Public Buildings in Puerto Rico After Hurricane Maria: Prestorm Challenges, Hurricane Damage, and Suggested Courses of Action for Recovery

TOM LATOURRETTE, BENJAMIN M. MILLER, TEDDY ULIN, KRISTIN VAN ABEL, KRISTA S. LANGEAND, NUPUR NANDA

www.rand.org/t/RR2606

The government of Puerto Rico submitted a recovery plan to Congress in 2018, describing a strategic approach to recover from the destruction of the 2017 hurricanes. HSOAC input provides a summary of damage to public buildings and the basis for 12 courses of action to repair the hurricane damage and to modernize the public building infrastructure to increase resilience to natural hazards, improve energy efficiency, and improve functionality and user experience.

RESEARCH QUESTIONS

- What was the damage to public buildings in Puerto Rico from Hurricanes Irma and Maria?
- What can be done to repair and reconstruct public buildings in Puerto Rico?
- How can these public buildings be realigned and repurposed such that they will withstand future storms, be more accessible to the public, and use space more efficiently?
- How can policy development and data collection be used to improve public buildings going forward?
KEY FINDINGS

- Information about the inventory and characteristics of public buildings in Puerto Rico, such as owners, conditions, and vulnerability to hazards, is sorely lacking, creating challenges for planning and recovery.
- Recovery of the public building sector requires the involvement of building users and building owners, who often have little association with each other.
- Data on the extent of hurricane damage and functional impairment to public buildings in Puerto Rico are incomplete, making it difficult to estimate the required scale of recovery efforts.
- Long-term trends, such as increasing vulnerability to hazards, deferred maintenance, changes in population and employment and evolving service needs and delivery approaches, influence public building requirements and recovery needs.

RECOMMENDATIONS

- Compile a public building inventory.
- Rightsize public buildings.
- Establish integrated services centers.
- Realign public building ownership.
- Move public services to public buildings.
- Study whether externalizing the Puerto Rico Industrial Development Company would improve its ability to support economic development.
- Refurbish community centers and community technology centers.
- Mitigate flood risk for critical government functions.
- Repair all essential public buildings damaged by Hurricanes Irma and Maria.
- Incentivize state-of-the-art building design, practices, and technologies.
- Bring public buildings up to code.
- Develop secondary power guidelines.