



The Associated Press-NORC
Center for Public Affairs Research



Two Years after Superstorm Sandy: Resilience in Twelve Neighborhoods

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INTRODUCTION

Superstorm Sandy, which made landfall on October 29, 2012, led to 182 deaths in the United States and caused over \$65 billion in damages, making it the second costliest hurricane in U.S. history. Two years after the storm, the recovery process is still ongoing for many communities, while other communities appear back to normal and have even taken steps to be better prepared for future disasters.

For example, in the city of Hoboken, New Jersey, it is hard to find lingering effects of the storm and community leaders have taken steps to better prepare the community, be it from infrastructure needs to personal preparedness. In other areas, such as New Dorp Beach and Midland Beach on Staten Island, the effects of the storm are still visible, with vacant lots, red-tagged homes and abandoned buildings.

Natural disasters like Superstorm Sandy can result in tremendous damage not only to the physical environment, but also to the social fabric of communities. Across the United States, there is a growing awareness that planning for and responding to disasters requires broad thinking that includes careful attention to social and community factors in addition to the more traditional focus on infrastructure and economic factors. Although the economic development and infrastructure of a community contribute to its resilience, recovery rates often differ in adjacent communities and neighborhoods with similar economic and structural resources. Social resources and social connections such as network connectedness, social cohesion, trust, and community bonds also are critical to response and recovery efforts because they facilitate social interaction and information exchange. These social resources are critical aspects of community resilience that can help a community recover after a disaster.^{1,2,3}

Central to these discussions is the concept of resilience: the ability of people and their social systems to survive, adapt, and continue moving forward after a disaster. With the frequency and severity of natural disasters on the rise, understanding and increasing community resilience has become a critically important issue for society. The high levels of damage and continuing recovery from Superstorm

Five Things to Know from the AP-NORC Center's Superstorm Sandy Resilience Study

Among the 12 neighborhoods surveyed in the Superstorm Sandy region:

- 1) Two years after the storm, most neighborhoods are recovering, but nearly 30 percent of residents report their neighborhood has recovered only halfway or less.
- 2) More help is needed. Less than half (43 percent) of residents say that most people have gotten most or all of the help they need to recover and restore their lives after the storm.
- 3) Neighbors are cited most often as being helpful for the recovery. Nearly 7 in 10 say neighbors helped, compared to 57 percent who say the same for local government and 55 percent for federal government and FEMA.
- 4) People living in neighborhoods with more social connections and resources are more resilient. They are more likely to say their neighborhood is well prepared to handle a disaster and more confident that their neighborhood would recover quickly after a disaster.
- 5) These social resources can help neighborhoods overcome economic barriers to resilience. Indeed, the positive effects of social resources on resilience are relatively similar across socioeconomic groups.

¹ Sampson, Robert J. (2012). *Great American City: Chicago and the Enduring Neighborhood Effect*. Chicago: University of Chicago Press.

² Norris, et al (2008). *Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness*.

³ Aldrich, Daniel. (2012). *Building Resilience: Social Capital in Post-Disaster Recovery*. Chicago: University of Chicago Press.

Sandy and other disasters are causing policy makers, emergency managers, and local leaders to ask two key questions: What factors contribute to resilient communities? And, how do we build resilience so that people and their communities are better prepared to survive disasters and able to bounce back quickly?

In 2013, the Associated Press-NORC Center for Public Affairs Research conducted a representative national survey of 2,025 individuals including an oversample of 1,007 interviews with residents of the regions affected by Superstorm Sandy.⁴ The study systematically measured the impact of the storm on people and neighborhoods in the region most affected by Superstorm Sandy and assessed the level of recovery six months after the storm. The study found that among the hardest hit areas in the region, nearly 40 percent reported that their neighborhood was less than halfway recovered six months after the storm and that many Americans who were impacted by Superstorm Sandy turned to family, friends, and neighbors for support or assistance more often than formal sources of support like the federal or state government.

It also contributed to our understanding of how neighborhood characteristics and social factors relate to recovery and resilience. The study found that neighborhoods lacking social resources were experiencing more difficulties recovering from Sandy. Compared with areas with higher levels of recovery, the 2013 study showed that residents in slowly recovering areas were less likely to believe that people could be trusted, more likely to experience a breakdown in social control with reports of looting and vandalism, and less likely to say that the storm brought out the best in people.

With funding from The Rockefeller Foundation, this current study builds on our 2013 survey by focusing on the long-term recovery and resilience in 12 neighborhoods in New York and New Jersey that were severely affected by Superstorm Sandy. The study was guided by two central objectives. First, the study provides a systematic and in-depth look at recovery in 12 very different neighborhoods two years after Superstorm Sandy. Second, the study provides unique data and insights on the interplay of social factors, resilience, and long-term recovery following Superstorm Sandy to better understand why some neighborhood areas are more resilient than others.

TERMINOLOGY: SOCIAL RESOURCES & RESILIENCE

Social resources include a number of different aspects of social life in a community including:

- **Social cohesion:** how connected people are within their neighborhoods.
- **Social control:** the informal ways that people in the neighborhood maintain public order.
- **Social exchange:** how neighbors help each other out.
- **General trust:** how much a person trusts people overall.

Resilience: the Rockefeller Foundation defines resilience as “the capacity of individuals, communities and systems to survive, adapt, and grow in the face of stress and shocks, and even transform when conditions require it.”

⁴ <http://www.apnorc.org/projects/Pages/resilience-in-the-wake-of-superstorm-sandy.aspx>

The central component of the study is a multi-mode survey that was conducted by the Associated Press-NORC Center for Public Affairs Research with 1,009 residents of the twelve neighborhood areas in New York and New Jersey. These survey data are complemented by qualitative data from key informant interviews, focus groups, and systematic neighborhood observations.

SUMMARY OF FINDINGS

The key findings from the study, summarized below, provide a more nuanced picture of Superstorm Recovery with a particular focus on how social resources contribute to neighborhood level resilience. The results imply that policy makers, emergency managers, and local leaders need to include social resources in their calculus as they build better policies, programs, and interventions to bolster community resilience and raise important questions about how that might be done and the role of different sectors including government, business, and non-profits, in fostering social connectedness.

Two years out from the storm, self-reported recovery levels are generally high across the surveyed neighborhoods, but it is certainly not universal. Many people are still living in neighborhoods where recovery has yet to happen and some question whether it ever will.

- Nearly three-quarters (72 percent) say their neighborhood is mostly or completely recovered from Superstorm Sandy, but 27 percent say their neighborhood is about halfway recovered (22 percent) or only a little or not at all recovered (5 percent).
- Among the 67 percent who report that their neighborhood has not yet completely recovered, a majority (76 percent) believe their neighborhood will eventually recover.
- Still, 1 in 5 say their neighborhood will never completely recover.

The social resources in a neighborhood are strongly associated with how residents view the resilience of their neighborhood.

- People living in communities with higher levels of social resources are more likely to say their neighborhood is extremely or very well prepared to handle a future disaster than people living in communities with low levels of these social resources.
- For example, 3 in 10 residents of neighborhoods with high informal social control report their community is extremely or very well prepared for a disaster compared with 1 in 10 residents of neighborhoods with low social control.
- High neighborhood social resources are also associated with people having more confidence that their community would recover after a future disaster.
- For example, people living in communities with high social exchange are more likely to report they are extremely or very confident their neighborhood would recover quickly from a disaster (37 percent) than people living in communities with low social exchange (22 percent).

Social resources strengthen community resilience regardless of neighborhood socioeconomic status. Indeed, social resources can make neighborhoods with fewer financial resources more resilient, and an absence of social resources can make it more difficult for wealthier neighborhoods to recover from disasters.

- The positive effects of these social resources on preparedness are relatively similar across socioeconomic groups.
- For example, in both high and low socioeconomic neighborhoods, residents living in communities with high informal social control are about three times more likely to say their neighborhood is extremely or very well prepared for a disaster than people living in communities with low informal social control.

Neighborhoods with healthier residents – both physical health and mental health – are more likely to be resilient.

- Residents in neighborhoods with higher average levels of self-reported health are more confident their community would recover quickly from a future disaster than those in neighborhoods with lower average levels of self-reported health.
- Twenty-three percent of residents living in neighborhoods with high average mental health report their community is extremely or very well prepared for a disaster compared with 17 percent of those in neighborhoods with low average mental health.

SECTION 1: THE RECOVERY STORY ACROSS TWELVE NEIGHBORHOODS

The Phase 2 study was conducted in 12 New York or New Jersey neighborhoods that are located in an area that was severely impacted by Superstorm Sandy. All 12 neighborhoods are located in a zone designated by FEMA as “high impact,” a composite assessment that indicates that 500-10,000 people in that zone were exposed to the storm surge, more than \$100 million in wind damages was caused, or more than eight inches of rain fell.⁵ Across this high impact area, self-reported recovery status six months after the storm from Phase 1 of the project further indicated widespread devastation and slower recovery in some neighborhoods than others. Among Phase 1 respondents who said that their neighborhood was very or extremely affected by the storm, nearly 4 in 10 (38 percent) reported their neighborhood had recovered just halfway or less. Of those who said their neighborhood had yet to completely recover, just over 1 in 5 (22 percent) believed that their neighborhood would never completely recover.⁶

To understand why some neighborhoods are recovering faster than others, the Phase 2 study utilized a data driven process to select 12 neighborhoods from the FEMA high impact area. The survey data are representative of the population of these 12 neighborhoods. These neighborhoods were selected to vary across a number of dimensions including income and poverty status, racial diversity, and size of the immigrant population.

⁵ FEMA Modeling Task Force: Hurricane Sandy Impact Analysis. 2014.

⁶ Resilience in the Wake of Superstorm Sandy. 2013. The Associated Press-NORC Center for Public Affairs Research.

Phase 2 Study neighborhoods and characteristics

Neighborhood	County	State	Population	Median Income	% White, Non-Hispanic	% Foreign Born	% Poverty
Babylon	Suffolk	NY	43,836	\$75,366	69.0%	21.5%	6.5%
Breezy Point-Belle Harbor- Rockaway Park	Queens	NY	28,531	\$73,739	78.4%	12.5%	6.2%
Gravesend	Kings	NY	27,105	\$38,435	54.7%	46.5%	17.8%
Hoboken	Hudson	NJ	22,241	\$116,054	74.6%	16.7%	8.7%
Islip	Suffolk	NY	34,244	\$94,260	86.1%	7.8%	4.4%
Jersey City	Hudson	NJ	21,059	\$36,090	5.8%	18.0%	23.7%
Long Beach	Nassau	NY	33,442	\$80,824	75.2%	14.9%	8.9%
Long Branch	Monmouth	NJ	30,855	\$52,553	52.2%	30.6%	14.5%
Lower East Side	New York	NY	48,043	\$35,197	23.9%	33.1%	27.4%
Monmouth Beach	Monmouth	NJ	3,351	\$94,583	90.6%	4.1%	2.7%
Point Pleasant-Point Pleasant Beach	Ocean	NJ	23,528	\$72,132	94.1%	3.2%	4.6%
New Dorp- Midland Beach	Richmond	NY	21,907	\$73,597	76.3%	24.7%	8.7%

The twelve neighborhoods also vary by recovery status at the time of the study and the socioeconomic status of the neighborhood. In the end, the Phase 2 study included four groups of neighborhoods: those with higher levels of recovery and higher socioeconomic status; those with higher levels of recovery and lower socioeconomic status; those with lower levels of recovery and higher socioeconomic status; and those with lower levels of recovery and lower levels of socioeconomic status.

Selected neighborhoods/community areas categorized by income and recovery status

	Higher Recovery	Lower Recovery
Mid-High Income	NJ: Hoboken (north of 7th St.) NY: Long Beach NY: Islip (southern portion)	NJ: Monmouth Beach NY: Breezy Point-Belle Harbor-Rockaway Park NY: Babylon (southern portion)
Low Income	NJ: Jersey City (Bergen Lafayette) NY: Gravesend NY: Lower East Side	NJ: Long Branch NY: Midland Beach/New Dorp Beach (Staten Island) NJ: Point Pleasant-Point Pleasant Beach

Recovery: measured using Phase 1 data and through verification interviews with key informants in each neighborhood.

Income: measured using Census information at tract level. Low Income defined as median annual household income less than \$73,600;

Mid-High

Income defined as \$73,601 or greater.

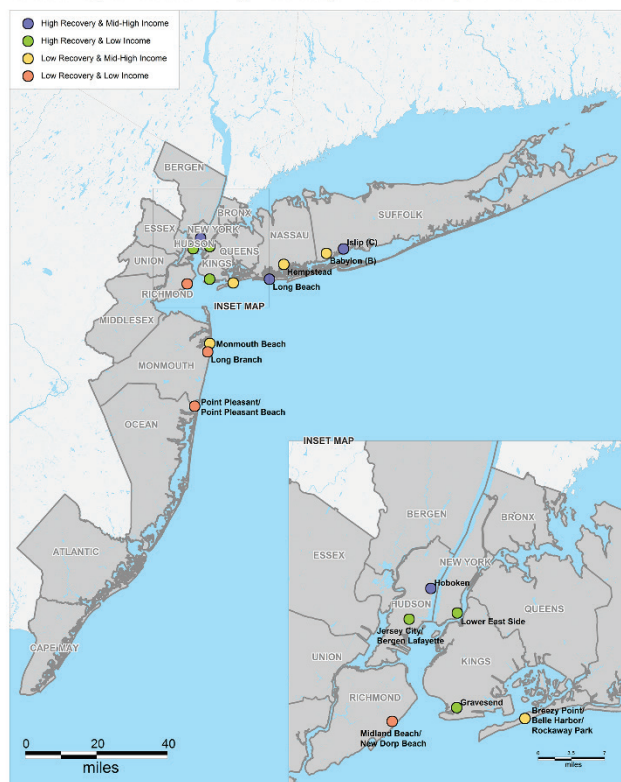
THE IMPACT OF SUPERSTORM SANDY WAS WIDESPREAD ACROSS THE STUDY REGION AND FELT ESPECIALLY HARD AT THE NEIGHBORHOOD LEVEL.

Across the 12 selected neighborhoods in the Phase 2 study, a majority of residents report extensive personal and neighborhood impacts due to Superstorm Sandy. Of those living at the same address or in the same neighborhood as they were when Superstorm Sandy struck landfall, 46 percent across the neighborhoods report being extremely or very affected personally by the storm, 27 percent moderately affected, and 27 percent personally affected only a little or not at all.

