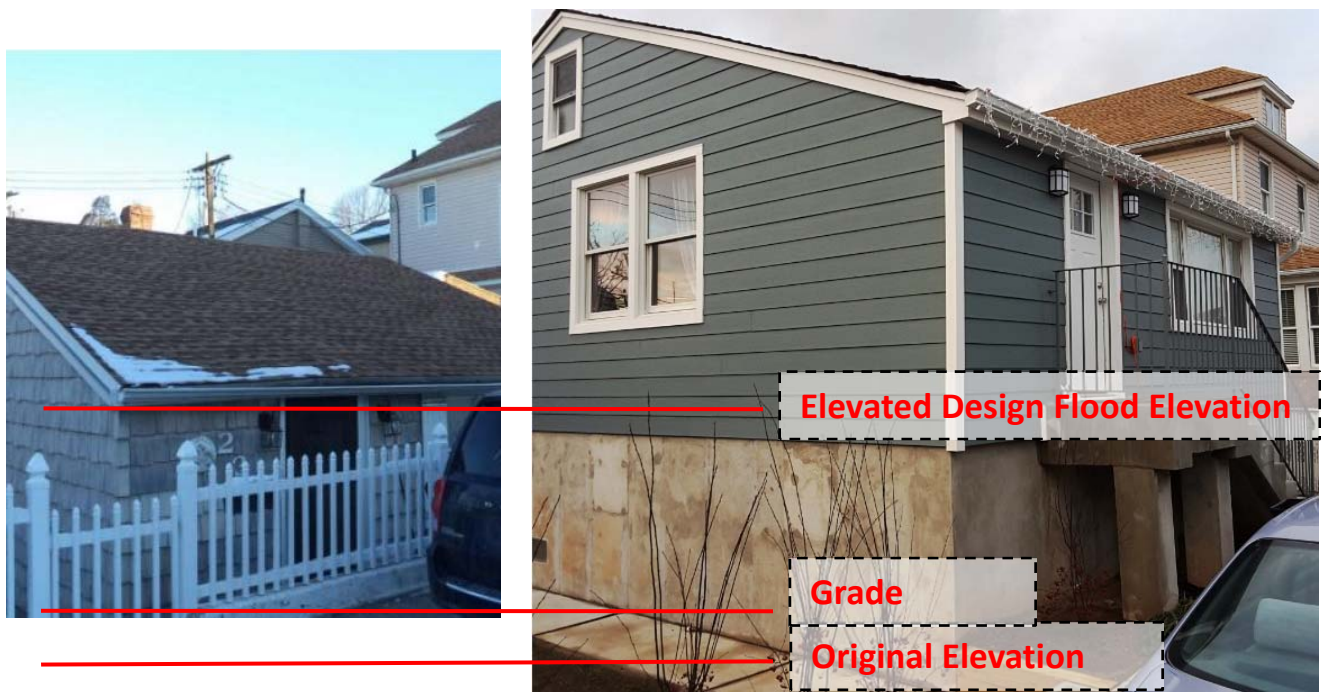
In communities with the highest levels of substantial damage, many homes had similar characteristics. Older, 1-story, light-frame homes suffered the most damage and often proved to be the most challenging to elevate due to zoning constraints, grade level, and the age and condition of the homes. In many neighborhoods, streets had been raised since the homes were built resulting in homes below street grade level.

**Average age of  
Build It Back homes  
Elevations – 81 years old  
Rebuilds – 85 years old  
Repairs – 64 years old**

### *Top neighborhoods with substantially damaged homes - elevations, rebuilds & acquisition*

Queens	Brooklyn	Staten Island
Breezy Point/ Roxbury 260 homes	Gerritsen Beach 160 homes Sheepshead Bay 65 homes	Midland Beach 225 homes New Dorp Beach 125 homes
Broad Channel 250 homes Arverne 80 homes Edgemere 65 homes Hamilton Beach 55 homes		

*Elevated home before and after elevation, Gerritsen Beach, Brooklyn*



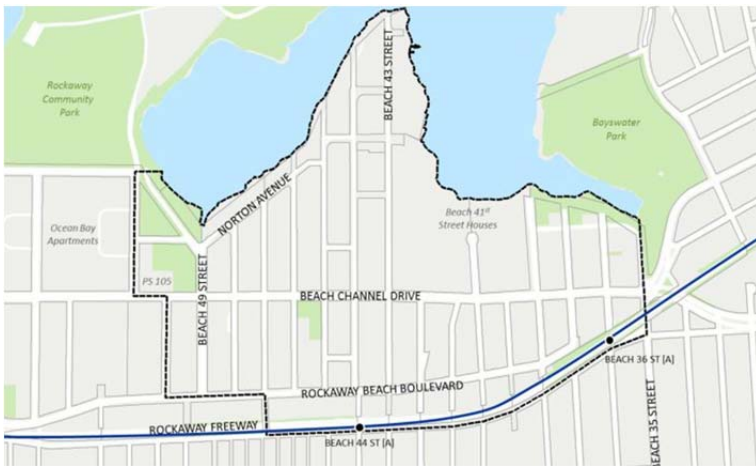
# BUILDING RESILIENT COMMUNITIES – THE MOST CHALLENGING CASES

BUILD IT BACK IS INVESTING IN MORE THAN HOUSING, IT IS INVESTING IN COMMUNITIES TO MAKE THEM MORE RESILIENT

## EDGEMERE, QUEENS

This year, New York City completed the Resilient Edgemere Neighborhood Plan, an 18-month planning process that coordinated recovery efforts with a long-term community vision. The Resilient Edgemere Neighborhood Plan outlines a holistic framework to respond to Edgemere’s unique vulnerabilities. The Plan was created through an engagement process including workshops to listen and learn from residents while providing transparent information about city development processes, flood risks, and affordability risks posed by changes in the National Flood Insurance Program.

