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Cornell Institute for Public Affairs  
The Housing Innovation Collaborative

# Case Studies in Rapid Shelter and Workforce Housing

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# **I. Introduction**

This report was completed as part of the Cornell Institute for Public Affairs Spring 2021 Capstone course in partnership with The Housing Innovation Collaborative. The CIPA capstone team conducted background research on rapid shelter and workforce housing, and then researched specific cases that exemplified innovation and effectiveness in rapid shelter and workforce housing. The team sought to profile cases with unique design, programmatic, or policy implementations, and looked specifically at each project's strengths, weaknesses, and learning opportunities that can be translated into recommendations for future projects. This report is divided into four sections: literature review, data and methodology, rapid shelter case studies and workforce housing case studies.

## **II. Literature Review**

### **Rapid Shelter**

The literature review for rapid shelter demonstrates the concept and objective of rapid shelter. With the great implications of building rapid shelters, the direct and indirect impact of building rapid shelter will also be introduced in this part including the influence of rapid shelter on wellbeing of people, livelihood of individuals, social cohesion and gender equity. Moreover, the impact of rapid shelter can extend from temporary humanitarian aid to long-termly positive socio-economic impact. To clearly indicate the significance of building high-quality rapid shelter after natural disasters, two specific rapid shelter development cases will be demonstrated in this part.

#### **What is rapid shelter:**

The objective of building rapid shelter is to fulfill both the tangible and intangible shelter needs of people affected by humanitarian emergencies while also setting the path for future sustainable reconstruction (IFRC, 2021). It is important to have the rapid shelter establishment plan developed in different regions since rapid shelter plays a critical role in saving lives, especially after natural disasters (IFRC, 2021). Rapid shelters are more complex than just building protective physical structures, but also serve as foundations for livelihood, health wellbeing and an environment that allows family and community engagement (IFRC, 2021).

The humanitarian guidelines codified in international laws have suggested certain standards for the rapid shelter development to refer to: rapid shelters should preserve the individual dignity, privacy and security; rapid shelter should aim to establish homes for post-disaster population to satisfy their self-orientation and recovery; rapid shelters should protect these people from hazards (Gray and Bayley, 2015). Furthermore, the handbook "Humanitarian Charter and Minimum Standards in Humanitarian Response" has also set out common standards and principles for adequate housing that rapid shelters are expected to also satisfy (The Sphere Project, 2011). Rapid shelters should be developed with careful

considerations and flexibility; they should be appropriate to specific contexts and take the particular help needed, social and climate factors, and scale of the disaster into considerations (Gray and Bayley, 2015). For example, successful shelter development should be able to solve other issues such as water and sanitation, settlement planning and waste management, cooking and heating (IFRC, 2021). It is expected that the rapid shelter development can also try to make communal facilities including health clinics and schools available to the impacted people (Gray and Bayley, 2015).

### **Direct and indirect impact of rapid shelter:**

The direct impact of rapid shelters includes providing climate protection, immediate safety and security, privacy and dignity, access to additional services to affected populations (CARE, CENDEP, 2020). Building rapid shelter and improving living conditions could impose a direct impact on people's health and livelihood.

- **Health:** The development of rapid shelters could improve affected population's physical and mental health, particularly for children. Evidence has demonstrated that substandard housing contributed to six-year-old children's poor health and developmental delays of children less than two years old (Harker, 2006). Also, in Nigeria, the mortality for children under five with adequate housing was lower than mortality for those living in inadequate housing (USAID, 2020).
- **Livelihood:** There is also evidence demonstrated that stable and affordable housing can contribute to people's employment and their financial stability (The Aspen Institute, 2019). For example, 46.2% of the population who lived in Ethiopian shelters have seen an increase in income and food accessibility (USAID, 2020). Meanwhile, transitional shelters could also be used by small business owners for business purposes, and this could help them save money to spend on food and education (2020). After the Indonesian Tsunami happened in 2004, 10% of the population living in one of the resettled areas made use of the transitional shelter for business purposes (Babister et al., 2007)

Besides imposing positive impact on affected population's livelihood, health, and wellbeing, there are also some indirect impacts of building high-quality rapid shelter:

- **Society:** Rapid shelter and housing development could help improve community engagement and social cohesion (Hulse and Stone, 2006). 46% of the residents in Lebanon have reported benefiting from housing upgrading including enhanced trust and reduced community tensions (USAID, 2020). Also, in Syria, 75% of the population have demonstrated that restored social services and infrastructure after conflicts could improve the relationships between internally displaced persons and their host families (2020).
- **Gender:** Housing vulnerability could increase the risk of domestic violence and sexual abuse, and women are more likely to be negatively impacted by poor housing conditions (WRM and UWS, 2009). Statistics have shown that women without stable housing are 8 times more likely to experience domestic violence than women who do have stable housing (USAID, 2020).