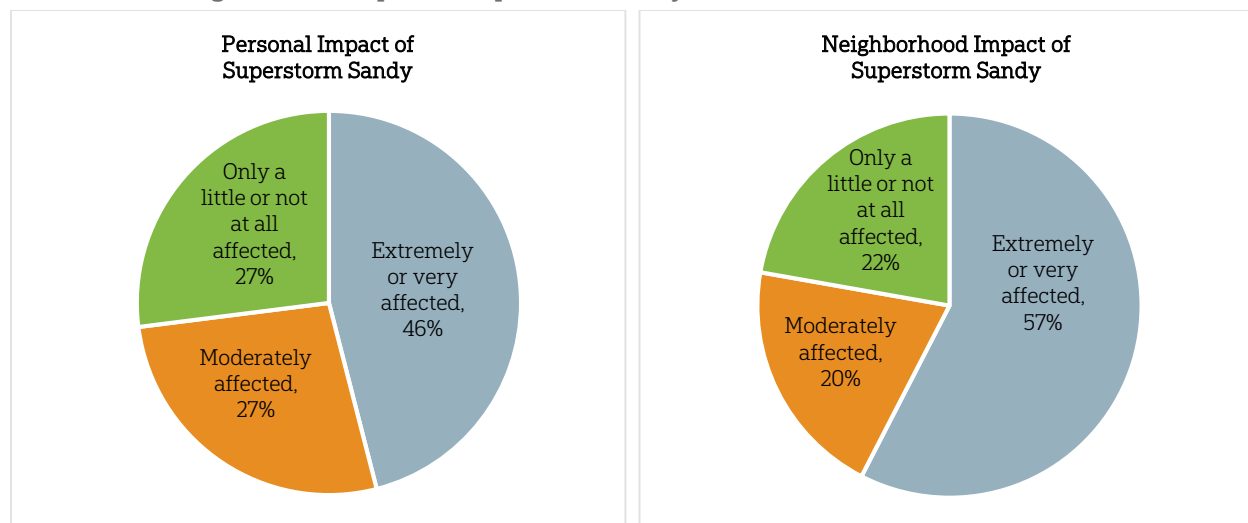
Reported levels of impact were higher at the neighborhood level than the individual level. Across neighborhoods, 57 percent say their neighborhood was very or extremely affected by Superstorm Sandy, 20 percent were moderately affected, and 22 percent were affected only a little or not at all.

Few demographic differences exist in terms of reported personal or neighborhood impacts, indicating that the impact of the storm was extensive and widespread.

Selected Neighborhoods/Community Areas Categorized on Recovery and Income Status



Personal and neighborhood impact of Superstorm Sandy



Questions: Superstorm Sandy struck the United States on October 29, 2012 and the storm affected some areas for days after making landfall. How seriously, if at all, were you personally affected by Superstorm Sandy? Would you say you were extremely affected, very affected, moderately affected, only a little affected, or not at all affected?

Thinking about your neighborhood, how seriously was your neighborhood affected by Superstorm Sandy? Would you say your neighborhood was extremely affected, very affected, moderately affected, only a little affected, or not at all affected?

TWO YEARS OUT FROM THE STORM, REPORTED LEVELS OF RECOVERY IN THE STUDY ARE GENERALLY HIGH, BUT NOT UNIVERSAL.

Two years out from the storm, self-reported recovery levels are generally high across the surveyed neighborhoods, but it is certainly not universal. Many people are still living in neighborhoods where recovery has yet to happen and some question whether it ever will. Overall, 83 percent of those living at the same address or in the same neighborhood as they were when Superstorm Sandy hit say they are completely or mostly recovered, 10 percent say they are about halfway recovered, and 7 percent say they are only a little or not at all recovered.

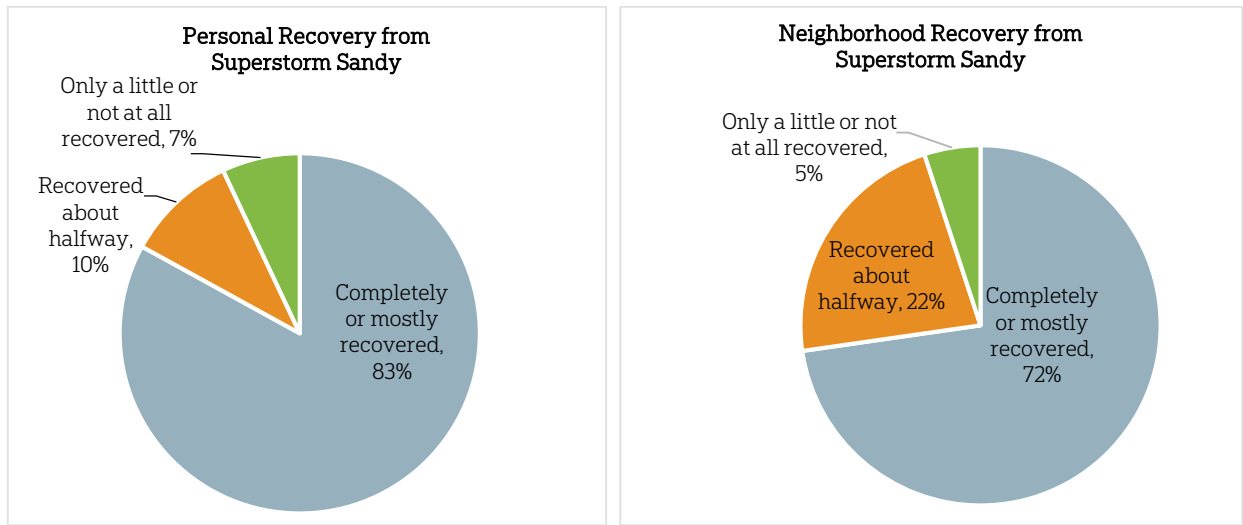


Respondents were asked to explain in their own words why they assessed their personal recovery in the way that they did. Notably, very few people mentioned social factors in explaining their recovery status. Of those who say they are mostly or completely recovered, 23 percent say it is because they experienced minimal or no physical damage to their property, 17 percent say it has to do with the availability of public utilities, 15 percent say it is because the physical repairs to their property have been completed, and 11 percent say it is because their daily life has returned to normal since the storm. Of those who say they are recovered halfway or less, 27 percent say it is related to personal finances, insurance, or government assistance, and 26 percent say it is because their property still needs repairs or the repairs are ongoing.

At the neighborhood level, recovery is not quite as high. For those whose neighborhoods that were at least a little bit affected, nearly three-quarters (72 percent) say their neighborhood is mostly or completely recovered from Superstorm Sandy, but 27 percent say their neighborhood is about halfway recovered (22 percent) or only a little or not at all recovered (5 percent). Again, respondents were asked to explain why they assessed their neighborhood's recovery in the way that they did. For respondents who say their neighborhood is mostly or completely recovered from the storm, the most common responses relate to the physical nature of the damage sustained in the neighborhood: 32 percent relate to the status of repairs and 19 percent say it is because they sustained no or minimal damage. Of those who say their neighborhood is halfway recovered or less, 32 percent say it is because of ongoing repairs, 24 percent say it is because residents cannot return to their homes or homes are vacant, and 15 percent say it is related to the infrastructure of community and public areas.



Personal and neighborhood recovery from Superstorm Sandy

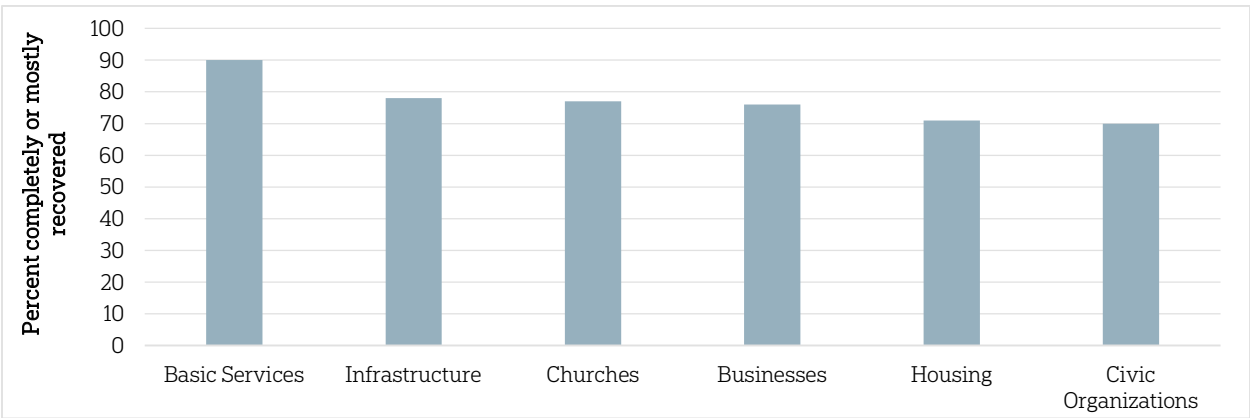


Questions: What best describes how you personally are recovering from Superstorm Sandy? Would you say you have completely recovered, mostly recovered, recovered about half way, recovered only a little, or not recovered at all?

What best describes how your neighborhood is recovering from Superstorm Sandy? Would you say your neighborhood has completely recovered, mostly recovered, recovered about halfway, recovered only a little, or not recovered at all?

When it comes to the various community fixtures that comprise a neighborhood such as infrastructure, churches, housing, and civic institutions, a majority report relatively high levels of recovery. Though again, even two years after the storm, a significant minority report that these aspects of their community are still not back to normal. Ninety-percent of neighborhood residents say basic services such as utilities, clean water, and sewers have mostly or completely recovered, 78 percent say the infrastructure in their neighborhood has mostly or completely recovered, 77 percent say churches or the religious community has mostly or completely recovered, 76 percent say businesses in their neighborhood have mostly or completely recovered, 71 percent say housing in their neighborhood has mostly or completely recovered, and 70 percent say civic organizations and civic activities have mostly or completely recovered.

Recovery level of various community fixtures



Question: For each of the following, please rate how much it has recovered since Superstorm Sandy hit your neighborhood.

Among the 41 percent who say they personally have not completely recovered, two-thirds are optimistic about their prospects for recovery and one-third report little hope. Sixty-four percent say they will completely recover, and a majority of them (53 percent) say they anticipate that things will be back to normal in less than one year, another third say it will take one to three years, 7 percent say it will take three to five years, and 4 percent say it will take more than five years. There are still people, however, who see little hope in the recovery process. Thirty-two percent of those who say they personally haven't completely recovered think they will never completely recover.

Even more believe their neighborhood will eventually completely recover. Among the 66 percent who report that their neighborhood has not yet completely recovered, a majority (76 percent) believe their neighborhood will eventually recover. Still, 1 in 5 say their neighborhood will never completely recover.

The outlook for full recovery at the personal and neighborhood levels

Percent who report...	Personal Recovery	Neighborhood Recovery
Not fully recovered	41	66
Will never completely recover	32	20
Will completely recover some day	64	76
Don't Know	4	3

SANDY IMPACTED POCKETBOOKS AND ALTERED FINANCIAL PLANS FOR THE FUTURE, BUT ALSO BROUGHT NEIGHBORS TOGETHER.

Superstorm Sandy's financial impact was felt across the twelve neighborhoods surveyed, and a considerable proportion of residents indicate that they made changes in their financial planning as a result of the storm and recovery. Nearly 3 in 10 (28 percent) say they put off taking a vacation as a result. Nearly a quarter (23 percent) report that they postponed saving money for retirement or a child's education, and the same percentage report putting off making a major purchase such as a house, car, or major appliance (also 23 percent). Smaller numbers of residents say they delayed major life events like going to school or continuing an education (8 percent), retiring (6 percent), and getting married, starting a family, or expanding a family (3 percent).

These results are very similar across demographic groups, with the exception that educational delays are most commonly reported among those who are younger or those with lower incomes. Nearly 3 in 10 (29 percent) of neighborhood residents age 18-29 say they delayed going to school or continuing an education, which was higher than all other age groups (10 percent for those 30-49, 2 percent for those 50-64, 1 percent for those 65 and older). Fourteen percent of those whose household



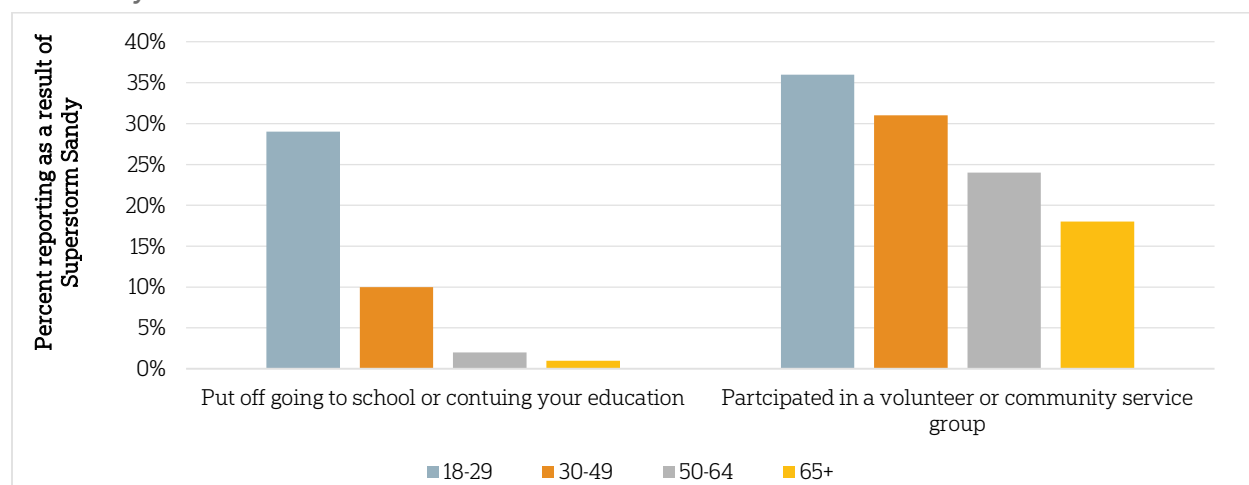
incomes fall below \$30,000 per year say they delayed in this way, compared with only 4 percent of those with incomes of \$75,000 or more.

Along with its challenges, Superstorm Sandy presented some new opportunities. Over a third (36 percent) of residents in the surveyed neighborhoods report that they met neighbors for the first time as a result of the storm. Over a quarter (27 percent) say they participated in a volunteer or community service group as a result of the storm. Younger residents are more likely to report this type of involvement than older residents with over a third (36 percent) of those 18-29 saying they participated in a service group, compared with only 18 percent of those 65 and older.

The majority of residents (63 percent) say people in their neighborhood have remained about the same in terms of closeness since before the storm, but a third (33 percent) say people are now closer than before the storm. Reports of increased closeness are twice as high among residents who say they felt a stronger impact from the storm. More than 2 in 5 (42 percent) of those who say they were personally extremely or very affected by the storm say that people in their neighborhood are closer, compared with 1 in 5 (20 percent) of those who were personally only affected a little or not at all. Similarly, 41 percent of those who say their neighborhood was extremely or very affected by the storm feel that closeness has increased, compared with 22 percent of those whose neighborhoods were moderately affected and 22 percent of those whose neighborhoods were affected a little or not affected.

“People are more aware of each other now than before [Superstorm Sandy]. People usually socialize in the city but after the storm, there was no way to take a train to the city, so people were forced to socialize,” said one Jersey City resident. People were sharing power from block to block. It improved the social aspect of the neighborhood.”

