



Good Things Come in Threes: Resiliency Reports Revealed for NYC by Patricia Harris and Thomas O'Neill, June 2013

Super Storm Sandy, in its devastating wake, caused \$33 billion in damage in New York City alone.[1] In the months following Sandy's destruction, as repair gives way to reform, many are wondering, "Is New York prepared for climate change?"

Three organizations have recently issued reports addressing this question – the New York Building Congress, the American Institute of Architects New York Chapter, and the NYC Building Resiliency Task Force. These reports offer differing analyses and approaches to how to better prepare New York City for extreme climate events. While these three reports offer varying recommendations, all revolve around the core concept of improving "resiliency," or the ability of New York City's structural and infrastructural systems to withstand and quickly recover from severe weather events through smarter design and development.

New York Building Congress - Risk & Resiliency After Sandy

"You can't prevent future emergencies, but you can mitigate the impact."

In its "Risk & Resiliency After Sandy" report released in June of 2013, the New York Building Congress (NYBC) Task Force on New York City Storm Preparedness offers three main recommendations to improve resiliency throughout New York, better preparing the City for the next major storm.

According to Zetlin & De Chiara LLP Partner Michael Zetlin, member of the NYBC Task Force, "We have long been aware of New York's place as a target of manmade threats, and Sandy served to remind us that the City can be vulnerable to extreme natural events as well. Our real estate, design, and construction communities have quickly and thoroughly risen to the challenge of laying out a plan to make New York safer and more secure from a wider range of threats." The NYBC Task Force was comprised of construction industry leaders and experts, including engineers, architects, labor leaders, lawyers, academics, and more.

The following three recommendations broadly describe the Task Force's overarching plan to improve New York City's resiliency by hardening, revamping and reworking critical systems; such as storm-proofing utility grids and improving emergency response coordination.

1. Harden the City's power grid, improving the reliability and resiliency of energy and telecommunication grids, as well as adopting modern weatherproof technology capable of withstanding powerful storms to existing infrastructure systems.
2. Establish clear authority and responsibility for emergency response teams. To achieve this objective, the NYBC has set forth five goals, centered on improving and increasing state agency oversight, processes and cooperation. One intriguing idea involves a standardized "Threat and Vulnerability Assessment," which agencies can use to analyze the resiliency of existing and potential critical facilities such as hospitals, transportation, and utility facilities.
3. Improve building and zoning codes to minimize structural vulnerability to natural disasters. The NYBC hopes that reworking these codes can enhance building resilience by hardening existing infrastructure systems and establishing emergency preparation and recovery plans for buildings.

American Institute of Architects New York – Post-Sandy Initiative

"Building back better and smarter... will help reverse the vulnerability we have inherited from centuries of misguided development."

The American Institute of Architects New York Chapter (AIANY) and the AIANY's Design for Risk and Reconstruction Committee's Post-Sandy Initiative, issued in May of 2013, critiques the structural and infrastructural systems in place before Sandy, and seeks to revamp such systems to improve

resiliency. The Initiative describes the pre-existing systems as contributing to a "defenseless built environment," with fragile houses and critical public health and safety facilities in vulnerable locations, and transportation and utility systems unable to withstand extreme weather events. AIAANY calls for renovating and modifying building, transportation and infrastructure networks with an emphasis on improving resiliency and reliability in the event of future storms.

Design unique solutions to address unique problems

The Initiative recognizes that the City of New York is a major urban center, whose efficacy depends on an interconnected web of various differing infrastructural systems. Such a unique and complex design means that not only must each system be resilient enough to withstand extreme weather, but creating those resilient solutions will require extensive analysis of the specific design and characteristics of each system. What may work for one bridge will not necessarily work for another, and so applying a universal solution that does not account for the peculiarities of a particular system is not feasible. Universal consensus, however, is imperative to the successful implementation of a proposed solution.

Focus on four categories: transportation and infrastructure, housing, critical and commercial buildings, and waterfront

To ease this process, the Initiative divides New York's diverse systems into four categories: transportation and infrastructure, housing, critical and commercial buildings, and waterfront. This grouping is similar to that described in the NYBC's report; the recommendations, while by no means identical, similarly focus on increasing the resiliency of each system. AIAANY's Initiative details efforts to improve the redundancy and resiliency of those damaged and vulnerable New York City infrastructure systems, including reducing the risk and number of housing displaced persons during emergency situations, assessing the vulnerability of critical and commercial buildings and hardening where necessary, and investing in research to create strategies that will reduce the potential risk to waterfront projects.

The Building Resiliency Task Force

"We don't know exactly what New York City's next weather or power emergency will be, or whether it will happen next year or next decade... we believe that with the right planning, New Yorkers can be prepared for whatever comes our way."

Task Force's recommendations focus on removing barriers to resiliency improvements, giving owners more options

The Building Resiliency Task Force, coordinated by Urban Green at the request of Mayor Michael Bloomberg and City Council Speaker Christine Quinn, was composed of specialized committees staffed by experts with backgrounds in various fields. These committees' proposals, released in June of 2013, focus on the buildings and Building Code and aim to protect New York from floods, high winds, extreme cold, and other forms of destructive weather. Specifically, the Committees considered impacts on commercial, high-rise residential, critical facilities, and one-to-three family homes. Due to the uncertainty of future extreme weather events, the Task Force's recommendations focus on gradually increasing the City's resiliency by advocating for and removing barriers to cost-effective resilient solutions. These proposals allow property owners and developers to implement resiliency improvements in flexible ways, instead of imposing potentially expensive retrofits.

Incorporate sustainability within resiliency

The Task Force was committed not just to preparing for potential extreme weather events in the foreseeable future, but to creating sustainable projects that will increase resiliency while reducing damage to the environment. The Task Force's proposals include environmentally friendly resiliency options such as solar energy panels and natural gas generators. Patti Harris, Partner and Chief Management Officer of Zetlin & De Chiara LLP, and a member of the Building Resiliency Task Force's Special Committee on Homes, commented, "Our charge was to review and make recommendations on the resiliency of buildings, from the tall residential and commercial buildings of Manhattan to the vulnerable single-family homes throughout Queens, Staten Island and Brooklyn. More importantly and more instructively, we were charged not to 'repair for Sandy,' but to prepare for a wide range of potential threats that may arise as a result of climate change."

The New York Building Congress, American Institute of Architects New York Chapter, and the Building Resiliency Task Force all offer varying approaches and recommendations to reform New York's disaster readiness in the aftermath of Hurricane Sandy. Their reports focus separately on improving infrastructure, critical buildings, residential and commercial buildings, environmental issues, and others, but all are united by one common theme: improving resiliency. Understanding and implementing this concept is critical to protecting New York and its residents from the impact of future storms.

[1] New York Building Congress, "Risk & Resiliency After Sandy"

[2] <http://www.buildingcongress.com/research/sandy/01.html>

[3] <http://postsandyinitiative.org/>

[4] <http://www.urbangreencouncil.org/BuildingResiliency>

The above article is an overview only, and should not be considered legal advice, which is dependent upon specific facts and circumstances. For more information, please contact Patricia A. Harris at 212.682.6800.