## **Long-term socio-economic impact of rapid shelter Starter houses in Vietnam**

In 1999, central provinces of Vietnam were attacked by the tropical floods and storms, and more than 55,000 houses were destroyed (Dijk and Leersum, 2009). The Vietnamese Red Cross collaborated with the other Red Cross societies to develop the starter houses with galvanized steel frame, metal roofing system and concrete foundation (Dijk and Leersum, 2009). Approximately 20,000 housing structures were constructed after the disaster between 1999 and 2001 (2009). Housing shelter recipients were satisfied with the starter house, especially its storm-resistance quality (2009). Based on the data, the house maintenance and repair costs of these newly developed houses were much lower than the original costs on maintenance and repair, and these costs in some of the communities have even reduced to zero (2009). Moreover, because of the lower maintenance and repair costs, the beneficiary households could spend more money on health, food and education (2009). Based on the survey, beneficiary households could afford one more meal each day on average than the non-beneficiary households because of the savings on the repair and maintenance costs (2009).

## ***Transitional shelter programme in Aceh, Indonesia***

In 2004, the tsunami in Aceh displaced more than 500,000 residents (International Recovery Platform, 2007). The IFRC collaborated with the other Red Cross organizations to construct a transitional shelter programme (2007). Approximately 20,000 transitional shelters were constructed for people living in tents or shacks at that time between 2005 and 2007 (2007). The purpose of such rapid shelters was to fill the gap between low-quality emergency shelter and permanent houses, providing beneficiaries to rebuild their permanent houses in two to four years (2007). These rapid shelters were steel-framed with wooden walls and metal sheet roofs (2007). Based on the research, most beneficiaries were satisfied with the transitional shelters, and some of these shelters are still used as additional assets because of their good quality (2007). Moreover, receiving transitional shelters has provided many families with privacy and comfort, thus helping them relieve some stress caused by the disaster (2007).

## **Workforce Housing**

Our literature review on workforce housing focused on academic articles, publications in major magazines and newspapers, and private-sector briefings and research. Our research on workforce housing explored the background and history of the issue, policies and programs that have been previously implemented and their efficacy, and proposed future solutions.

### **What is workforce housing?**

Middle-income workers, such as teachers, firefighters, healthcare workers, retail clerks, and restaurant workers have often been left out of policy plans for affordable housing. This group, sometimes known as the “missing middle”, usually makes between 80% and 120% of AMI. Often, their incomes are too high to qualify for traditional low-income housing programs, but too low to take advantage of housing-related tax deductions or to afford a home on their own

in the area in which they work (Paulsen, 2017). This dilemma leads to long commute times from cheaper areas, scheduling challenges for dual-income families, and a disconnect between the workers and the community they work for (Parlow, 2015).

FY 2016 80- and 120-Percent Area Median Income Limits (four-person households) and CY 15 Median House Price and Median Annual Gross Rent

Metropolitan Area	HUD Area Income Limits (HAMFI)		Median House Price (\$)	Median Annual Rent (\$)
	80-Percent Limit (\$)	120-Percent Limit (\$)		
New York	72,500	108,750	414,000	15,696
Los Angeles	69,450	104,175	540,600	16,176
Chicago	61,500	92,250	224,300	12,144
Dallas	57,350	86,025	172,500	11,904
Houston	55,350	83,025	168,300	11,736
Washington	70,150	105,225	401,500	18,636
Philadelphia	64,250	96,375	240,900	12,744
Miami	56,800	85,200	241,700	14,496
Atlanta	54,000	81,000	186,300	12,180
Boston	73,050	109,575	393,000	15,792

CY = calendar year. FY = fiscal year. HAMFI = HUD Area Median Family Income. HUD = U.S. Department of Housing and Urban Development.

Note: CY 2015 house price and rent data are from 2015 American Community Survey (ACS) 1-year estimates of median value of owner-occupied housing and median gross rent.