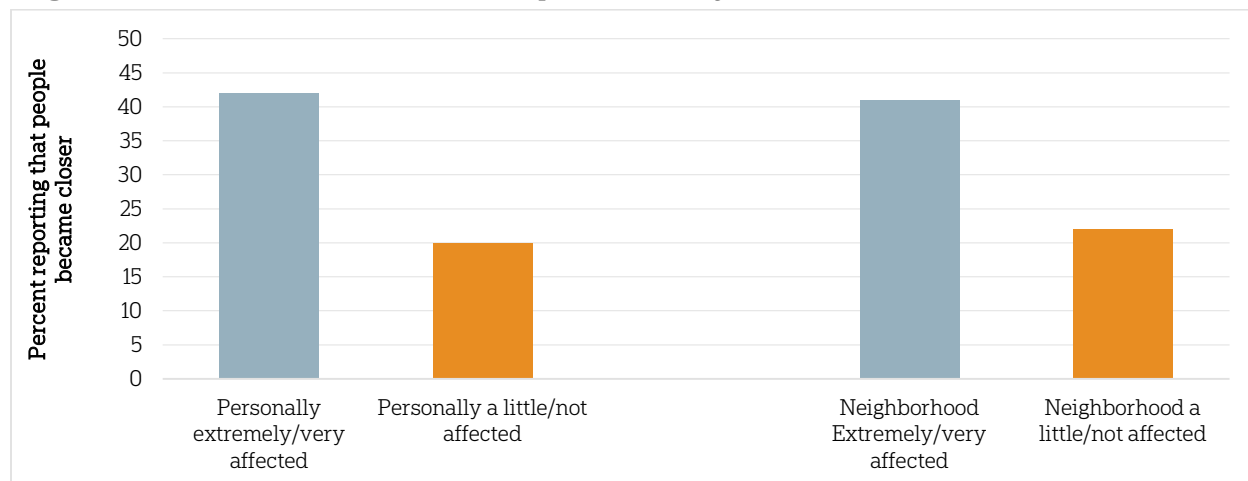
Younger residents most likely to delay educational plans but also most likely to get involved with the community after the storm



Questions: As a result of Superstorm Sandy and the recovery process, have you had to put off going to school or continuing your education, or not?

As a result of Superstorm Sandy, did you participate in a volunteer or community service group, or not?

The people most affected by the storm are also the most likely to report that the people in their neighborhood are closer now than before Superstorm Sandy



Question: In general, would you say the people in your neighborhood are closer with one another, more distant, or about the same as before the storm?

NEARLY TWO YEARS AFTER THE STORM, MANY HAVE NOT RECEIVED HELP FROM FORMAL SOURCES AND THINK MORE ASSISTANCE IS NEEDED FOR THE RECOVERY.

In the Phase 1 study about resilience in the wake of Superstorm Sandy that surveyed people across the entire affected region, respondents reported that they relied on informal sources of help like friends and neighbors even more than formal sources like government and first responders. About 16 percent of those surveyed in the

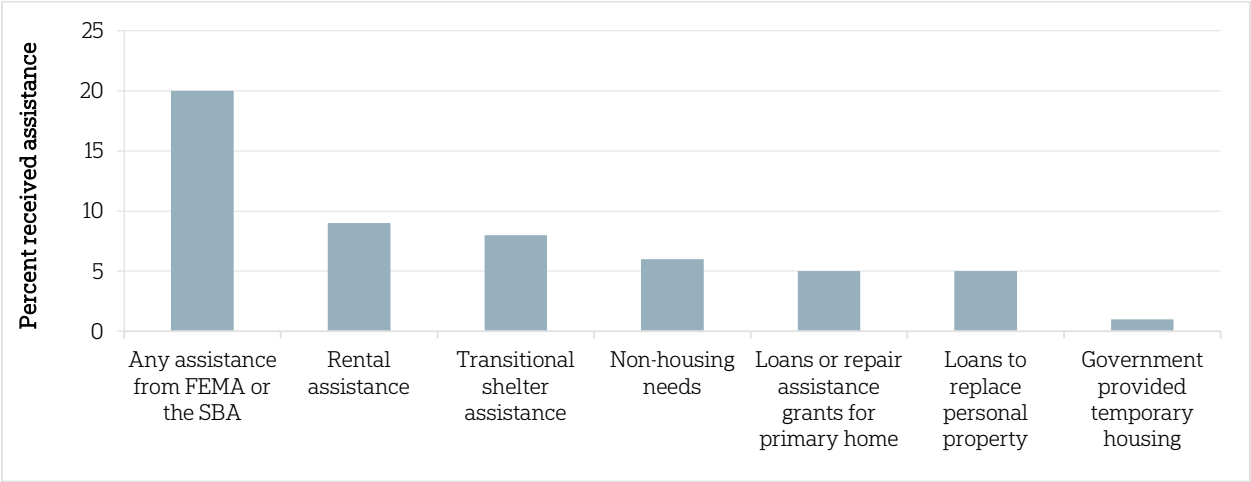
affected area then said they contacted the federal government, including FEMA, while fewer than 1 in 10 said they contacted their state government (7 percent), or local police, fire department, ambulance services, hospitals, and other first responders (9 percent). Higher numbers reported that they sought help from nearby friends, family, and neighbors (31 percent), and friends and family who lived more than a mile away (27 percent).

In a focus group, Long Island residents reported that community institutions like churches and schools opened their doors for people in need of warmth, shelter, and beds.

In the current study, 2 in 10 residents of the neighborhoods surveyed say they received assistance from FEMA or the U.S. Small Business Administration (SBA). Fewer than 1 in 10 residents say they have received rental assistance (money to help pay for another place to live, 9 percent), transitional shelter assistance to pay for a hotel or motel stay (8 percent), assistance with needs other than housing such as medical, transportation, personal property, etc. (6 percent), loans or repair assistance grants to repair a primary home (5 percent), loans to replace personal property (5 percent), and government-provided temporary housing such as a home or trailer (1 percent).



Percentage of respondents who received assistance from FEMA or the U.S. Small Business Administration and the types of assistance received



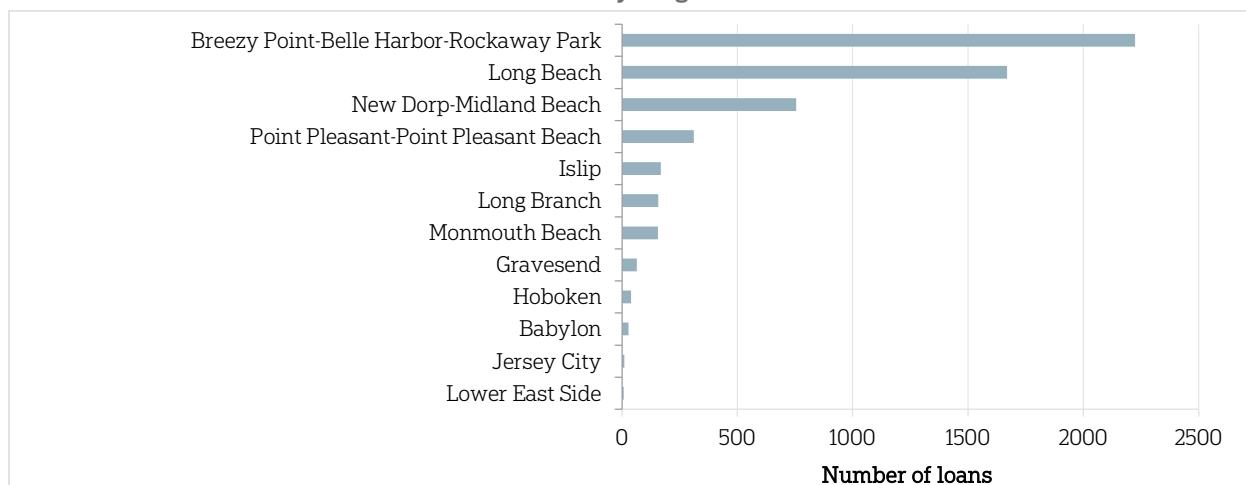
Questions: At any point after Superstorm Sandy, did you receive any assistance from FEMA or the SBA (the U.S. Small business Administration) to help you recover from the storm, or not?

At any point after Superstorm Sandy, did you receive any of the following types of assistance, or not?

Along with these low levels of assistance, residents of the twelve selected neighborhoods indicate that more help is needed. When asked to think about how much help most people in their neighborhoods have gotten, less than half (43 percent) say that most people have gotten most or all of the help they need to recover and restore their lives after the storm. An additional 30 percent say most people have only received some of the help they need, and 18 percent say most people have only gotten a little or none of the help they need. Whites and Hispanics are more likely to report that most people in their neighborhoods have received most or all of the help they need for recovery compared to blacks (45 percent and 49 percent vs. 29 percent).

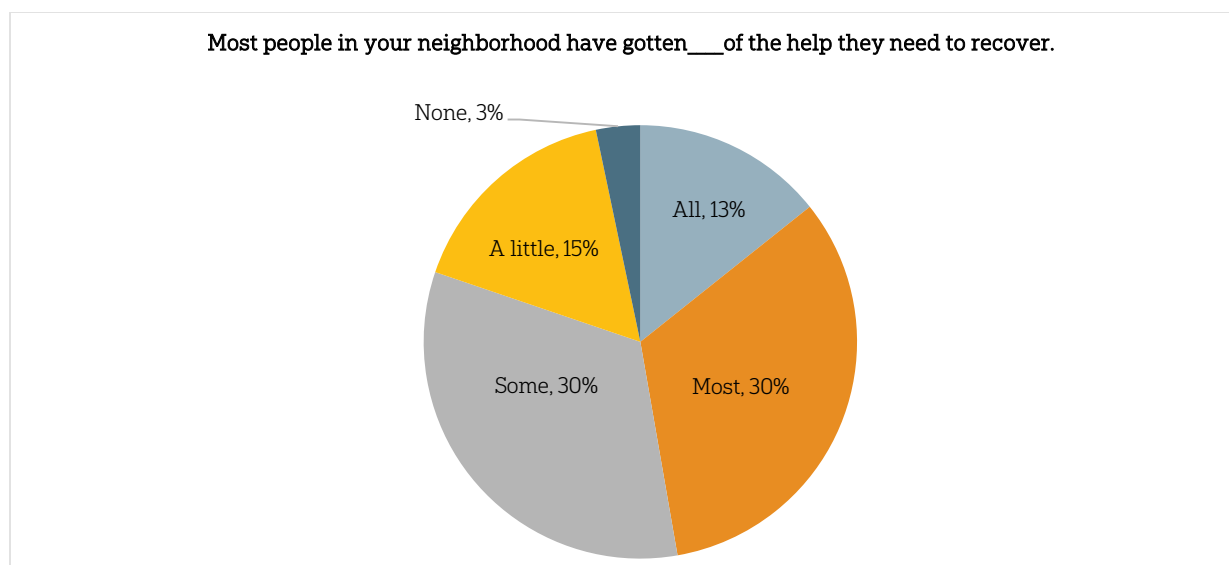


Number of U.S. Small Business Association loans by neighborhood



In a similar pattern to the 2013 results, residents say that informal contacts like neighbors helped their neighborhoods recover at high rates, with nearly 7 in 10 (69 percent) saying neighbors helped either a little or a lot (as opposed to hurt recovery or fell between helping and hurting). These more personal sources are cited as being more helpful than more formal sources of assistance like churches (61 percent), charitable organizations (59 percent), local government (57 percent), the federal government and FEMA (55 percent), relief organizations (55 percent), and state government (52 percent). Businesses and neighborhood organizations rate lower with 47 percent and 37 percent, respectively.

A majority think that the people in their neighborhood haven't gotten the help they need to recover after the storm



Question: Next, thinking about the people in your neighborhood do you think that most people in your neighborhood have gotten all, most, some, a little, or none of the help they need to recover and restore their lives after Superstorm Sandy?

SECTION 2: THE RECOVERY STORY WITHIN EACH NEIGHBORHOOD

While the survey data provide a general picture of recovery in the study area, each neighborhood has its own impact and recovery story. The character of each neighborhood is unique and Superstorm Sandy had different impacts on the community as a result. Through key informant interviews conducted in January and February 2014 with individuals or small groups of local government officials, two focus groups with residents from the affected region, systematic neighborhood observation by NORC field staff,⁷ and on-the-ground journalism, we are able to tell a data-driven story about each neighborhood and its nearly two-year recovery process from Superstorm Sandy.

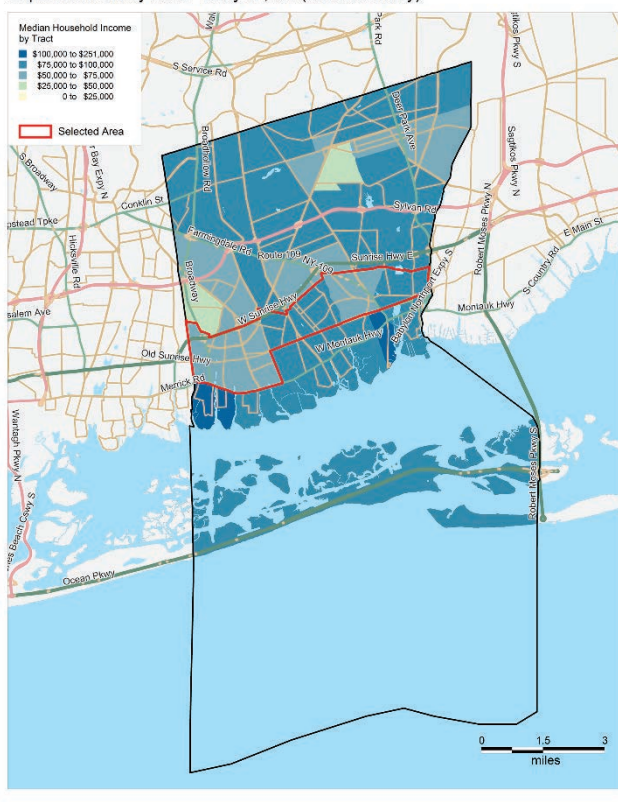
BABYLON, NEW YORK

The South Shore town of Babylon, including portions of Copiague, West Amityville, North Lindenhurst, West Babylon, and the village of Amityville, is home to 43,836 people. This neighborhood is majority white (69 percent) but also includes a sizeable number of foreign-born residents (22 percent). The median income of the neighborhood is \$75,366 with 7 percent of the population below the poverty line. Between 2005 and 2009, 14 percent of the residents of this area moved, making it the fourth-most transient of the 12 neighborhoods sampled. Its SoVI score (a measure of social vulnerability to environmental disaster taken at the county level),⁸ indicates low levels of social vulnerability. Babylon ranked in the 2nd percentile nationally by this measure⁹ meaning that it is better positioned than 98 percent of counties in the country.

This area suffered from power outages and overflow of sewer systems and cesspools. Emergency officials consulted as part of rebuilding plans say the area typically has a moderate risk of flooding during a hurricane, save for areas around a small body of water, like Avon Lake, where the risk is high. But along the water south of Montauk Highway, homes and businesses were devastated by the storm surge, flooding and power outages. In Amityville, 23 percent, or 914 homes, were damaged and in Copiague, 27 percent, or 2,187 homes were damaged, according to NY Rising.

The area was hit hard, and while facilities and businesses are back up and running (with the help of 28 SBA loans), one respondent from the key informant interviews estimates that less than 50 percent of the substantially damaged homes and about 60 percent of less damaged

Superstorm Sandy 2012 - Babylon, NY (Suffolk County)



⁷ In each of the 12 neighborhoods, a trained NORC field observer utilized a checklist protocol to assess systematically five randomly-selected block faces within the neighborhood in order to provide quick snapshots of conditions on the ground.