The Plan coordinates housing investment and infrastructure investment through 63 initiatives. The entire plan is available here: <http://www1.nyc.gov/site/hpd/community/Edgemere.page>



*Resilient Edgemere Neighborhood Boundary*



*Limit coastal development and use land for resiliency*

## SHEEPSHEAD BAY, BROOKLYN

Constructed in the 1920s, homes in the Sheepshead Bay Courts have no street access. Years after the homes were built the surrounding streets were raised resulting in below grade homes with a strong propensity for flooding during heavy rain events and storms. Hurricane Sandy significantly exacerbated the poor conditions in the Courts by damaging and blocking the sanitary and storm sewer systems. Build It Back is working with the homeowners in these communities to elevate and rebuild 40 homes and upgrade the water and sewer infrastructure where homeowners have come together and formed a Homeowners’ Association.





## ATTACHED HOMES

Hundreds of attached homes were damaged by Hurricane Sandy, presenting Build It Back with a unique challenge. Attached homes pose design, engineering, and legal challenges, requiring homeowners to agree on how to move forward. Build It Back performed extensive outreach to groups of homeowners living in substantially-damaged attached homes, resulting in complete groups of attached homes that will be elevated or reconstructed by the program. The program is rebuilding or elevating over 110 attached homes.

Attached home elevations where we are elevating more than two homes are among the most challenging.

### ***5 Attached Homes Elevation Midland Beach, Staten Island***



### ***4 Attached Homes Elevation Coney Island, Brooklyn***



## SANDY RECOVERY WORKFORCE1 UPDATE

Prioritizing opportunities for Sandy-impacted residents in the rebuilding of their communities, Build It Back, in partnership with NYC Department of Small Business Services, launched Sandy Recovery Workforce1 to match these workers with jobs in the recovery and connect residents with training for union construction careers.

**1,600 Sandy-impacted New Yorkers found jobs**

1,110 Sandy-impacted New Yorkers worked for Build It Back

150 Sandy-impacted New Yorkers are working as apprentices after pre-apprenticeship training provided through Sandy Recovery Workforce1

23% of all trades workers on Build It Back are Sandy-impacted New Yorkers



*Jamel Dickerson  
Carpenter, NYC District Council of Carpenters  
Far Rockaway, Queens  
Edward J. Malloy Initiative for Construction Skills*

**“IT MAKES YOU PROUD TO WALK DOWN THE BLOCK AND SEE TWO HOUSES YOU HELPED REBUILD WHILE MAKING A GOOD WAGE.”**



*Linda Ramirez-Gonzalez  
Laborer, Mason Tenders District Council of Greater New York and Long Island, Construction & General Building Laborers' Local 79  
Staten Island  
Nontraditional Employment for Women (NEW)*

**"I LOVE DOING THE WORK ... WE ALL WORK TOGETHER, IT'S PRETTY AWESOME, I WOULD DEFINITELY RECOMMEND ANYONE'S INTERESTED IN THIS TRAINING TO DO IT."**

## TEMPORARY HOUSING & RELOCATION SERVICES UPDATE

In 2014, Build It Back dedicated funding to provide rental assistance to homeowners displaced by construction so they are not burdened with existing mortgage payments and additional rental payments while their homes are being elevated. The Program expanded its services to include relocation assistance. The Program partnered with the Center for New York City Neighborhoods (CNYCN) and New York Disaster Interfaith Services (NYDIS) to provide comprehensive Temporary Housing and Relocation Services for homeowners and tenants displaced by construction.

Services were designed to help address barriers to securing temporary housing including large multigenerational families, specific physical or mobility needs, and pet-friendly units. Additionally, the Program works to ensure homeowners remain near their communities.



*Elevated Homes, Arverne, Queens*

**OVER 1,000 HOMEOWNERS  
HAVE RECEIVED ASSISTANCE  
WITH TEMPORARY HOUSING &  
RELOCATION**

- 76% have been reimbursed for rental payments
- 16% have rental payments made directly to their landlord
- 8% occupy units leased by the Program

**84% of homeowners were temporarily relocated within their original community or borough**

# BUILD IT BACK MULTIFAMILY STORM RECOVERY AND RESILIENCY PROGRAM UPDATE

**THE MULTIFAMILY PROGRAM  
WILL SERVE  
143 HOUSING DEVELOPMENTS  
(19,663 HOUSEHOLDS)**

**97% of Developments Served**

**78% of Developments are Complete**



Managed by NYC Department of Housing Preservation and Development, the Multifamily program also includes resiliency retrofits in 30 developments with 9,000 households. This work includes elevating electrical and mechanical equipment above the Design Flood Elevation, dry floodproofing utilities through flood doors or barriers, protecting equipment through the use of flood damage-resistant materials, installing on-site backup power generation, as well as one combined heat and power and one solar project.

This September, HPD announced a \$33.5 million grant to fund resiliency work for Knickerbocker Village, a 1,590 unit affordable housing development in Manhattan. Project highlights include the installation of new main electric services in four buildings, as well as emergency backup generators to provide lighting, elevator services, heat, and hot water to the buildings in the event of a power outage and dry floodproofing of building utilities.