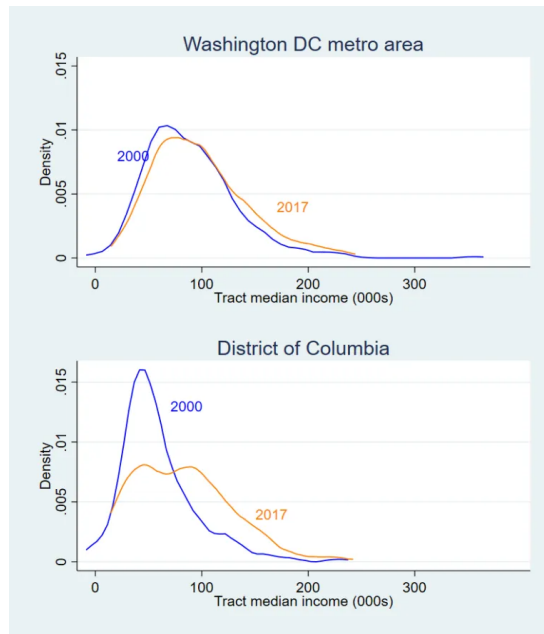
Sources: FY 2016 Income Limits Briefing Materials; 2015 ACS; author's calculations

*Although the median home price may appear to be “affordable” for people making 80% AMI, the financial requirements for purchasing a home (a 20% down payment, strong credit history, falling under Dodd-Frank’s aggregate debt-to-income ratio caps) make the process unrealistic for many households (Paulsen, 2017).*

“Workforce housing” is the term that is often used to describe programs that target the income groups discussed above. However, the term is imprecise and controversial, given that many low-income groups are also employed and therefore part of the “workforce” but are not in the implied middle-class income group (Ford & Schuetz, 2019).

## Why workforce housing?

It is in a city’s best interest to make affordable housing available for its workforce. Middle class workers are more likely to contribute to the city’s economy and enhance revenue than they are to require public assistance. Providing adequate workforce housing can help reduce sprawl and lessen the burden on resource-strapped outer neighborhoods currently being occupied by commuting workers (Kroopnick, 2008). Cities can collect more property tax from a broader cross-section of residents when more middle-class people move in and begin renting or purchasing homes. Middle-class individuals are more likely than low- or high-income individuals to spend a high portion of their income on locally-consumed items and services, creating an economic multiplier effect (Ford & Schuetz, 2019). The future of cities, especially those in danger of population loss and “brain drain”, depends on their ability to capture this group of workers for whom suburban life is not desirable, feasible, or affordable.



*The number of middle-income residents in cities like Washington, DC has significantly increased in the past several decades. In 2000, only 16% of neighborhoods in DC were middle income. In 2017, middle-income neighborhoods made up 35% of the metropolitan area and 31% of the District. (Ford & Schuetz, 2019)*

## Implemented solutions

Several policy solutions have been implemented by governments and the private sector to attempt to mitigate the workforce housing crisis.

### 1. *Massachusetts/Boston*

The state of Massachusetts has implemented a number of government-led solutions to the affordable housing crisis in the city. MassHousing, the quasi-public agency charged with developing affordable housing in the state, has been at the forefront of most of these projects. A \$100 million MassHousing fund was established in 2016 to provide aid to households earning between 61% and 120% of AMI. The new funding allows the government to use state-owned land for development of affordable units, and ensures workforce housing units will be deed restricted as affordable to households with incomes between 61% and 120% of the AMI for 30+ years (Kimura, 2016). This fund recently contributed \$2.1 million to develop the former site of two Boston car repair shops into 36 units of new mixed-income homes, which includes 21 units of new workforce housing (“MassHousing to Provide \$2.1 Million in Workforce Housing Financing for New Rental Housing Community for Working Residents in Dorchester,” 2019). The state has also launched a grant program that encourages local housing authorities with state units to partner with developers to completely redevelop their properties into mixed-income developments with workforce housing. The grant program, known as the Partnership to Expand Housing Opportunities states that “in return for the modernization of the local state-aided public

housing stock, including a full one-to-one replacement of current subsidized units, the housing authorities' development partners will construct additional new market-rate and workforce housing units" ("Baker-Polito Administration Program Advances Public-Private Partnerships to Modernize Public Housing," 2016).

## **2. *Miami***

The city of Miami has a Workforce Housing Development Program to enable private property developers to get density bonuses 'in exchange for building workforce housing units or a monetary contribution to the City's Affordable Housing Trust Fund' (Wijburg, 2021). The target group of this Trust Fund was later changed to also include lower-income people, and has since moved away from the sole focus on workforce housing development. Miami has taken a strong stance on public-private partnerships in developing affordable housing, with a recent written commitment between the local government and business to take collective responsibility for the city's housing affordability problem. This agreement states that private companies need to take a leading role in contributing to or creating funds to develop affordable housing for their employees (*Connect Capital Miami*, 2019). Miami-Dade County introduced a local Surtax Program in 1984, which allowed the local government to tax private real estate transactions and to set aside the tax revenue for the production and rehabilitation of affordable housing and to provide home ownership assistance to low-income groups (Wijburg, 2021). This combination of funding sources has allowed the city government to partner with the private sector to build several innovative projects. These projects include partnering with a hotel developer to refurbish run-down apartments for hotel employees to live in, and building combined housing/school buildings in areas that needed to expand school capacity (Wijburg, 2021).