⁸ Calculated using data from ACS 2006-2010; data aggregated by Tract. According to the Hazards and Vulnerability Research Institute, SoVI methodology and results were originally published in the following article: Cutter, S.L., B.J. Boruff, and W.L. Shirley. 2003. "Social Vulnerability to Environmental Hazards." *Social Science Quarterly* 84(2): 242-261.

⁹ ACS 2006-2010; data aggregated by Tract

homes are back to normal. Two barriers stand in the way of rebuilding. The first is that insurance companies and banks are withholding checks based on the status of residents' mortgages. The second is that new rules and regulations set high standards for new construction and can be difficult to meet.

The area itself has made a concerted effort to help residents overcome these obstacles by providing grant money, waiving fees, and assisting people in their dealings with insurance companies. It may take up to three more years, according to this official, but the area is committed to keeping up home values and making sure all homes meet new Federal Emergency Management Agency (FEMA) guidelines.

A trained NORC field observer was sent to Babylon to systematically assess five randomly-selected block faces within the neighborhood in order to provide quick snapshots of conditions on the ground. In Babylon, three of these block faces were 100 percent residential, though the other two blocks also featured commercial buildings. The majority of these homes were single occupancy dwellings with some apartment buildings and duplexes mixed in as well. The condition of the residential property and yards varied from block to block, ranging from very well-kept to just fair. None of this residential property was currently under construction, boarded up, or condemned. One of these blocks, in the midst of the apartment complexes, featured a pool, picnic tables, grills, a playground, and sports facilities, providing residents with a place to relax. Still, activity was low across all these block faces, with only a few people milling about.

Commercial real estate could be found on just a tiny share of one block face and the businesses, mostly mom-and-pop stores, pawn shops, etc., were in poor, deteriorating condition. The industrial buildings, which made up 90 percent of one block, were also rated in poor condition.

Even in the face of these lasting challenges, residents today are more likely than not to speak highly of their neighborhood as a place to live, though they are less united in their belief that people like themselves can improve their neighborhood for the better.

GRAVESEND, NEW YORK

Gravesend sits on Brooklyn's South shore. Its population of 27,105 is diverse (55 percent white, 47 percent foreign-born) and largely low-income, with a median income of \$38,435 and 18 percent of the population below the poverty line. Its population is generally stable. Just 5 percent of Gravesend residents moved between 2005 and 2009. While there are large shares of Gravesend residents who rate the neighborhood as an excellent or good place to live, there is a sizeable contingent that describes it less favorably.

Neighborhood observers who surveyed five blocks in Gravesend encountered diverse block faces with mixes of residential, commercial, industrial, and recreational property, though residential buildings were most prominent. They were mostly well-kept and not one block was under construction. Businesses, primarily mom-and-pop stores, pawn shops, etc., were prominent in the three block faces with commercial buildings. Residents were able to enjoy playgrounds, sports fields, courts, and equipment, which could be found on three of these blocks. Vandalism, garbage, and other signs of neglect were mostly non-existent. Closed businesses and boarded-up buildings could be found scattered on two of the blocks, but they were, overall, a rarity more than the norm. One block even featured a yacht club, highlighting the mix of upscale and more modest establishments in Gravesend.

The neighborhood straddles the Belt Parkway, a low-lying road that connects Queens and Brooklyn. When Sandy hit, the tide came in, covered Belt Parkway and began flooding nearby Shore Road. Large retailers along the water flooded from the surge and homes and businesses were also flooded from combined sewage and runoff pipes that were overwhelmed. According to Marnee Elias-Pavia, District Manager of Community Board 11, much of the flooding came from the sewers. “A lot of residents have told me that on some of the bay streets that they saw water shooting out of the street like geysers,” she said.

The New York City Economic Development Corporation estimated that about 5,000 businesses in Southern Brooklyn, which includes Gravesend, were impacted by the storm. Toys’R’Us managed to open a pop-up store in its parking lot for the holiday season, Kohl’s did not open until just a bit before Easter, and a nearby car dealership lost its entire stock of vehicles. A bank and a fitness center left and never returned, as did several small mom-and-pop stores. Through March, 2013, the neighborhood received 65 SBA loans¹⁰.

Many immigrant residents had trouble getting aid because their housing could not always be verified and those residents were often the ones who were working with contractors to clean people’s homes. But many of the workers were not trained in how to remediate mold safely or deal with floodwater damage, Ligia Gualpa, director of the Worker’s Justice Project, said. The Bay Parkway Community Job Center, which helps day laborers learn skills and obtain work, began holding workshops on how to deal with mold and what equipment workers would need. That training is expanding as a way to be prepared for future disasters.

“No one is talking about worker infrastructure for next time,” said Gualpa, whose organization oversees the job center. “At the end of the day, it’s homeowners and workers on the front lines.”

Gravesend’s SoVI score ranked in the 99.68th percentile nationwide, making it the second most vulnerable neighborhood of the 12 neighborhoods sampled.¹¹

HOBOKEN, NEW JERSEY

Just a bit more than one square mile large, the city of Hoboken sits along the Hudson River directly across from Manhattan. Its riverside location offers expansive views but Hoboken has long been plagued by flooding, though never before had the Hudson flowed over and into the city. According to Hoboken’s Mayor, Dawn Zimmer, when Superstorm Sandy pushed ashore in October 2012, waters

Superstorm Sandy 2012 - Gravesend, NYC (Kings County)



¹⁰ ACS 2006-2010; data aggregated by Tract

¹¹ ACS 2006-2010; data aggregated by Tract

came in from the north and south edges of the city, inundating garden apartments and businesses and electrical substations, as well as overwhelming sewage systems.

Zimmer said virtually every public building was impacted in some way, power was out on average across the city for seven days and first floor structures were acutely impacted. Of the 25,000 housing and business units in the city, about 1,800 were uninhabitable. With power out, people did not have ways to communicate, to stay warm and in some high-rise buildings, even leave their homes.

Rescue crews went door-to-door, finding out people's needs, rescuing them or bringing supplies. Some buildings could only be accessed from second-floor windows. And the need for prescriptions became so urgent that city volunteers went door-to-door gathering pill bottles, returning to a pharmacy, filling the prescriptions and bringing them back to residents.

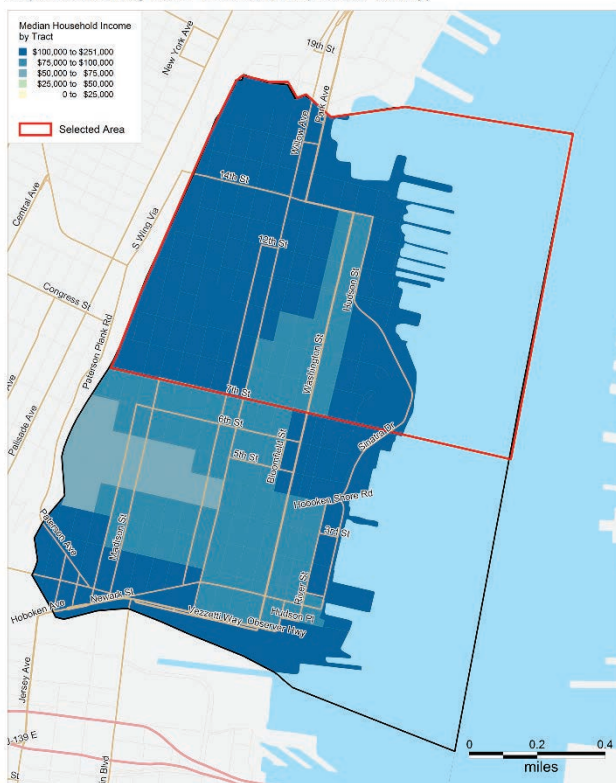
Almost two years later there is still work to be done. Construction projects for businesses, city buildings, and individual homes have yet to be completed. The city is still in the process of replacing city vehicles and acquiring new buses. Yet officials remain confident that the neighborhood will completely recover eventually. Why? Because they have secured millions of dollars of resources to make the city more resilient.

Hoboken has heeded the warning of Sandy, winning a design competition to make the city more resilient, proposing parking garages that could also retain storm water and starting a pilot program in affordable and vulnerable housing units to improve coordination with at-risk residents. Zimmer said Hoboken is "at risk of another Sandy," and that, "the reality is that Hoboken is very exposed."

In June 2014, Hoboken, Weehawken and Jersey City won \$230 million as part of the Housing and Urban Development's Rebuild by Design¹² competition to make areas more resilient. The strategy for this area – and the funding won – is to resist floodwaters, delay rainwater runoff, use green infrastructure to absorb water, create spaces to store water and find new ways to discharge water safely back into the environment.

Drawing on a Dutch plan, Hoboken also is working to turn an abandoned, contaminated lot into a multi-level sewage containment facility under a parking garage, which would, in turn, be topped by a city park for residents. In October the city is launching a pilot plan at a public housing property for low

Superstorm Sandy 2012 - Hoboken, NJ (Hudson County)



¹² Rebuild by Design is an initiative by the Hurricane Sandy Rebuilding Task Force and HUD, in collaboration with the Institute for Public Knowledge at New York University, Municipal Art Society of New York, Regional Plan Association, and Van Alen Institute. The Rockefeller Foundation is a lead supporter and funded the selection process with additional support from with additional support from Deutsche Bank, Hearst Foundation, the JPB Foundation, Surdna Foundation, and the New Jersey Recovery Fund. For more information: <http://www.rebuildbydesign.org/>.

income senior and disabled residents that will include floor captains to liaison with building managers, keeping track of who stays or leaves during emergencies and what medical needs they may have. After Sandy, the building checks were often duplicated and took away time from other rescue work. Ken Ferrante, Hoboken's Office of Emergency Management coordinator said the city is trying to "streamline" that amount of legwork necessary to assess these situations. "There has to be a better system."

In return for making sure neighbors are prepared, the floor captains will get small LED-powered lighting units and portable chargers for themselves and residents to keep cell phones and other electronics powered up. The hope is to add to the emergency response. Zimmer and other local leaders believe that individual preparedness not only helps keep people safe but that the effect extends to their communities as a whole. "People, if they are individually prepared, can also make sure they are individually safe and their communities are safe," Zimmer said. "I think we can make sure everyone is safer if there is a stronger community network." The area of Hoboken north of 7th Street is home to 22,241 people. Three-quarters of its residents are white and 17 percent are foreign-born. A closer look at Hoboken will give conflicting views on the possibility of a strong community network emerging. Hoboken is the richest of the 12 neighborhoods sampled (median income of \$116,054), but also the most transient (28 percent moved between 2005 and 2009). Despite its overall wealth, 9 percent of the population lives in poverty and it has been measured with high levels of social vulnerability, ranking in the 89th percentile nationally by SoVI score. This section of Hoboken received 39 SBA loans through March, 2013, the fourth lowest of the 12 sampled neighborhoods.¹³

One important first step should be emphasized: residents think they can make a difference. Those surveyed were more likely than not to say they can have a big or moderate impact on making their neighborhood a better place to live. They also overwhelmingly rate Hoboken as an excellent or good place to live. Observations of five randomly selected block faces reflect this, as well. The observed block faces were a mix of residential, commercial and school buildings. Four blocks featured residential housing, and the well-kept apartment building was the most prominent type of housing on each. Businesses like a local bar, described as in moderate to good condition, made up the majority of the commercial establishments. The streets were clean, with no visible graffiti and almost no other signs of vandalism or other destruction, and there were only small amounts of litter and garbage. The situation on these blocks suggests that, at least in some places, Hoboken has come a long way in the last two years.

ISLIP, NEW YORK

The section of Islip surveyed is home to 34,244 people. Its population is 86 percent white and 8 percent foreign-born. With a median income of \$94,260 and just 4.4 percent of the population below the poverty line, the neighborhood is one of the most prosperous neighborhoods sampled. It received 168 SBA loans following Sandy, further stimulating the economy. It shows low levels of social vulnerability, falling in the 2nd percentile nationally as measured by its SoVI score¹⁴.

Situated along the Great South Bay on the south shore of Long Island, these Islip neighborhoods are low-lying coastal communities popular with fishermen, boaters and others seeking recreation opportunities. Along the four block faces surveyed, well-kept single-family homes were the most prominent structures with the occasional apartment building mixed in. The streets were free of litter,

¹³ ACS 2006-2010; data aggregated by Tract

¹⁴ ACS 2006-2010; data aggregated by Tract

garbage, empty bottles, graffiti, broken windows, or any other signs of vandalism or destruction. Playground equipment, including slides and swings, basketball hoops, picnic tables, and grills help paint the picture of a peaceful neighborhood, which residents call home. Not surprisingly, Islip residents rate their neighborhood highly as a place to live.

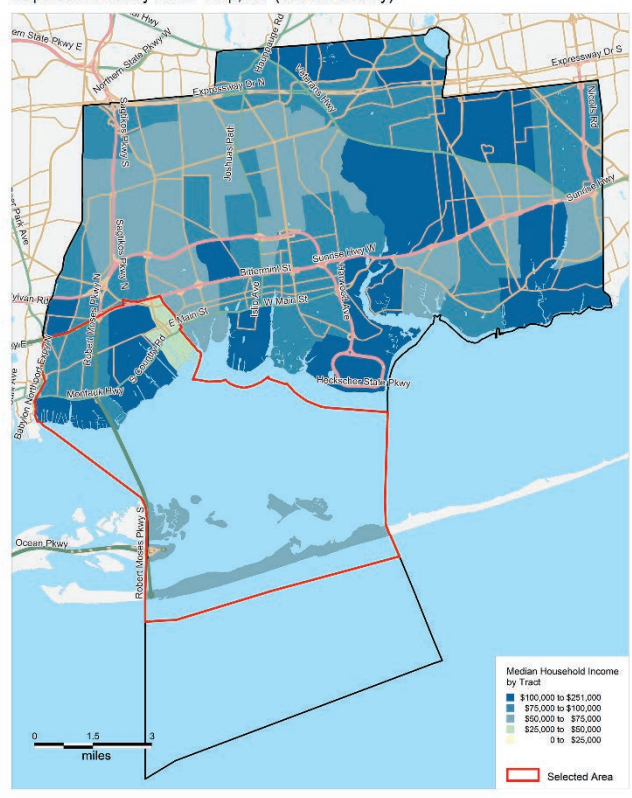
To the south of the bay is Fire Island, a barrier island that was breached in three locations when Sandy roared ashore, allowing the ocean waves to move through the bay. Most homes south of Montauk Highway took on water and downed trees knocked out power, in many places for up to two weeks. Boats docked or moored along the shore were lifted up, pushed onto lawns and into homes. Flooding also created a number of environmental hazards because sanitary sewers backed up and mixed with floodwaters. Oil tanks also were picked up in the waters and dispersed throughout much of the community, dumping oil in basements, yards, streets and canals. Many residents who did not heed evacuation calls had to be rescued by boat. Looters came by land and water to rob abandoned homes.

After two years Islip presents a mixed bag of recovery. Some homes and areas are indeed back to normal. While neighborhood observations did not uncover any active construction, restoration remains ongoing in coastal reconstruction zones. Structurally-compromised homes are being completely reconstructed or raised, a process that has taken time. But in an area where many residents think that people like themselves can have a big to moderate impact on making Islip a better place to live, people have not shied away from taking on the challenge of making Islip more resilient for themselves. Rebuilding homes to meet new FEMA regulations is part of that process.

