

The purpose of this competition is to design provisional housing for residents displaced by a catastrophic flood. The endeavor requires collaboration across different fields of expertise. Concurrently, the significance and viability of the physical solution is tied to its effectiveness in becoming part of the city's existing infrastructure and urban community.

Concept

The concept is to have the displaced community co-inhabit Prospect Shore as an integral part of the neighborhood—a city within a city. The goal is to deploy and recover together, as a community, in a rapid, sustainable, flexible and cost efficient way. To the extent possible, citizens remain in their familiar environment and close to home avoiding displacement and alienation. The design of the units is technologically advanced and will meet the needs of affected families, by integrating the new spaces created between provisional units and existing housing, neighborhoods are kept whole, empty lots may be used for future development, and recovery is focused and effective.

The Process

After the flood waters recede, the street level dynamic-circulation, egress/ingress, utilities, security—is moved to a higher datum. This new datum becomes the starting point for new provisional housing. Core towers connect the ground plane to the new datum structure. An array of recycled and recyclable material extends off the core tower, much as a tree branching out above the ground plane, and serves as the conduit for energy, mechanical ventilation, water and all circulation systems. The housing units are light, billowous and self sustaining modules that plug into the structure.

The process will first recover salvageable and recyclable materials to be used as part of the rebuilding effort and as part of the new unit structure. The new structure will be deployed, constructed and integrated with the existing built structure and initially use existing city utilities for water and electrical needs. As units are deployed and stabilized, the system will provide its own water harvesting, gray water management, and energy production. The number of total units deployed will depend on the extent of the damage and number of displaced households. We can for see the immediate deployment of 12,000 to 18,000 units.

The deployed units and the existing building structures will create a new expanded interstitial space, a dynamic human scale environment that will function as a community gathering area. The temporary dweller and stable resident will physically connect on roofs, elevators, stairwells and street. The design seeks to integrate the rebuilding effort with the day-to-day functions of the neighborhood.

The units and structure are flexible and have been designed as a system to be deployed in a variety of conditions. The system can be built along single family houses, mid-rise city blocks as well as high-rise superblocks. The materials used for the construction of the units and structure are lightweight and streamlined for reusability. After total site reconstruction the de-constructed units can be salvaged, stored and even transported to other cities and states. The versatility of the design allows for future use as temporary shelters, information kiosks or portable housing.

As the rebuilding process advances towards full neighborhood revitalization, the units will be deconstructed and the new roof spaces, with gardens, cisterns and water filtering systems, will remain as a by-product of reconstruction—to enrich the existing community.