## **3. *Seattle***

The Rainier Valley area in Seattle has taken on an ambitious project that combines private philanthropy, government grants, and local community organizations. The Othello Square development will have 436 units of mostly workforce housing, a clinic, a charter school, and office space for local businesses and nonprofits. The driving force in creating the workforce housing was Seattle Children's Hospital, which made an \$8 million gift to allow developer Spectrum to double the number of apartment units, for incomes of 80% or less of AMI, which is anywhere from \$56,000 to \$80,250, depending on household size (Roberts, 2019). The project is in its second iteration- it was previously a mixed-use apartment project led by developer Lobsang Darby, but that development stalled when Darby was arrested for federal securities fraud. When deciding how to proceed after his arrest, nonprofits and local government chose to reframe the project as a community-led initiative, seeking out significant feedback from individuals and families who live in the area, which is mostly made up of African-Americans and immigrants. The goal of the project in its current state is to meet the needs of the community by incorporating the community's feedback throughout every step of the process.

### **III. Data and Methodology**

#### **Rapid Shelter**

These cases analyzed in the report are all related to rapid shelter development after natural, conflict, and complex crises. These hazards that have led to the rapid shelter development all imposed great impact on the regions, and the rapid shelter development process had a significant impact on the post-disaster recovery. The report aims to provide better solutions to rapid shelter development through analyzing the implication of each case and to ultimately help various government agencies develop better strategies to save lives after disasters. COVID-19 is especially creating a health and economic crisis in the US and throughout the world (National Alliance to End Homelessness, 2020). For example, according to the estimate made in January 2020, there were approximately 580,000 individuals that were homeless in the US, a 2% increase from the year before (Fessler, 2021). This means that nearly 2 people were homeless in every 100 people in the US in January 2020. As an effective strategy to relieve residents' stress during and after COVID-19, the report therefore also aims to help government agencies and nonprofit organizations provide better solutions to cope with the impact of the pandemic.

Specifically, the report will be focusing on the main strategies including implementation, strengths and weaknesses of each project, demonstrating the reasons behind the efficiency and inefficiency of each project. Meanwhile, different countries implement different approaches to develop rapid shelters, and the approaches could be related to countries' economic development, political governance, geography, culture, and exposure to hazards. Therefore, the cases analyzed in the report are from different regions and after different types of hazards from the past twenty years. More cases should be analyzed in the future in order to provide a more comprehensive overview of the rapid shelter development strategies.

The data collected from each case include number of houses damaged or destroyed, number of people affected, project target population, the number of units constructed after the events, construction time, shelter size and cost, and implementation approach. These data are collected from the Global Shelter Cluster website and the data are from the past twenty years. Through these data, the report aims to analyze the reason behind the main efficiency or inefficiency of the rapid shelter construction, thus providing implication on the future rapid shelter development process.

Location	Hazard	Impact of the Hazard	Construction Time	Project Target Population	Shelter size (m2)	Cost (USD)	Implementation
Vietnam	Typhoon (2009)	23,500 houses destroyed; 356,790 people evacuated	13 months	approximately 2,730 people (650 households) across seven provinces	26	1650/household	Government-and organizations-monitored construction
Haiti	Earthquake (2010)	180,000 house damaged;	18 months	10,000 emergency shelter kits distributed  20,000 reinforcement kits distributed.  2,550 T-shelters installed	-	2800/T-shelter	Partnership between local organizations and international organizations
Sri Lanka	Floods and Landslides (2017)	229,233 households affected; 879,778 people affected; 3,048 houses fully damaged; 76,803 houses partially damaged	7 months	28,075 people	18.5	2,600/household	Construction completed by UN-Habitat, community-based organizations and affected families
China	Sichuan Earthquake (2008)	5 million houses damaged; 15 million people displaced	2 years	63,000 families in 1 county in Sichuan	50-150	9,440-19,500	Government-led construction

## Workforce Housing

The CIPA capstone team focused on several case studies of workforce housing projects to explore the question of how to best develop workforce housing to suit the needs of the middle



class. Case studies of three projects were chosen to represent a diverse geographic reach as well as differences in strategy and implementation. Cases were researched using developer and government websites, news media sources, and through short informational conversations with people involved in the projects. Data collected on each of the housing case studies includes the specific type of housing created, target population, types of partnerships between government, nonprofits, private sector, and other stakeholders, financing methods, project outcomes, strengths, and weaknesses.