As residents fought to salvage what they could, a lot of misinformation circulated throughout the community. Learning about support services, as well as how to deal with the myriad federal support agencies became a challenge. A West Islip resident, whose ranch-style home was flooded with three feet of water, began collecting information and sending out an email/web newsletter with updates.

Active before the storm with her civic association, she had connections with other people in the region who could also distribute information. It was not long before her email chain included more than 200 groups or people. While the health insurance executive had her own cleanup to organize, she became a resource point for many: "I deal with public policy making and regulators on a daily basis and frankly I felt obligated to my family, friends and neighbors to help as much as I could," she said. "I was faced with a lot of questions and people just not having the right information. There was no real outlet to get information."

Superstorm Sandy 2012 - Islip, NY (Suffolk County)



She, her husband and two kids spent 12 weeks living with three different friends before finding temporary housing nearby. In October 2013, they moved back into their house, staying in small sections as others were still under repair. They had to raise the house and essentially rebuild the inside.

Neighbors reacted differently, some taking the damage in stride, others focusing on menial tasks unrelated to recovery that would distract from the disaster: “Imagine everything you’ve ever worked for is gone,” she said.

Through her community work, she was named to a committee tasked with rebuilding the area for NY Rising, a state initiative using federal funds to help communities recover and become more resilient. One item included in the plan: a drop-in center to provide information, community support and mental health services.

JERSEY CITY (#7 - BERGEN-LAFAYETTE), NEW JERSEY

The Bergen-Lafayette section of Jersey City is home to 21,059 people. Just 6 percent of the population is white, with the large majority of residents made up of blacks and Hispanics. Eighteen percent of the population is foreign-born. With a median income of \$36,090 and 24 percent of residents living in poverty, this is one of the more economically disadvantaged neighborhoods in the sample. It received just 11 SBA loans and measured high in social vulnerability, ranking in the 89th percentile nationally. Its residential population is also highly transient. Over 18 percent

Organizations emerge from the storm ready to help in the next disaster

While emergency responders worked to get the city back in order, a chance meeting between three volunteers led to the creation of the Jersey City Sandy Recovery group. One person knocked on doors handing out information sheets, another posted on Facebook ways to help residents and a third posted fliers telling people to meet at city hall. Upon meeting each other as they worked on their own efforts, the three joined forces and organized 800 volunteers who helped 2,500 families and provided \$700,000 in goods and services to those affected by the storm, said Councilwoman Candice Osborne, who was one of the organizers and later elected to the city council. At one point, the group had so many donations they created a free store and allowed people to shop for what they needed. The group has since been folded into a countywide organization and some of the members are now part of a Hudson County Long-term Recovery Committee, which provides legal, health and other services to Sandy victims. Efforts like the Hudson County Long-term Recovery Committee have been critical to the recovery process in Jersey City.



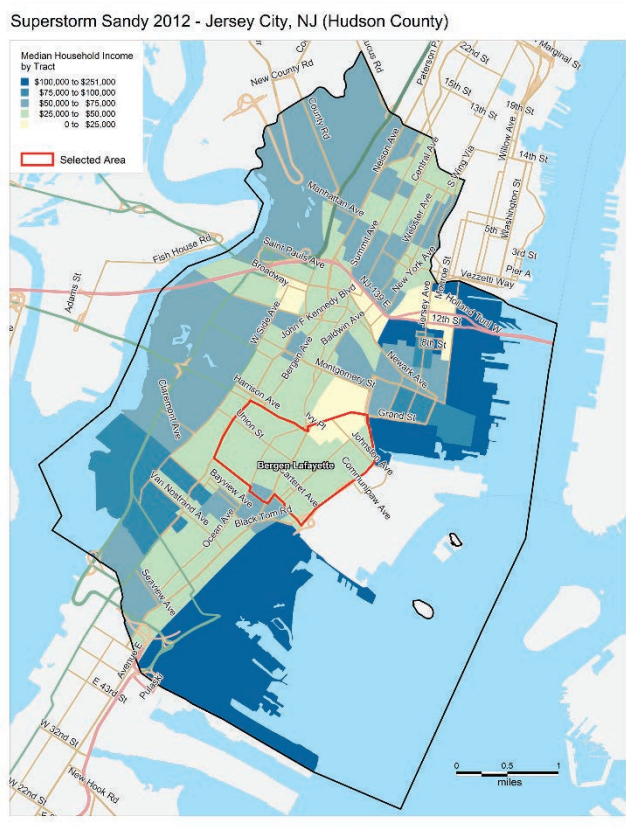
of the population moved between 2005 and 2009.¹⁵ A majority of residents do not rate their neighborhood as a good place to live.

The four block faces surveyed were predominantly residential, mostly featuring well-kept duplexes or small apartment buildings. A public housing complex was stationed on one block, not out of place considering this is a low-income area. Only one block had ongoing residential construction, but it only involved a few buildings. There were no commercial or industrial buildings on any block face. Scattered across these blocks were signs indicating security warnings, “No Trespassing,” “Beware of Dog,” and “Building Inspection,” or “Exterminator.”

Like Hoboken to the north, Jersey City experienced the wrath of a swollen Hudson River. As Superstorm Sandy came ashore, the Hudson pushed into New Jersey’s second most populated city, flooding homes and knocking out power, with reports of water levels up to the knees during low tide, said Candice Osborne, who was a community organizer at the time of the storm and was later elected to city council. Power in some locations was out for up to 20 days, creating evacuation problems for people in multi-story buildings who did not have the means to leave without an elevator. FEMA issued \$5.65 million in public assistance grants to Jersey City residents alone, the sixth highest amount for a municipality in the state.

Even with this influx of federal money, many aspects of this neighborhood are still in need of work. Elevators and escalators at public transportation stations break down frequently, perhaps due to corrosion from salt water. A ferry dock has yet to be replaced. Many apartment buildings are over 100 years old, cannot be raised, and feature ground-floor units that do not meet current regulations, placing owners and tenants in difficult positions.

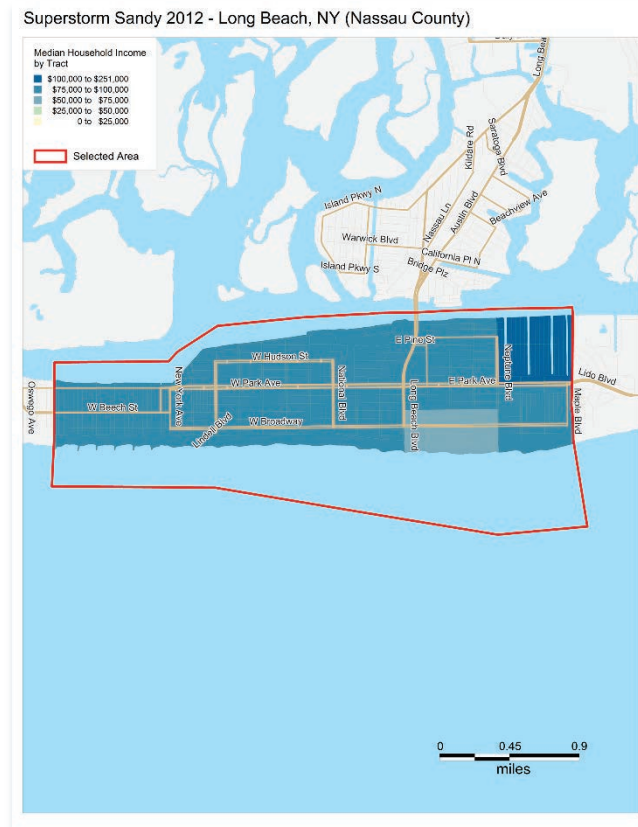
Still, residents today describe their neighborhood optimistically as “quiet and peaceful,” “diverse,” and “up and coming.” People keep to themselves but after the storm, when there was no way to take a train to the city, people were forced to socialize. They shared power. While businesses and churches were not necessarily helpful, people were “helpful on a personal level.” One resident said it improved the social aspect of the neighborhood. Today, a majority of residents believe that people like them can help make their neighborhood a better place to live.



¹⁵ ACS 2006-2010; data aggregated by Tract

LONG BEACH, NEW YORK

The city of Long Beach is located on a barrier island off of the South Shore of Long Island in Nassau County. The densely populated city of 33,442 sitting along the water has seen flooding before from both the ocean side to the south and by Reynolds Channel to the north.¹⁶



Long Beach was hit hard by Superstorm Sandy. According to the Red Cross, it sustained an estimated \$200 million in damage. Sixty-eight percent of housing stock sustained heavy damage. The effects of this linger today, as the neighborhood shows that the process of physical recovery remains ongoing. On one block surveyed, seven residential buildings were under construction. Another building was boarded up. Other areas do show signs of a return to normalcy. The residential buildings that made up a majority of the blocks observed were filled with mostly well-kept single family homes and the streets were free of graffiti, broken windows, and other signs of destruction. Residents like living there, with a majority rating it as a good place to live.

The neighborhood population is 75 percent white and 15 percent foreign-born, placing it near the median in each category of the 12 neighborhoods sampled. Nine percent of its

residents live in poverty. Eleven percent of the population moved between 2005 and 2009, the fifth-highest rate in the sample. Through March 2013, the neighborhood received 1,669 SBA loans, the second most of any neighborhood sampled here.¹⁷ It ranked as the least socially vulnerable of these 12 neighborhoods, as well. Perhaps related, Long Beach residents are also more likely than not to say that people like themselves can help make their neighborhood a better place.

Sandy struck during a full moon high tide and the storm surge at its peak reached 17.48 feet, according to the United States Geological Survey. Ocean and bay met, flooding homes, turning streets into rivers, and depositing sand throughout the entire city. Power, water and sewage processing plants were knocked offline and cellular communication was spotty for nearly two weeks. Homes were flooded, cars destroyed, roads undermined and the iconic 2.2 mile boardwalk, built in 1907, was destroyed. A lifeguard shack simply disappeared. More than 54 city buildings were damaged and 68 percent of Long Beach's housing stock was destroyed or heavily damaged, according to state NY Rising documents. An evacuation order remained in place for two weeks and a curfew was also imposed as the city went to work clearing roadways of sand and

"It's not a new normal," said Dr. Laurie Nadel, organizer and a psychotherapist specializing in stress and anxiety. "It's a new different."

¹⁶ ACS 2006-2010; data aggregated by Tract

¹⁷ ACS 2006-2010; data aggregated by Tract

debris. Nearly 500 portable toilets were scattered throughout the town and residents were bused off the barrier island to clear the area.

Overwhelmed by the amount of household debris that had to be disposed of, the city and county dumped truckloads of appliances, photo albums, furniture – even a wedding dress – in a nearby park, which was then trucked offsite to a barge and moved to upstate landfills. Help arrived from across the country and neighbors banded together to clear the city, cook food, assist friends and help with chores. “If you ask people ‘What is the best thing that happened?’ – which is an odd thing to ask – everyone will say community,” said Liz Treston, a writer who after Sandy became president of the Long Beach Community Organizations Active in Disasters.

The COAD, which is a conglomeration of governmental, nonprofit and support organizations, is now undergoing an evaluation of city and resident needs. The hope is to get people thinking about how to be prepared before a disaster hits. Having batteries, water, food, rain ponchos, extra medicine, important documents and supplies packed away ready for a fast exit is extra critical in this island community where help may not arrive for a couple of days.

Other social networking groups, such as Long Beach Rising, have also sprouted up and a weekly support group to deal with the trauma launched in August 2014. “It’s not a new normal,” said Dr. Laurie Nadel, who is one of the organizers and a psychotherapist specializing in stress and anxiety, especially post-traumatic stress. “It’s a new different.”

LONG BRANCH, NEW JERSEY

A famous painting by Winslow Homer in the Museum of Fine Arts, Boston shows the bluffs at Long Branch, New Jersey in the late 1860s. When Superstorm Sandy roared ashore, the areas with bluffs were fairly protected. The ones without those famed bluffs were not.

Long Branch is on the Jersey Shore in the northern part of the state, about an hour east of the capital city of Trenton. It is home to 30,855 people, a diverse population that is 31 percent foreign-born and just over 50 percent white.¹⁸ The area flooded, power was out for about two weeks and some homes incurred structural damage. The beach office, bathrooms, access areas and ramps along the boardwalk were destroyed. Each day, residents got reverse 911 calls updating them on the latest news and a citywide curfew was put in place. Residents were quick to lend a hand in the aftermath of the storm, so much so that Long Branch’s mayor, Adam Schneider, spoke of the two weeks following the storm as “inspiring.”

Nearly two years later, it’s hard to find signs of Sandy’s wrath, as the shoreline is dotted with large condominiums, apartment complexes and shopping centers that were built to withstand storms. Neighborhood observations of five block faces made up nearly entirely of residential property found moderately well-kept single family units and apartment buildings tucked between clean streets. Just

¹⁸ ACS 2006-2010; data aggregated by Tract

one residential building was under construction. The establishments on the two blocks with commercial property were mostly mom-and-pop stores, pawn shops, etc. with buildings in just fair condition.

Fencing is up where part of a boardwalk was “picked up and tossed aside” and a coastal roadway is partially closed so visitors can use that to walk along the water and get to the beaches. Even with less access to the water and amenities, the area’s tourism industry thrived. In 2012, Long Branch had \$1.8 million in beach revenue. In 2013, the summer after Sandy, it was \$1.75 million. It was their second best summer on the beach, according to Schneider.

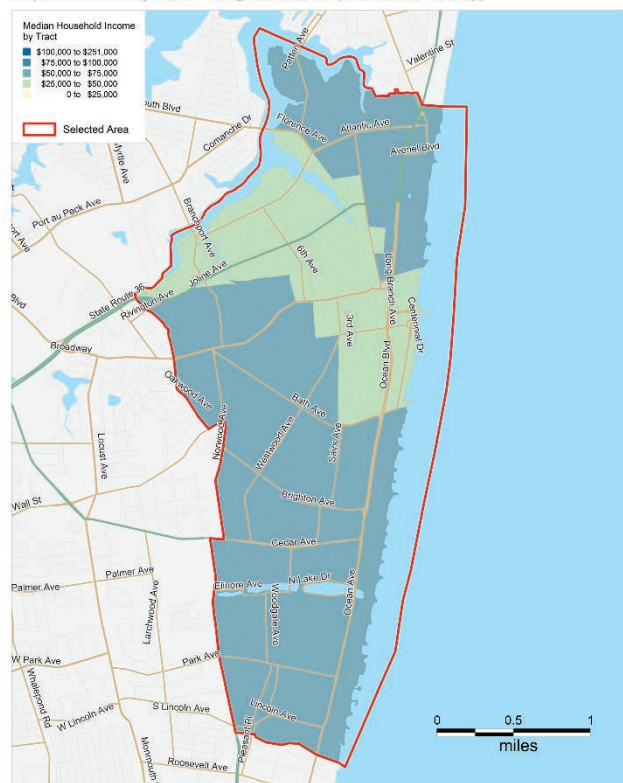
Tourism revenues may have boomed, but in the aggregate, the city’s residents have struggled economically. Long Branch ranks in the bottom half in median income out of the 12 neighborhoods sampled (\$52,553) and suffers from the fourth-highest poverty rate (15 percent). To aide in the recovery of its local businesses, Long Branch received 158 SBA loans following Sandy, the sixth most of these 12 neighborhoods. Despite these challenges, it is one of the least socially vulnerable neighborhoods in the sample, sitting in just the 2nd percentile nationally.¹⁹

One local official felt that the neighborhood was only about halfway to a full recovery. About a mile and a half stretch of the boardwalk needs replacing. The process of elevating and rebuilding continues on a number of homes. Even in the face of this, the official was optimistic that the neighborhood will eventually recover completely. Though before the storm, residents were more likely to move from Long Beach than all but one of the neighborhoods sampled (21 percent moved between 2005 and 2009), those who live there now are not complaining: they generally rate Long Branch positively as a place to live.

