



Report After Hurricane Sandy



Citizen Ideas for Building a More Resilient City, Block by Block

There is little doubt that urban areas like New York City are vulnerable to extreme weather events. Hurricanes Irene and Sandy remind us that cities must be prepared to address a wide variety of challenges at the local level—protecting transportation systems, coastlines, energy grids and infrastructure can help to minimize damage and bring a city back to life after the worst is over. There are many important recommendations for building resiliency into NYC’s metro area, discussed by the NYC Panel on Climate Change and included in PlaNYC2030.

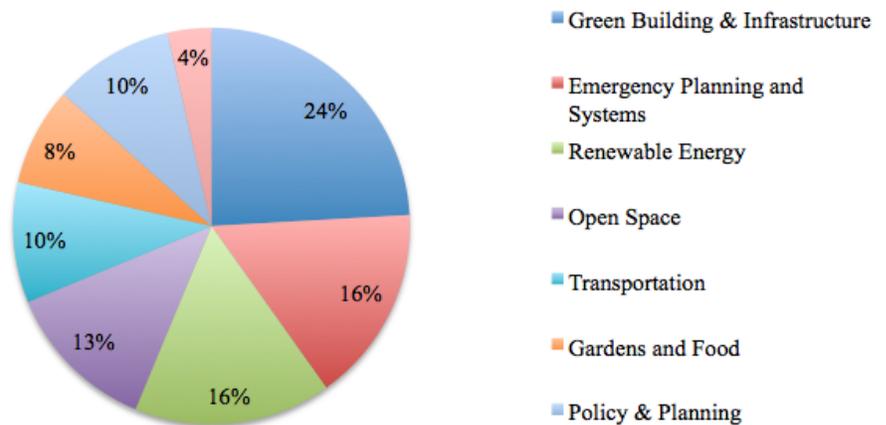
But because Hurricane Sandy also proved the importance of neighborhood cohesion during natural disasters, ioby decided to ask people to share their ideas for their own neighborhoods. Just one week after Hurricane Sandy, ioby brought together a diverse group of constituents to share information and ideas about how the NYC Metro Area can build more resilient communities. Over 380 people participated, contributing more than 150 unique ideas. Participants represented multiple sectors of society, including engineers, architects, energy experts, policymakers, artists, lawyers, business owners, nurses, activists, planners, academics, media and more.

The goal was to bring together local ideas for a more resilient city. In ioby’s work, we have seen hundreds of citizen-led projects take shape. We know that residents know their own neighborhoods best, and by reaching out to citizens to discuss their own neighborhoods, we were able to collect a wealth of ideas and opportunities to make our communities stronger and more resilient.

The Results

The ideas generated spanned all five NYC boroughs, New Jersey and a general “everywhere” category. Participants were invited to think big and small. Some gave very specific place-based suggestions (e.g. stronger dock at Coney Island) and others provided larger perspectives (e.g. modernizing the electricity grid). Also, many ideas addressed emergency situations (e.g. “buddy” systems in apartment buildings so everyone can be accounted for in an emergency) and others more general resilience (e.g. green buildings to help provide better shelter to inhabitants while reducing energy demands that contribute to the changing climate).

Citizen Ideas for a More Resilient City



Place-based ideas

Manhattan

- Construct oyster shoals around the lower Manhattan coastline to blunt tidal surges
- Build more urban gardens in Harlem
- Install solar panels on the rooftop of tall buildings in Midtown
- Construct green buildings in Washington Heights
- Create stricter policies for rebuilding in flood-prone zones
- Use the river currents to generate power on the coasts in Morningside Heights, Harlem and Washington Heights
- Secure out/indoor pulley systems to deliver food, water and medicine to residents living in the top floors of tall buildings in lower Manhattan