The three cases chosen are as follows: the redevelopment of Liberty Square in Miami, Florida; the use of a community land trust to create an affordable homeownership model on Long Island, NY; and the renovation of a former timeshare condo building for year-round affordable housing in Provincetown, MA. Each of these projects approaches the question of how to provide affordable housing for the “workforce” population differently. Liberty Square is a large, mixed-income development in a major city with an extremely high cost of living. LICLT focuses on homeownership rather than rentals and is developing housing across multiple sites. Harbor Hill is a smaller-scale rental option in a unique setting with a tourist economy.

## Rapid shelter in Sri Lanka, 2017- Floods

**NO. of houses damaged:** 3,048 fully damaged and 76,803 partially damaged

**NO. of people affected:** 879,778 as of 31 May 2017



House prototype  
(Source: Global Shelter Cluster)

### Rapid shelter target population:

approximately 28,075 people

### Project output:

- ✓ 89 transitional shelter
- ✓ 692 households provided with repair assistance
- ✓ 6,385 households provided with emergency shelters (NFI)
- ✓ 4 evacuation centers upgraded

**Shelter size:** 18.5 m<sup>2</sup> average/unit

**Materials Cost per shelter:** USD 1,545 for transitional shelter; USD 95 for shelter repairs; USD 65 for emergency shelters

**Project length:** 7 months

**Stakeholders involved:** UN-Habitat, community-based organizations (CBO: farmer organizations; welfare and funeral societies; self-help groups and Village Development Committees), affected families

**May, 2017**

### Project timeline

0 month	2 month	4 month	5 month	6 month	7 month
•	•	•	•	•	•
Planning and damage assessment	Construction begins	NFI distribution begins	Procurement of material and hire of labors	NFI distribution completed	Project closure

### Project implementation:

A network of CBO and affected families themselves were collaborating to conduct shelter repairs, build transitional shelters, distribute NFIs and upgrade evacuation facilities. The project was overseen by a team of fifteen staff from the UN-Habitat. CBO helped families with material procurement and labor hiring process and distributed cash grants to families' bank accounts.

### Strengths of the project:

- ✓ The project was implemented timely and effectively with the involvement of CBO
- ✓ Cost saving was achieved through reusing salvaged building materials
- ✓ Smooth information flow with strong linkages with government departments
- ✓ Participatory monitoring and evaluation methods were used throughout the project.
- ✓ Transparency and accountability of the utilization of the funds were achieved through the establishment of a georeferenced database for local teams

### Weakness of the project:

- ✓ Delayed contractual agreements & payments to CBO due to slow internal processes control
- ✓ Challenges in adjusting project activities (transitional shelter, shelter repairs and emergency shelters) from the low flexibility of the project funding
- ✓ Slow recruitment processes led to delay in the project emergency responses

## Rapid shelter in Sichuan (China), 2008- Earthquake

**NO. of houses damaged:** 5,000,000 estimated

**NO. of people displaced:** 15,000,000 estimated



Temporary tents  
(Source: Chinanews.com)



House prototype  
(Source: Global Shelter Cluster)

**Rapid shelter initial target population:**

63,000 families in 1 county in Sichuan

**Project output:**

100,000 tents in first three months;

About 5,000,000 permanent houses across three provinces

**Shelter size:** 50-150 m<sup>2</sup>

**Materials Cost per shelter:**

USD 9000 – USD 18,000

**Project Cost per shelter:**

USD 440 – USD 1,500

**Project length:** 24 months

**Stakeholders involved:** Provincial, city and county government

### Project timeline

**May 12<sup>th</sup>, 2008**

0 month

3 month

4 month

19

2 years

Earthquake

Government has distributed 100,000 tents to 300,000 quilts

Project starts

Distribution of funds

Project completion

### Project implementation:

The government was in charge of allocating the land, selecting construction teams and monitoring the construction. The government also distributed cash grants (450 USD or 1500 USD/household) to families fulfilled the selection criteria for housing related need.

### Project strengths:

- ✓ A beneficiary database was developed to increase the project transparency
- ✓ Cash grants were distributed to help families transition back to normal lives
- ✓ High efficiency was achieved through having grants directly go to families' bank accounts
- ✓ Scope and technical aspects of the project were simplified with government directly managing the whole construction process

### Weakness of the project:

- ✓ With strict selection criteria, only about 30% of the population were selected in some communities as grant beneficiaries, which has led to the dissatisfaction for people who were unable to receive the grants.
- ✓ Low efficiency in developing a list of beneficiary names. Most houses were completed when the funds were distributed.