In some of the city’s low income areas, the storm has dramatically impacted finances and health. One resident moved four days before the storm to an oceanside apartment. As he tried to move his car to higher land during the storm, it was hit by a piece of boardwalk, knocking him over and causing him to drop his 6-year-old Jack Russell terrier into the surf. He stayed for nine days in the apartment, without water or electricity, searching for his dog, which he later found drowned on the beach. The apartment was declared uninhabitable and knocked down. From there, he spent two weeks at a large shelter in a room full of cots and then a hotel for six months before being moved into Section 8 public housing in Long Branch.

It was the latest string of tragedies to hit this 55-year-old resident, an environmental engineer. He was laid off in 2008 as the Great Recession took hold of the economy and then prior to Sandy, he suffered a

Superstorm Sandy 2012 - Long Branch, NJ (Monmouth County)



¹⁹ ACS 2006-2010; data aggregated by Tract

heart attack and went on disability. At times he lived in a tent or in his car, then his new apartment promised to be his chance to get things back on track. But then Sandy struck. As he bounced from place to place after the storm, his health worsened. He now receives federal disability.

He had no family close by and most of his friends, also hit by Sandy, could not offer help. Churches were packed with those in need so he was one among many. His clothes came from charitable organizations. Food came from food pantries. “It really set me back,” he said.

While hoping to move to different housing, he has witnessed a number of violent crimes; he thinks it will be about 18 months to two years before he is financially stable. Yet he remains optimistic that his future will be different. “It takes time,” he said. “I tell myself I’m better off than I was. Every day is another day, a better day.”

LOWER EAST SIDE, NEW YORK

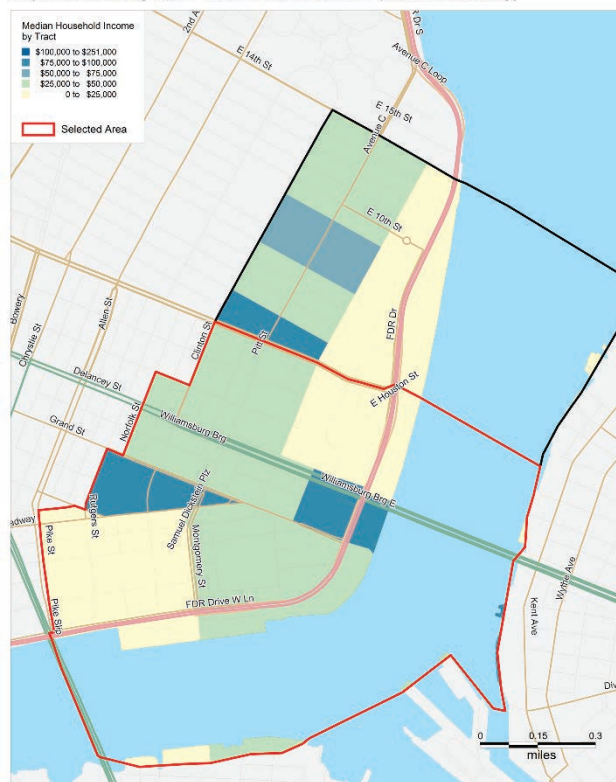
The section of Lower East Side sampled here ranks in the 99.94th percentile in social vulnerability. It had the lowest median income (\$35,197) of the 12 sampled neighborhoods. In a focus group, residents cite poor infrastructure, including “balky” electricity, plumbing, and other utilities. Twenty-seven percent of its residents live in poverty. It received just 7 SBA loans in the aftermath of Sandy.²⁰

Not all Lower East Side residents say their neighborhood is a great place to live but focus group respondents were eager to speak about the diversity, community, and friendly environment in the Lower East Side. They talk about the booming art scene, the block parties and cocktail parties, and the deep generational roots many inhabitants have to the neighborhood.

Lower East Side is known for its diverse group of residents, but its assortment of residential, commercial, industrial, governmental, and recreational property helps add to the neighborhood’s sense of variety. Three blocks featured traditional apartment buildings as the most prominent type of housing. Another was predominantly apartments above store fronts. And still another was mainly housing projects. All these residential properties were rated as moderately or very well-kept, as were the residential yards (on the two block faces with yards). There was no visible construction on any of these buildings.

In between blocks with mostly heavy construction (3 block faces), the neighborhood also featured a diverse array of businesses, mostly mom-and-pop stores, pawn shops, etc. There were two coffee shops out of the five blocks surveyed. Almost all of these businesses were outfitted with metal security

Superstorm Sandy 2012 - Lower East Side, NYC (New York County)



²⁰ ACS 2006-2010; data aggregated by Tract

blinds or iron gates. While one block had visible graffiti on buildings, signs, or walls, there were no signs of broken windows, broken glass, garbage, litter, beer bottles, or other vandalism or destruction.

In the aftermath of the storm, one resident described a feeling of camaraderie, especially thanks to the restaurants and buildings in the neighborhood, whose proprietors would give away the food they were not selling. This created a kind of street-fair atmosphere and there was trust between the tenants.

For the Lower East Side, the lack of power caused more concern than the flooding in this mostly immigrant community on the eastern side of Manhattan bordering the East River. Floodwaters did hit the area, but blown substations and transformers elsewhere on the electrical grid plunged this community into darkness. The neighborhood was without electricity, water, and cell phone service, according to Susan Stetzer, district manager of Community Board No. 3, which advises city government on issues in the community.

"We all work in close association with each other," Susan Stetzer, district manager of Community Board No. 3 said. "This community had a big advantage because of that tradition and because the community is very united still in serving our community."

While parts of the area are undergoing gentrification, the Lower East Side is also home to many New York City public housing and subsidized unit complexes. More than 17,000 people live in public housing units across 80 acres. The area is also home to several settlement houses, which were created in the late 19th and early 20th century to help immigrant communities. Along with the settlement houses, numerous nonprofit organization and support groups exist in the area and those agencies and groups were of key importance in the first days after the storm. They continue to work in close association with each other.

Stetzer cites the tradition and unity of the neighborhood as an advantage in the weeks following the storm. Volunteers, sometimes climbing 20 stories, knocked on doors bringing food and blankets, checking on medical conditions and providing information to residents, many of them elderly or disabled. In a neighborhood that lacks the financial resources enjoyed by many of the other neighborhoods in this sample, these efforts by volunteers and nonprofit organizations provided a much needed boost to Lower East Side residents.

MONMOUTH BEACH, NEW JERSEY

Over 3,300 people call the borough of Monmouth Beach home. Its residents are mostly white (91 percent) and generally well-off. The median income of the neighborhood sits at close to \$95,000 and less than 3 percent of its inhabitants are below the poverty line. Its social vulnerability score ranks in the 2nd percentile.²¹ Unsurprisingly, residents are united in their belief that Monmouth Beach is a good place to live.

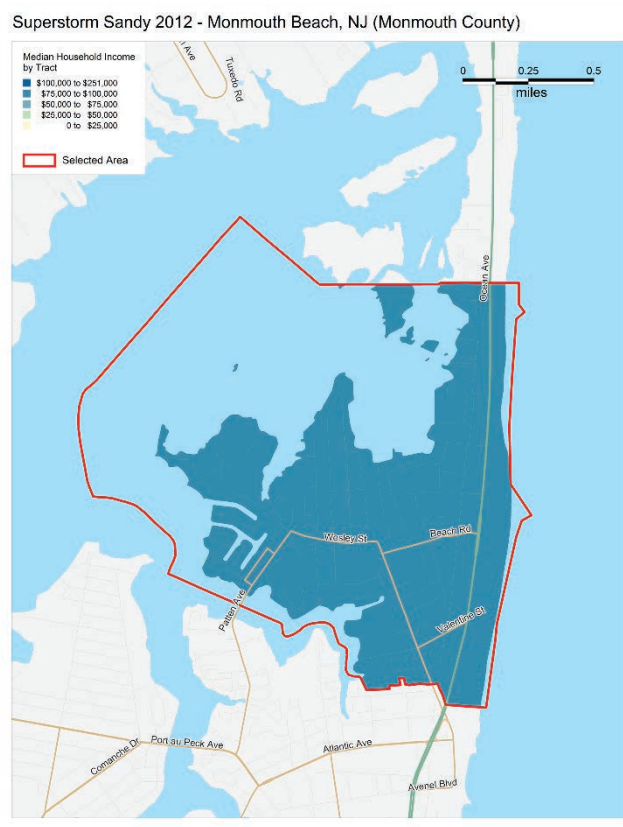
²¹ ACS 2006-2010; data aggregated by Tract

Aside from one upscale restaurant and a few other commercial establishments, housing dominated a majority of the space on the block faces observed in Monmouth Beach. Single occupancy homes and small apartment buildings made up the majority of the residential structures. Most of these buildings and yards were well-kept, but one block had a mix of buildings in moderate to poor condition. This block had a few residential buildings, along with a few other types of property, under construction.

Situated in northern New Jersey with the Atlantic Ocean to the east and Shrewsbury River to the west, Monmouth Beach had seen flooding before. When Superstorm Sandy struck, the storm surge topped a sea wall, flooded into town, and crested a small ridge before meeting up with the river. This all happened exceptionally quickly, said Dennis Cahill, who was captain of the Monmouth Beach Office of Emergency Management until his retirement in October. About one in four homes had some type of flood damage.

By 6 P.M. the day of the storm, first responders had to flee the police department, where emergency operations had been set up, and go to the nearby fire station. As the waves pushed in, they were forced to take refuge on the second floor. Power went out, as did the phones. The only means to communicate was Captain Cahill's cell phone. Monmouth Beach managed to avoid any fatalities, and Cahill attributes that to 75 percent of the population heeding the call to evacuate the area.

Monmouth Beach 3,351 residents concentrated in about 1 square mile.²² The remaining one square mile is over water. FEMA granted the borough \$3.24 million in municipal assistance and residents there received an additional \$3.92 million to help with recovery costs. Despite its small population, it received 156 SBA loans after Sandy. At least 290 homeowners, or 15 percent, also collectively received \$2.91 million in grants from Housing and Urban Development to resettle within Monmouth Beach or the same county. To be eligible, the homes had to be primary residences and have had at least one foot of water in their houses, according to New Jersey state records. An additional \$415,000 has gone to 13 property owners to reconstruct their homes and many more are being rebuilt or raised. New construction specifications mean homes will be higher and feature flood vents, with the end result hopefully being a Monmouth Beach community that is more resilient to future flooding.



²² ACS 2006-2010; data aggregated by Tract

NEW DORP AND MIDLAND BEACH, NEW YORK

The communities of New Dorp and Midland Beach (#8) have a combined population of 21,907 residents with a median income of \$73,597. These residents are predominantly white (76 percent), but there is also a significant foreign born contingent (25 percent). Nine percent of the population lives in poverty. Compared to the nation as a whole, this area showed low levels of social vulnerability, ranking in the 21st percentile. In addition, between 2005 and 2009, only 4 percent of residents in these communities moved, which suggests a rather stable residential population before Superstorm Sandy.²³ Residents generally rate their neighborhood as a good place to live.

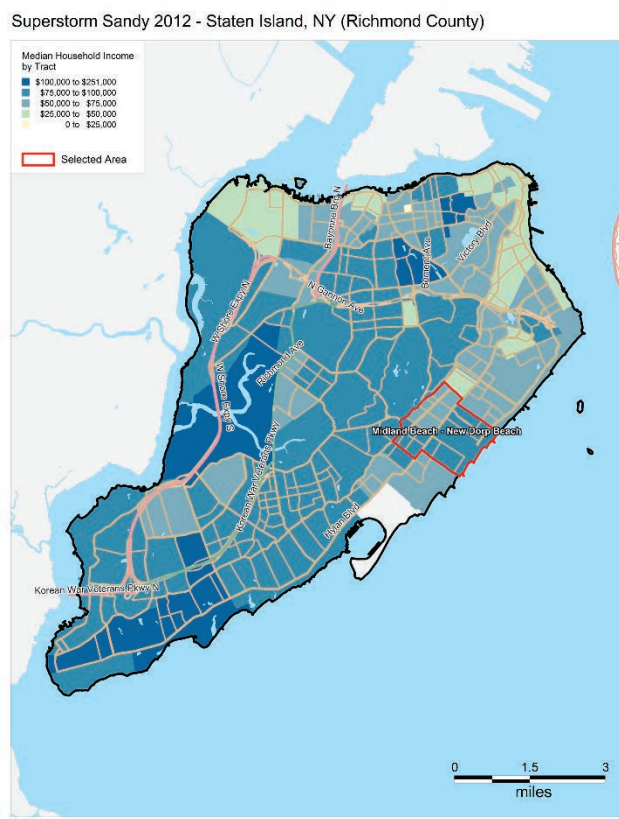
The borough of Staten Island, connected only by bridges to New Jersey and Brooklyn, suffered some of the most extreme damage from Superstorm Sandy. Twenty-three people on Staten Island died and at least eight of those people were from Midland Beach and New Dorp Beach. Many fell victim to the extreme tide that hit the eastern shore of the island, sweeping people away, drowning them in homes and contributing to deaths by electrocution.

In the early 1900s, this area was home to wetlands with tourist resorts and summer homes but by the 1960s development had expanded and those homes close to the coastline were winterized and people moved closer and closer to shore. During Sandy, the peak storm tide hit 16 feet and waves of up to six feet crashed against the shore. Water swept in fast and fierce, sometimes moving as far inland as 1.25 miles.

The oft-flooded Midland Beach, which some residents refer to as “the bowl,” was inundated, including an area along Grimsby Street that now has a somber alias – “Lake Grimsby” – after the ocean surged in and water levels reached the top of street signs, said Staten Island Taxpayers’ Association President Dee Vandenberg.

While homes are being raised and have been rebuilt, nearly two years later, parts of this hard-hit area look as though the storm may have hit just a few months ago. Empty lots, homes with red tags declaring them off-limits and spray-painted messages on siding to emergency responders are still noticeable.

Leonid Blyakherov, a 13-year resident of Midland Beach who works in Manhattan as a computer analyst, lost the contents of his first floor. He said much of his community relied on the help of neighbors, public officials and emergency aid. “We have a lot [of help] from all different kinds of volunteer groups,” Blyakherov said. “We help each other in this place.”



²³ ACS 2006-2010; data aggregated by Tract

A New York City program called Build it Back, organized to help residents get back into their homes, facilitates funding for rebuilding, elevation and other efforts. On Staten Island, the city has 4,610 active applications to aid. The program has started 165 construction projects and completed 36, according to city statistics. Many people are still not back in their homes, Vandenberg said.