Brooklyn

- Move mechanical rooms and electrical panels to upper floors of buildings to make them less vulnerable to flooding
- Offer emergency training in Russian in Coney Island
- Install rainwater harvest systems in Red Hook
- Develop bike paths in Coney Island
- Connect the Shore Parkway Promenade to the Brooklyn Greenway and add a barrier to protect water and clean it up for recreation
- Establish bike “brigades” that can deliver supplies to areas where roads have been washed out during and after an emergency
- Create neighborhood relief centers for emergencies
- Require all construction around the Gowanus Canal to be green
- Evaluate the ecology of Coney Island Creek
- Increase support for urban gardens in East New York
- Rebuild and improve Coney Island dock according to green standards
- Help Red Hook businesses that don't have insurance
- Green NYCHA buildings to make them more resilient to weather events
- Build a rickshaw transport system under the Brooklyn Queens Expressway
- Rebuild marshes along the coastline
- Protect Battery Tunnel

Queens

- Develop volunteer corps of electricians to help people get inspections needed to restore power
- More and better recycling of building materials in Western Queens
- Create an emergency power solar power station in Breezy Point
- Place power lines underground throughout Queens

- Restore the wetlands in the Rockaways
- Increase bike paths, bike shares and bike shops in the Far Rockaways
- Better match what communities need with donations in the Far Rockaways
- Build floating boardwalks along coastlines
- Install renewable energy at Astoria Pool
- Protect Jamaica Bay
- Relocate La Guardia Airport

Bronx

- Provide opportunities to visit and learn about the Hunts Point Market and food systems
- Green Yankee Stadium
- Increase awareness about City Island and other places that are very vulnerable to flooding
- Make efficient ferries to the Bronx
- More bioswells and trees in the Western Bronx
- Tear down the Bruckner Expressway
- Build parks along the border with Westchester County
- Better sidewalks so people can walk more in the South Bronx
- Have stricter laws about trucks idling when making deliveries

Staten Island

- Return “upzoned” areas to protected status along the coast
- Redevelop old industrial areas with green architecture in North Shore
- Create permanent storm shelters
- Install a solar farm on the roofs of industrial buildings
- Plant Spartina grass and bamboo to stop erosion in South Shore
- Better protect marshlands
- Centralize information sharing between relief efforts
- Institute smart regulations for new construction, especially in coastal zones
- Supply solar generators for emergencies

New Jersey

- Support partnerships among businesses in Bay Shore for recovery
- Install a new tide meter in Sandy Hook (the storm surge was so high, it took it offline)
- Construct an efficient light rail
- Restore the Bay Shore
- Have efficient ferries
- Build floating boardwalks along the coast
- Conduct vulnerability assessment for all construction projects along the coast

General Ideas

- Create “buddy” programs to account for everyone in an apartment building during and after an emergency
- Expand protected coastline areas, wetlands and marshlands to absorb energy from storms
- Require all infrastructure to be green, including retrofitting all current structures
- Support residents to create green roofs
- Modernize the electricity grid
- Create a team of people to coordinate curbside storm debris recycling
- Distribute solar powered water heaters after an emergency
- Install wind power
- Create programs for urban gardens to provide food during emergencies
- Make flood insurance prohibitively expensive for new shoreline construction so it is harder to build in vulnerable areas
- Educate youth about extreme weather events and vulnerability
- Provide tours and opportunities to learn about the NYC Metro Area’s vulnerable places

Moving Forward

Increased awareness about the impacts of natural disasters has led many citizens to pay closer attention to the resiliency of the infrastructure and systems that help our everyday lives to function. Indeed, when subways and energy grids were taken out by Hurricane Sandy, the city was brought to a halt. Issues like this affected the conversation; there were many calls for increased access to bikes and bike paths and renewable energy that can help citizens to carry on while the citywide systems were restored.

There was a clear sense that resilience during an emergency is closely intertwined with the longer-term strength of communities. That what is good during an emergency is also good for everyday life. For example, the distribution of food from urban farms was discussed as a way to help feed citizens after an emergency. But it was equally discussed as a service to people that live in food deserts that do not have regular access to healthy food, thus reducing poverty—and vulnerability—across the NYC Metro Area.

The thoughtfulness in and enthusiasm for the exercise has been overwhelming. It is clear that New Yorkers want to be a part of the conversation for how we can grow and learn from Hurricane Sandy. Moreover, people have innovative and practical ideas that can be implemented across all eight categories. It is our hope that this conversation contributes to larger discussions about our more resilient future, and that we all continue to innovate for stronger, more sustainable neighborhoods.