# Rapid shelter in Haiti, 2010- Earthquake

**NO. of houses damaged or destroyed:**  
180,000



Transitional shelter      Upgraded transitional shelter  
(Source: Global Shelter Cluster)

## Project output:

10,000 emergency shelter kits distributed  
20,000 reinforcement kits distributed  
2,550 T-shelters installed

## Materials Cost per shelter:

T-shelter: USD 1,700 per unit

## Project Cost per shelter:

T-shelter: USD 1,100 per unit

## Project length: 18 months

**Stakeholders involved:** local organizations (Haiti Red Cross Society) and numerous international organizations (include USAID, UN, International Red Cross)

## Project timeline

January 12<sup>th</sup>, 2010

0 month	1 month	2 month	6 month	12 month	18 months
•	•	•	•	•	•
Earthquake	Draft 1 year strategy	10,000 emergency kits distributed	5 year habitat strategy	20,000 reinforcement kits and 500 rural repair kits distributed	2,550 transitional shelters installed, and 1,126 tool kits distributed

## Project implementation:

This project provided three forms of support for people with differing needs. In the emergency phase, the Haiti Red Cross Society distributed 10,000 emergency shelter kits. It continued to provide 2,550 transitional shelter kits and 20,000 reinforcement kits for people did not have land to build their houses. 500 rural repair kits and over 1,000 tool kits were provided for repair purposes. Strong partnerships were established between Haiti Red Cross Society and numerous international organizations, including USAID, UN, International Red Cross to work on the project development.

## Project strengths:

- ✓ Multiple approaches were provided to people with different needs, allowing projects to match the evolving situation during the project
- ✓ Strong partnership were developed between local and international organizations for national strategy development and material/technical support

## Weakness of the project:

- ✓ Due to Haiti Red Cross Society's lack of planning on the logistics capacity of the project, three months were lost trying to establish partnership with other organization in the later stage
- ✓ The quality of emergency shelter kits and tents distributed to the beneficiaries was variable

## Rapid shelter in Vietnam, 2009-Typhoons Ketsana and Mirinae

**NO. of houses destroyed:** 23,500

**NO. of people evacuated:** 356,790



House prototype  
(Source: Global Shelter Cluster)

### **Rapid shelter target population:**

approximately 2,730 people (650 households) across seven provinces

### **Project output:**

650 permanent houses completed

**Shelter size:** 26 m<sup>2</sup> average/unit

### **Materials Cost per shelter:**

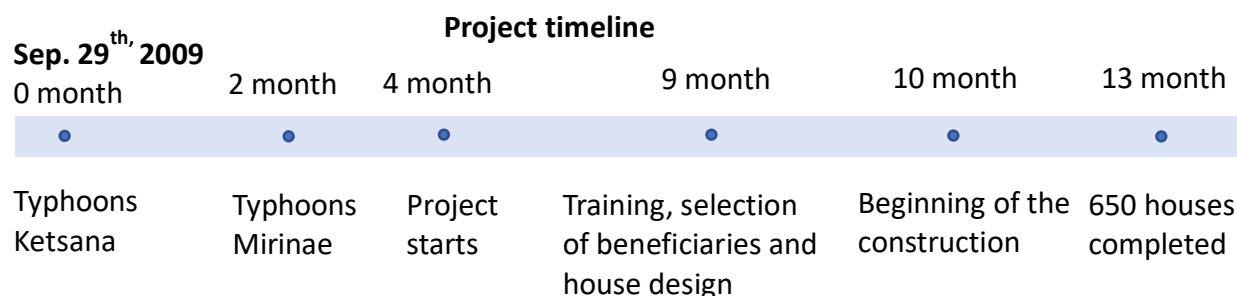
1,650 USD cash grant

1,300 USD average spend on material only

**Project length:** 13 months

**Shelter construction length:** 2 months

**Stakeholders involved:** Viet Nam Red Cross (VNRC), government, international partner organization (International Federation of Red Cross and Red Crescent Societies, and the Development Workshop France)



### **Project implementation:**

First, government officials of each province and community were given program training including beneficiary selection criteria, cash grant distribution process and related guidelines by VNRC; community meetings were held to select beneficiaries. International partner organization was identified by the government to provide the technical support and supervision.