Much of recovery has focused on finding ways to divert storm water and runoff, as well as returning some wetland areas back to their natural state. Civic associations from both areas and the New York Governor's office applied to a United States Department of Agriculture program that would buy homes, knock them down, and do wetland restoration. The USDA has approved requests to spend more than \$50 million to take 38 Midland Beach properties and was notifying residents in September 2014. If property owners accept the offers, it will lead to the protection and restoration of 33 acres of floodplain, according to a

spokeswoman for the National Resources Conservation Service, the USDA agency overseeing the project. Another 13 properties in New Dorp have tentatively been approved.

Residents still are wary when storms are coming or even during small wind and rain events. "I worry about the storms all the time," said Blyakherov, who weathered the storm from the upper floors of his house. "I had a bad experience."

Businesses also suffered in the aftermath of Sandy. Following the storm, these communities received 755 SBA loans.²⁴

Nevertheless, reported recovery remains low. Residents' incomes were high enough that they did not qualify for many assistance programs yet not high enough to permit residents to devote their own resources to fixing their homes. Consequently, many of these people will remain stuck with homes badly in need of repairs.



POINT PLEASANT-POINT PLEASANT BEACH, NEW JERSEY

The boroughs of Point Pleasant and Point Pleasant Beach in Ocean County, New Jersey has a combined total a population of 23,528 residents, with a heavy majority of whites (94 percent) and very few foreign-born inhabitants (3 percent). The population's median income of \$72,132 is the highest of the study's low income neighborhoods and the area has less than 5 percent of residents living in

²⁴ ACS 2006-2010; data aggregated by Tract

poverty (the third-lowest rate in the sample), suggesting a predominantly middle class neighborhood. It received the fourth most SBA loans, 312 in total. These communities show low levels of social vulnerability, ranking in the 13th percentile nationwide. From 2005-2009, about 10 percent of the population had moved, suggesting a moderate level of stability in the residential population before Sandy²⁵.

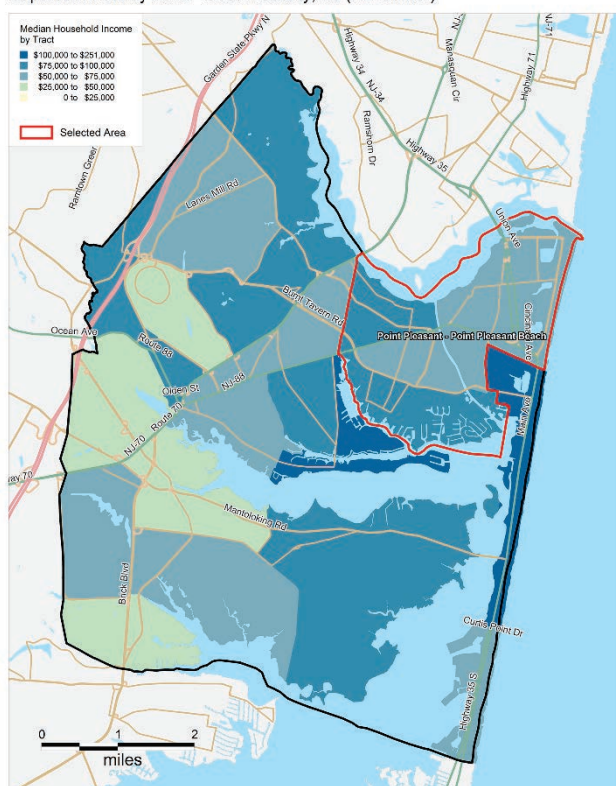
Whether living along the ocean, a creek, the river, or a bay, residents of Point Pleasant and Point Pleasant Beach were hard hit by Superstorm Sandy. Nestled along the shore and a series of waterways about 40 miles east of Trenton, these two areas were hit both by the ocean and a surge that pushed into area waterways flooding homes, businesses and parks. In Point Pleasant Beach, which fronts the Atlantic Ocean and is home to a boardwalk and many ocean-side businesses, flooding hit much of the community of more than 4,700 people and power was knocked out. The same happened, though from creeks and inlets, in Point Pleasant, which has more than 18,500 residents.

Debris surrounded homes. Decks came loose and floated away, as did picnic tables, benches, and bikes, said Point Pleasant resident Mary Ellen Luthy. The only supermarket in Point Pleasant flooded, gas stations were closed, power was out and cars were destroyed. “It impacted the entire community,” said Luthy, who was president of a local civic group called the Woman’s Club of Point Pleasant until this past spring. “It impacted the merchants in the community. We didn’t have power for a while. Some people moved and didn’t come back.”

Churches bused in volunteers from other areas to help, the Masonic lodge coordinated and staged efforts, groups gave out cleaning supplies and a local high school raised money for teachers impacted by the storm. One resident with a full house generator opened up his home and had about 20 people over nightly to eat. One neighbor even stayed over with pet parrots because it was too cold in her powerless house for the pets. Luthy reports that this type of behavior gave residents a feeling of community support.

Nearly two years later, the neighborhood is a patchwork of recovery. Neighborhood observations of five largely residential block faces uncovered buildings that varied in condition from very well kept to just fair, in need of landscaping, repairs, and fresh paint. The few businesses in these areas were mostly mom-and-pop stores, pawn shops, etc., and the buildings were in just fair condition. One building had been boarded up and several homes were for sale. The streets were clean – graffiti, vandalism, litter and garbage were at a minimum – but these blocks were not in especially bustling

Superstorm Sandy 2012 - Ocean County, NJ (NE Corner)



²⁵ ACS 2006-2010; data aggregated by Tract

areas. There were no recreation facilities or equipment and almost no activity in public spaces. Traffic ranged from moderate to light to none at all.

Some houses have been raised, lots are vacant where homes were knocked down and repair work on decks and other houses are in various states. The neighborhood is divided as to whether people like them can have an impact on making it a better place to live. “People who had money were able to recover more quickly than average people,” said Luthy. “This is a blue-collar town.”

Point Pleasant Beach Mayor Vincent Barrella said many residents are living in parts of their homes while repair work is being done. “There are a lot of people living on the second floor with a hot plate and toaster,” he said. “The displaced placed.”

Delays in insurance claim payments and FEMA payments are barriers holding back the recovery of this largely residential area. But confidence in a full recovery persists as residents believe the substantial property values of the area will remain attractive to investment or reinvestment. Despite difficulties rebuilding, the residents of Point Pleasant-Point Pleasant Beach rate their community very highly as a place to live.

BREEZY POINT, BELLE HARBOR, AND ROCKAWAY PARK NEW YORK

The communities of Rockaway Park, Belle Harbor and Breezy Point lie on the western edge of the Rockaway Peninsula. Originally destinations for summer visitors from New York City in the early 1900s, the communities are now largely year-round residential areas with a mix of bungalows, larger homes and multi-family units.

The communities of Rockaway Park, Belle Harbor, and Breezy Point have a combined population of 28,531 residents and a median income of \$73,739.²⁶ Residents of the Rockaway Park, Belle Harbor and Breezy Point neighborhood area are predominately white (78 percent) and the area has a low poverty rate, about half the national average (only 6.2 percent of residents are estimated to have incomes at or below the federal poverty line). In addition, between 2005 and 2009, only 8.3 percent of residents in these communities moved, suggesting that before Superstorm Sandy this neighborhood had a stable residential population. These communities scored high in social vulnerability, placing in the 96th percentile nationally and ranking as the third most vulnerable of the 12 neighborhoods sampled. No neighborhood sampled received more SBA loans than the 2,225 in Rockaway Park, Belle Harbor, and Breezy Point.

Superstorm Sandy 2012 - Breezy Point - Belle Harbor - Rockaway Park, NYC (Queens County)



²⁶ ACS 2006-2010; data aggregated by Tract

Asked about the impact of the storm, a local emergency management official describes how communities were flooded with waves from both the Atlantic Ocean and Jamaica Bay, inundating homes, sparking fires and knocking power offline. Offshore buoys recorded wave heights of up to 30 feet and much of the peninsula was submerged under five feet of water during the height of the storm. A saturated water table also created geysers of water that shot up through dunes. In Breezy Point, a fire fed by high winds consumed more than 130 homes as three local volunteer fire units struggled to rescue residents, flee rising floodwaters, and batter the flames. Problems caused by a lack of power, offline sewer service, and inoperable cell service and communication technologies were compounded by sand in streets, broken boardwalks, homes displaced from their foundations, and fire damage to residential houses.

Hit hard by flooding and fires during the storm, the Rockaway Park, Belle Harbor and Breezy Point area faced a long road to recovery. Described by a local emergency management official as a “community that was forever helping people,” the tables were turned and the community received help from a variety of sources from religious groups who came in from other states to FEMA and other government officials. Having lost 12 percent of its housing stock, key utilities and infrastructure, and one of its economic engines in the devastated beach and boardwalk, residents recognize that “it will be several years before we get back to normal.” But, they are rebuilding and rebuilding smarter with new regulations that include sprinkler systems and raised foundations, to protect homes. Residents are looking for solutions to bring back their neighborhood, for example pushing for year-round ferry service to replace the destroyed subway tracks that used to bring tourists in to the beach. Hank Iori, president of the Belle Harbor Property Owners Association, said, “We’re ready to be re-born in a sense. We’re going through a renaissance. We’re trying to get the city to pay attention.”



Neighborhood observations indicate that Rockaway Park, Belle Harbor and Breezy Point are still rebuilding. The five selected block faces were largely residential in nature and composed of single-family homes generally in good condition, but construction was prevalent. Three blocks featured active construction. Two blocks had 20 or more active construction sites. Nevertheless, residents still speak highly of their neighborhood and largely believe that people like themselves can have an impact making their neighborhood a better place to live.

SECTION 3: THE ROLE OF SOCIAL FACTORS IN RESILIENCE

Prior research indicates that the degree to which people socialize, trust and help their neighbors can vary significantly across communities. This variation in social resources at the neighborhood level can help explain many differences between communities with similar financial resources and populations. For example, studies show greater social resources are often associated with lower levels of violence²⁷ and higher self-reported physical health in communities.²⁸

Research also indicates that social resources may have a significant impact on the ability of a community to prepare, respond, and recover from disasters. While many people may assume disaster recovery is based solely on neighborhood wealth or outside financial assistance, social factors may play a key role in the resilience of communities.

“Like with 9/11 – people are willing to come together after a horrific tragedy.”

Daniel Aldrich has demonstrated that social resources such as high voting rates, participation in voluntary organizations, and high levels of trust can all boost community resilience.²⁹ He explored how different neighborhoods recovered from the Tokyo Earthquake in 1923, the Kobe Earthquake in 1995, the Indian Ocean Tsunami in 2004, and Hurricane Katrina in 2005. Across all four of these case studies, he finds neighborhoods with more engaged residents and social connections recovered in less time and more completely from natural disasters.

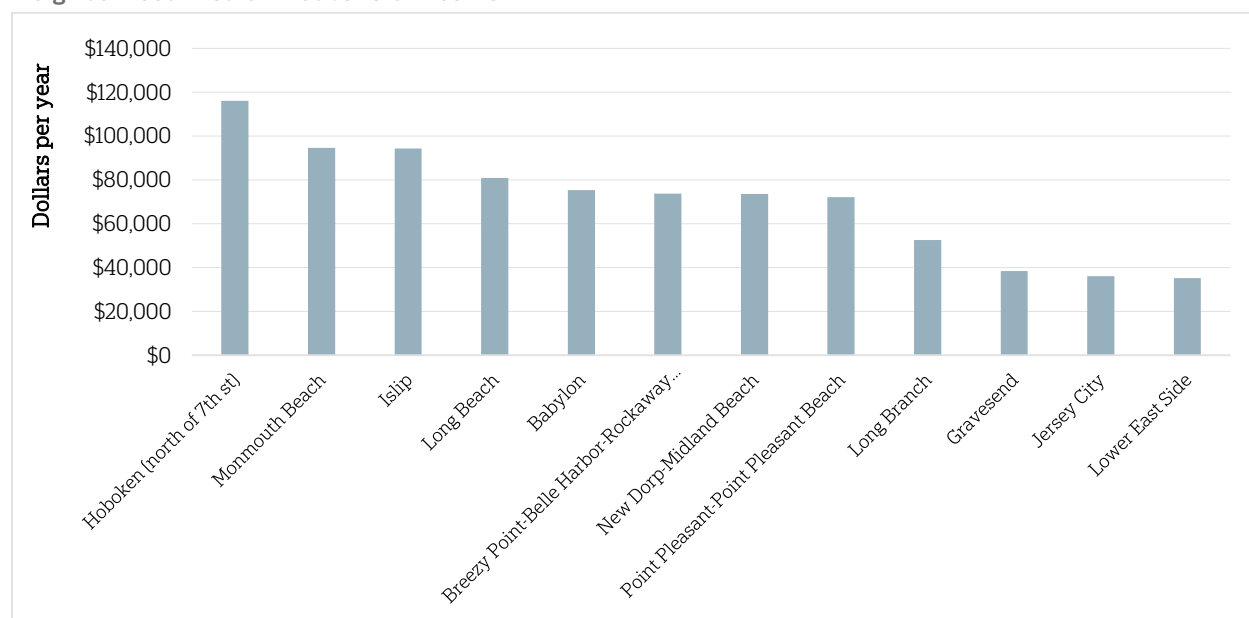
Neighborhoods across New York and New Jersey are recovering from Superstorm Sandy at varying rates, and neither financial resources nor initial storm damage explains all these differences. This raises several important research questions: Do social resources vary in these neighborhoods? Do these social factors help explain why some communities are more resilient than others?

Isolating the effects of social factors on resilience. In order to explore the role of social factors in recovery, the 12 neighborhoods in the survey are divided into two groups based on neighborhood socioeconomic status. Dividing the communities into these two groups allows for an examination of the extent to which social factors vary in neighborhoods with similar levels of financial resources and storm impact. About half of survey respondents live in communities in the low socioeconomic status group while the other half live in neighborhoods in the high socioeconomic status group.

²⁷ Sampson, R.J., Raudenbush, S.W., & Earls, F. (1997). Neighborhoods and Violent Crime: A Multilevel Study of Collective Efficacy. *Science*, 277: 918-924.

²⁸ Browning, C.R. & Cagney, K.A. (2002). Neighborhood Structural Disadvantage, Collective Efficacy, and Self-Rated Physical Health in an Urban Setting. *Journal of Health and Social Behavior*, 43(4): 383-399.

²⁹ Aldrich, Daniel. (2012). *Building Resilience: Social Capital in Post-Disaster Recovery*. Chicago: University of Chicago Press.

Neighborhood median household income³⁰

The low socioeconomic status group features six neighborhoods that all have median household incomes of less than \$73,600 a year. The neighborhoods in this group are: Jersey City - Bergen Lafayette, Gravesend, Long Branch, Lower East Side, Midland Beach/New Dorp Beach, and Point Pleasant - Point Pleasant Beach.

The high socioeconomic status group features six neighborhoods that all have median household incomes of more than \$73,601 a year. The neighborhoods in this group are: Babylon, Breezy Point-Belle Harbor- Rockaway Park, Hoboken, Islip, Long Beach, and Monmouth Beach.

An analysis of differences within and between these two groups examines whether resources boost neighborhood resilience regardless of a neighborhood's socioeconomic status or the initial impact of the storm.

