This Guide will inform the design of resilient community centers to strengthen organizational capacity, promote year-round education, and withstand environmental, social, and economic changes. The Guide offers practical suggestions, including how to develop operational ability and relevant physical assets—like solar panels and water cisterns—to achieve resilience.
Chapters

00: Introduction

Part 1: Community Organization

Part 2: Operating a Resilient Community Center

Part 3: Physical Assets of a Resilient Community Center

Community Case Studies
The Community Together effort was a partnership between Enterprise Community Partners, Relimagina Puerto Rico (a project of the Resilient Puerto Rico Advisory Commission), Mercy Corps, and ResilientSEE-PR partners, including Design Ed 4 Resilience and Perkins and Will. Please see the guidebook for a full list of content developers and advisors.
What is a Resilience Hub?

- Sustainable Energy Source
- Cohesion of Emergency Preparedness Plan
- Dependable Communication
- Cultivation of Community Garden
- Accessibility to Water
- Strength of People
- Capacity of the Organization
- Coordination of Safety Guidelines
**Systems of a Community Resilience Center**

**Communications**
- Wi-Fi
- Satellite phone
- Landline phone
- Wi-Fi/3G access for social media and community broadcast

**Structural**
A professional structural engineer should be consulted to verify the building meets code requirements for seismic movement. Depending on location, oversized structure can withstand forces caused by storm surge produced by hurricane or tsunami events.

**Energy Storage**
Design a 72-hour system that includes batteries for storing energy. Ensure that basic needs—like ventilation, emergency lighting, and electricity for essential equipment—are connected.

**Energy Generator**
Most a backup energy generator for emergencies. Ensure that the generator is placed outdoors, at least 20 ft from the structure, and is protected from debris.

**Rainwater Collection**
Install a rainwater collection system for non-potable water use, such as irrigation, flushing toilets, and cleaning. Purified water can be used for drinking. Rainwater storage tank could be located on the roof or ground.

**Solar Power**
Initial solar panels with batteries; some centers might also have a connection to the grid for selling power during low use or consuming power during high use. Solar panel and other forms of renewable energy. Other recommendations for the community center or individual houses: portable solar chargers for mobile phones, solar lamps, portable solar power generators, dedicated solar panels for critically ill patients (for example, microwaves or refrigerators), solar refrigeration, or back-up diesel generator.

**Solar Thermal Heaters**
Use solar energy to heat up water.

**Openings**
Design using operable windows and doors, that allow cross-ventilation and ventilation. Open spaces by allowing the exterior access to the building. Shade openings to reduce amount of sunlight and heat gain entering the building.

**Vegetation**
Use native vegetation to increase shade, mitigate excessive sunlight, reduce heat gains, and generate biodephi, thereby reducing energy costs.

**Ventilation**
Design a ventilation system in which air is always circulating through the inhabited space. This ventilation system could be passive with natural breezes or mechanical with active systems, such as an exhaust fan.

If a new construction, place the building above the Design Flood Elevation (DFE). If it is already built, ensure equipment that might get damaged with water is stored above the DFE.
## Part 04: Community Case Studies

### Introduction

1. C.D.S.C. Daguao - Naguabo
2. Centro Gupe - Patillas
3. GB, Cano Martin Pena - San Juan
4. C.C.C. - Corcovada - Anasco
5. ACUTAS - Toa Baja
6. FE Que Transforma - Vieques
7. P.E.C.E.S. - Humacao

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