### **Project strengths:**

Houses were established based to traditional design with important reinforcement. Daily project construction work was closely supervised by qualified engineers. Beneficiaries were able to adjust the home construction based on individual needs. Technical trainings were provided by the international organizations to help families follow the construction work

### **Weakness of the project:**

Water and sanitation (both software and hardware components) were not included in the shelter program  
Long time spent on staff coordination process, and this has delayed the project  
Disparities between provinces should have been considered, including the availability of local labor and the variability of material and transport, for quality and cost controls

# Recommendations for Future Rapid Shelter Development

## Stakeholder Development

- Establish strong linkage among stakeholders for future projects to ensure smooth information flow
  - Rapid shelter development strength in Sri Lanka -2017 - Floods
- Partner with international organizations to increase the technical assistance or expand the project capacity.
  - Rapid shelter development strength in Vietnam - 2009 - Typhoon
- Strict monitoring throughout the project by the main stakeholder
  - Rapid shelter development in China -2008 - Earthquake



## Project Planning

- Field survey needs to be conducted to understand the local situation and needs
  - Rapid shelter development strength in Vietnam - 2009 - Typhoon
- Investigations are needed to take the culture, geography and exposure to hazards into considerations
  - Rapid shelter development strength in Vietnam - 2009 - Typhoon
- Develop different approaches at different stages, allowing projects to match the evolving context and meet different groups' needs
  - Rapid shelter development strength in Haiti - 2009 - Earthquake



## Project Management

- Georeferenced database and beneficiary database need to be developed to increase transparency and accountability of the utilization of funds.
  - Rapid shelter development in China -2008 - Earthquake
  - Rapid shelter development in Sri Lanka – 2017 - Floods
- Ensure smooth internal capital flow, efficiency of recruitment and beneficiary list development processes to avoid process delay
  - Rapid shelter development weakness in China - 2008- Earthquake,
  - Rapid shelter development weakness in Vietnam-2009-Typhoon



## Project Implementation

- Participatory monitoring and evaluation need to be established throughout the program (close supervision by local engineers)
  - Rapid shelter development strength in Sri Lanka -2017 - Floods
- Water and sanitation, community development need to be considered in the project
  - Rapid shelter development weakness in Vietnam-2009-Typhoon





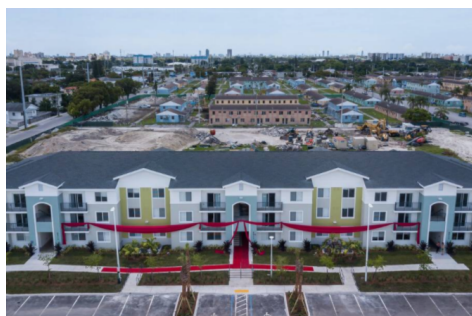
# LIBERTY SQUARE MIAMI, FLORIDA

## BACKGROUND

- Miami is among the least affordable large cities in the US for housing, 57% of HH spending >30% income on housing costs, 33% of renters spending >50% income on rent
- Revitalizing the entire Liberty City neighborhood, a high-crime and high-poverty area which is the site of a former housing project

## KEY PLAYERS

- Related Group (Developer), Miami Dade County, United States Department of Housing and Urban Development, Miami-Dade County Public Housing and Community Development



## FINANCING

- Will cost **\$330M** by completion in 2023
- Miami-Dade County: **\$46M** directed for affordable and workforce housing, **\$26M** for general community revitalization in Liberty City including schools, grocery stores, and healthcare facilities on the property
- HUD: **\$3.5M**
- Related Group: Initial **\$23.1M** construction loan, **\$16M** LIHTC

## UNITS BUILT

- 640 public housing units, 224 affordable housing units, 120 elderly affordable housing units, 288 workforce and market rate housing units
  - Income restrictions range from 30-120% AMI for affordable/workforce units
  - Specific income thresholds for different types of housing are not publicly available
- 60 affordable homes soon to be available for ownership

## TARGET POPULATION

- Existing tenants given first preference and allowed to move to new buildings without a rent increase, relocation paid by the developer
- Given temporary housing in nearby buildings while the old housing project is torn down
- Random computerized lottery selection from qualified applicants

## PROJECT FEATURES

- 75% of permanent jobs in the new facilities to Liberty Square residents
- Free wifi for all residents
- County providing all residents job training, apprenticeships, certifications, and reentry training for ex-offenders
- Later phases of the project will include a specialized school, childcare facility, and health clinics within walking distance for all Liberty Square residents
- Addressing issues of food insecurity with on site grocery store

## STRENGTHS

- Centering housing in a full neighborhood redevelopment
- First mixed-income project in Miami that incorporates public, affordable, workforce and market-rate units under one plan- truly integrated with different income levels in the same buildings with no separation
- Decreased blight by tearing down decrepit buildings, hopes of decreasing poverty/crime

## WEAKNESSES

- Accusations of gentrification- former Liberty Square housing project was the first public housing for Black Americans in the South
  - Mistrust from the community- Related Group's Hudson Yards project raised questions about funding and tax breaks

# LONG ISLAND COMMUNITY LAND TRUST LONG ISLAND, NY



## TARGET POPULATION

- Applicants are required to make between 80-120% AMI
- LIHP has additional programs like mortgage assistance for first-time homebuyers
- Randomized lottery system to select homebuyers, if the selected applicant declines to purchase the next one is chosen

## PROJECT FEATURES

- Partnership with GOSR to combine storm recovery and affordable housing, and to decrease blight from properties that have been left vacant in the years following Hurricane Sandy
- Covers the entire Long Island region, other CLTs cover smaller regions and do not have as much impact, influence with the government, or funding
- Housing remains affordable beyond a grant lifecycle/single owner

## STRENGTHS

- Long-term affordability is guaranteed
- When a homeowner wants to sell, the CLT evaluates the appreciated value of the home based on CPI and home improvements. A portion of the appreciated value goes to the owner, but it is sold to the next person on the list with no broker fee and no other cost increases

## WEAKNESSES

- Smaller scale, slow moving
- Launched in 2017, only 9 completed projects. LIHP simultaneously works on many projects related to affordable housing
- Confusion between LIHP CLT and other smaller town/county level CLTs
- Some funding sources are not continuous- LIHP cannot count on lawsuit settlements as a permanent fixture of the budget

## BACKGROUND

- The project's goal is provide an affordable path to homeownership on Long Island for people who make between 80-120% AMI
- Community Land Trust model- CLT acquires and retains land in trust for the community and never sells it, provides a 99 year lease for the individual homeowners and offers a deed for the building on trust land

## KEY PLAYERS

- Long Island Housing Partnership (LIHP) and Long Island Community Land Trust, Citi Community Development, New York State Government (Governor's Office of Storm Recovery, Attorney General's Office)



## FINANCING

- **\$750,000** and **free land** from Governor's Office of Storm Recovery (GOSR)
- **\$333,333** from NYS Homes and Community Renewal's Community Land Trust Loan Fund
- **\$1.5M** from Citi Community Development
- **\$1.1M** from NY Attorney General's office, money from settlements with UBS/RBS
- Additional funding from private foundations and private donors

## UNITS BUILT

- Properties chosen are usually vacant lots, foreclosed homes, and decrepit buildings that can be easily torn down for new construction
- Recent donation of 23 homes damaged in Hurricane Sandy from GOSR
- 9 completed homes to date, all over Long Island, 14-18 will be beginning construction shortly





# HARBOR HILL PROVINCETOWN, MA

## BACKGROUND

- Provincetown is a tourist destination, and second homes and seasonal rentals have driven prices too high for year-round residents
- Providing year-round rental units in Provincetown for residents earning between 80-200% AMI
- Redevelopment of a bankrupt/abandoned timeshare condo complex

## KEY PLAYERS

- Year Round Market Rate Rental Trust (YRMRRT), Cape Cod Community Development Partnership, Town of Provincetown (residents and government), NEI General Contracting, Cape Light Compact



## FINANCING

- Town purchased the property in 2018 at bankruptcy auction for **\$8.1M**, and was initially authorized by town meeting to spend up to **\$10.7M** on purchase and renovation
- Additional **\$429,000** in town funding authorized for renovations
- **\$250,000** state grant for renovating ADA units
- Planned long term funding through rental income

## UNITS BUILT

- 28 total units (studio to 3 bedroom)
- Two of the 28 units are fully ADA compliant and are the first units created under new disability-focused inclusionary zoning bylaws in Provincetown
- Monthly rent for the non-ADA units range from \$1,450 for the studios to \$2,700 for the 3-bedroom
- ADA units are deed restricted at \$1,000 - \$1,200 monthly rent

## TARGET POPULATION

- Focused on year-round residents-tenants must live in Provincetown for all but six weeks of the year, and make between 80 and 200% AMI (for an individual, \$51,250 - \$127,820)
- Lottery with additional preference to those who already live in town, work in town, or whose children attend public school

## PROJECT FEATURES

- After the bankruptcy, some of the old condo occupants left furniture, which was made available to new apartment residents
- Architecture of the building is the traditional Cape Cod style, which seamlessly blends in with the surrounding neighborhoods and avoids "othering" people living in affordable housing

## STRENGTHS

- Only project of its kind in the area, addresses a specific need
- Funding authorized through town meeting vote, where direct participation ensures buy-in from town residents and decreases NIMBYism
- The town chose a property that didn't need major renovation, in theory the project should have moved quickly

## WEAKNESSES

- The units are still not affordable enough an individual making 80% AMI cannot reasonably afford the studio with spending >30% income on rent
- Does not allow subletting- could be a lucrative market for seasonal workers that would make renters additional money

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