Beyond neighborhood income levels, there are some significant individual-level income differences in the respondents from the high and low socioeconomic groups. Respondents from the low socioeconomic group are three times more likely to have household incomes under \$30,000 a year (39 percent) than respondents in the high group (13 percent). Likewise, only about 29 percent of

³⁰ ACS 2006-2010; data aggregated by Tract

respondents in the low socioeconomic group have household incomes of more than \$75,000 a year compared with 55 percent of respondents in the high group.

Education levels also differ across the two groups. People in the high socioeconomic group are more likely to have a college degree (40 percent) than people in the low group (25 percent).

There are also significant racial and ethnic differences among respondents of the two groups. In the low socioeconomic group, 46 percent of respondents are white, 21 percent are Hispanic and 17 percent are black. In the high socioeconomic group, 74 percent of respondents are white, 13 percent are Hispanic and 2 percent are black.

MEASURING SOCIAL RESOURCES ACROSS THE TWELVE STUDY NEIGHBORHOODS.

Social resources include a number of different facets of social life including feelings of social cohesion (perceptions of how connected people are within their neighborhoods), social control (the informal ways people in the neighborhood take control of a bad situation to maintain public order), social exchange (how neighbors help each other out), and general trust (how much a person trusts people overall).

We briefly describe each of these aspects of social resources among all the respondents in the 12 study neighborhoods. Then we look at how differences in levels of social resources in the 12 study neighborhoods contribute to differences in neighborhood resilience.

High levels of social cohesion across the study neighborhoods.

Respondents report relatively high levels of social cohesion, which is an aspect of social resources that focuses on neighborhood connectedness.³¹

Nearly 9 in 10 adults report that people are willing to help their neighbors, 7 in 10 say people in their neighborhood can be trusted, and 7 in 10 agree their neighborhood is close-knit.

Only 1 in 3 respondents say people in their neighborhood do not share the same values, and about 1 in 10 adults report that people in their neighborhood generally do not get along.

Social Cohesion Promotes Information Sharing

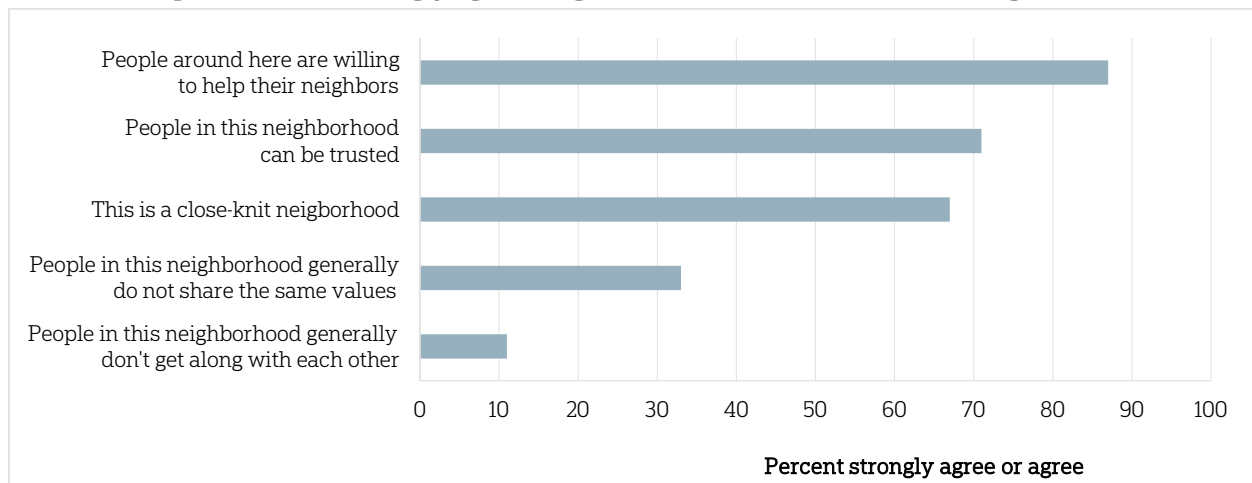
After the storm, a lot of misinformation circulated throughout the community. Learning about support services, as well as how to deal with the myriad federal support agencies became a challenge.

That's when a West Islip resident, whose ranch-style home was flooded with three feet of water, began collecting information and sending out an email/web newsletter with updates.

Active before in the storm with her civic association, she had connections with other people in the region who could also distribute information. It wasn't long before her email chain included more than 200 groups or people. She became a resource point for many. "I deal with public policy making and regulators on a daily basis and frankly I felt obligated to my family, friends and neighbors to help as much as I could," she said. "I was faced with a lot of questions and people just not having the right information. There was no real outlet to get information."

³¹ Respondents were asked this series of five questions about neighborhood social cohesion twice in the survey, once about what their neighborhoods were like before the storm, and once about what they were like after the storm. For most people, the storm did not have a lasting impact on how people perceive the social cohesion of the neighborhood. The pre and post storm measures are highly correlated at $r=.76$.

Percent of respondents who strongly agree or agree with statements about their neighborhood



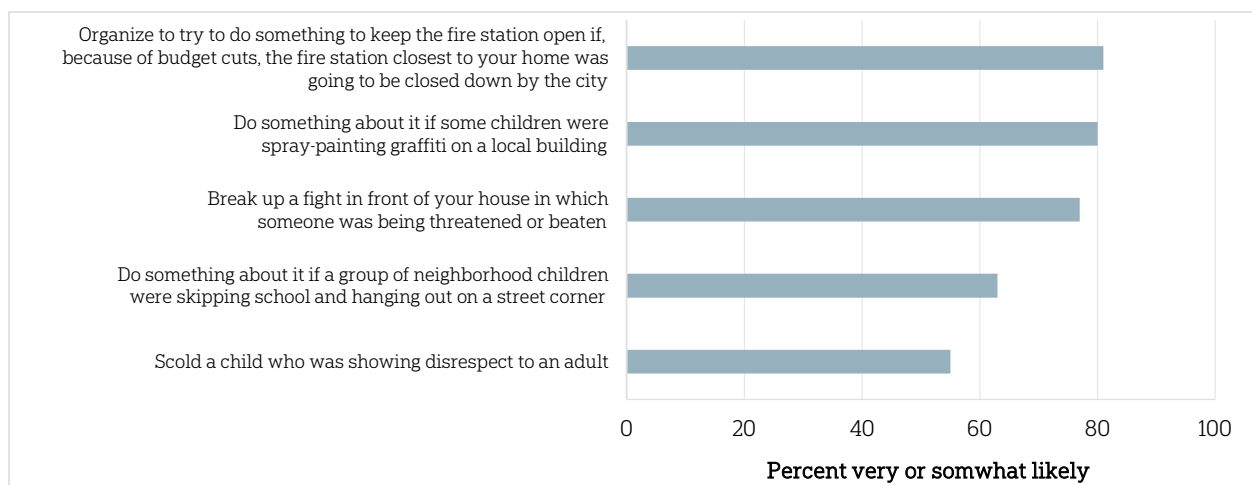
Question: Now I'm going to read some statements about people in your neighborhood. Thinking about what your neighborhood is like now after Superstorm Sandy, please tell me whether you strongly agree, agree, disagree or strongly disagree.

Most people perceive high levels of informal social control in their neighborhood. A majority of people say it is likely that people in their neighborhood would take a variety of actions to maintain informal social control, which includes the informal ways that people in the neighborhood maintain public order.

When asked about different actions people in their neighborhood would likely take, about 8 in 10 adults say people would: 1) likely organize to prevent a fire station from closing due to budget cuts; 2) do something if children were spray-painting graffiti on a local building; and 3) break up a fight in front of their house.

Smaller majorities report that people would do something if children were skipping school (63 percent) and scold a child showing disrespect to an adult (55 percent).

Percent of respondents who believe people in their neighborhood are very or somewhat likely to take such action



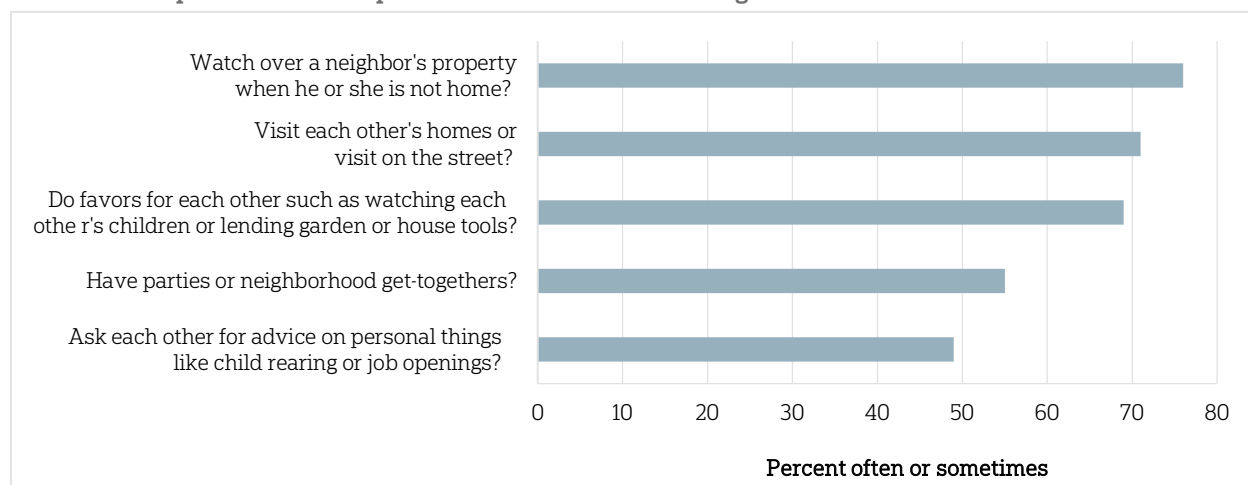
Question: For each of the following, please tell me if it is very likely, somewhat likely, somewhat unlikely, or very unlikely that people in your neighborhood would act in the following manner.

Varying levels of social exchange and interaction with neighbors. Among respondents, there is wide variation in social exchange, which looks at social transactions between neighbors.

The frequency with which people interact with their neighbors varies depending on the type of social exchange. Majorities report having relatively frequent public interactions with neighbors, while fewer adults report having more intimate interactions with neighbors.

Seventy-six percent of adults report sometimes or often watching over a neighbor's property when he or she is not home. About 7 in 10 adults say they often or sometimes visit each other's homes or visit on the street, and a similar proportion report doing favors for other neighbors. Just over half (55 percent) say they have neighborhood parties or get-togethers. However, less than half of adults report asking others for personal advice.

Percent of respondents who report often or sometimes having such social interactions



Question: Now I am going to ask you about some things that you might do with people in your neighborhood. For each statement, please tell me whether they happen often, sometimes, rarely, or never.

People are fairly divided in terms of general trust. About half of respondents say that most people can be trusted while the other half say you cannot be too careful in dealing with people.

Race and socioeconomic factors affect people's beliefs about trust, a finding that is consistent with past research.³² Scholars have found that factors such as neighborhood or community context, socialization, and historical or contemporary discrimination lead minorities and poorer people to have less trust than others.³³

Whites are more than twice as likely to be trusting (58 percent) than either blacks (24 percent) or Hispanics (24 percent). Age and education also have significant effects on trust. Fifty-eight percent of people 65 and older say most people can be trusted compared with only 39 percent of adults 18 to 29. College graduates are more likely to report trusting people (60 percent) than people with no college experience (36 percent).

³² Smith, T.W. (1997). Factors relating to misanthropy in contemporary American society. *Social Science Research*, 26, 170-196.

³³ Smith, S.S. (2010). Race and Trust. *Annual Review of Sociology*, 36, 453-475.

SOCIAL RESOURCES ARE STRONGLY ASSOCIATED WITH HOW RESIDENTS VIEW THE RESILIENCE OF THEIR NEIGHBORHOOD.

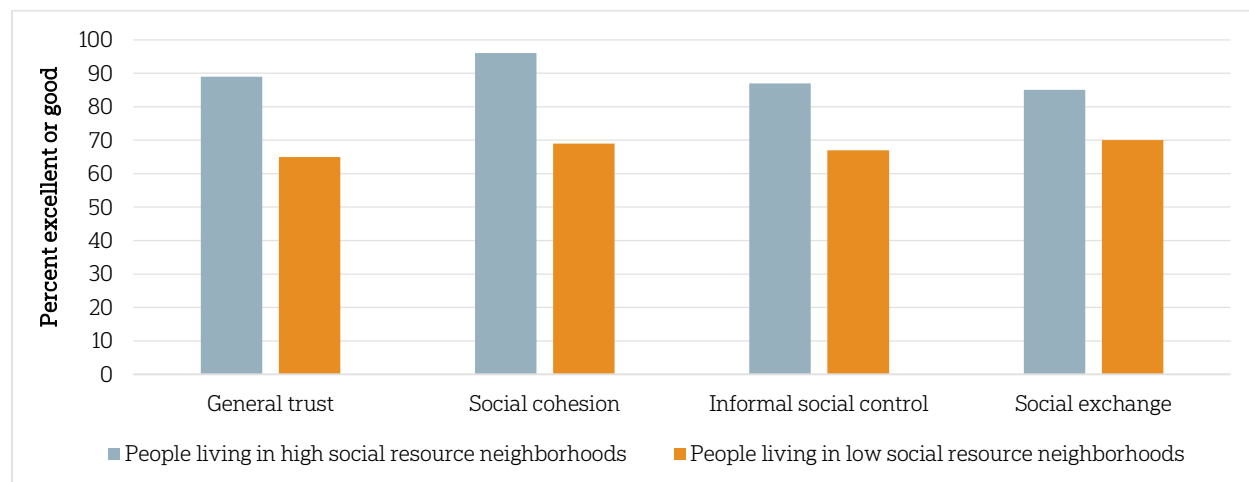
Looking across the study area, the data reveal that the social resources in a neighborhood are strongly associated with how residents view the resilience of their neighborhood. First, the four components of social resources measured in the survey (social cohesion, informal social control, social exchange, and general trust) are all positively associated with people's rating of their community as a place to live.³⁴

Generally, people have positive opinions about their neighborhoods and the impact they can have on their community. Seventy-seven percent say their neighborhood is an excellent or good place to live and only 23 percent report their neighborhood is a fair or poor place to live.

But people living in neighborhoods with high levels of social resources are more likely to rate their community as an excellent or good place to live than people who report low levels of these social resources.

For example, 96 percent of people living in neighborhoods with high social cohesion rate their community an excellent or good place to live compared with only 69 percent of people living in neighborhoods with low social cohesion.

Percent of respondents who rate their community as an excellent or good place to live by four measures of social resources



Question: Overall, how would you rate your current neighborhood as a place to live? Would you say it is excellent, good, fair or poor?

These neighborhood ratings are strongly related to community resilience. As mentioned earlier, resilient communities are those that are prepared to withstand disasters and bounce back quickly when they occur. To measure resilience, respondents were asked about their neighborhood's readiness for major storms or other disasters in the future and their confidence about their neighborhood's ability to bounce back quickly if a disaster were to strike.

³⁴ Social cohesion, informal social control and social exchange are all measured for each individual respondent with a factor score derived from their answers to a series of related questions. These factor scores are then split at the median, with half of individuals having scores above the median and half having scores below the median. High social resources refers to those people above the median split, and low social resources refers to those people below the median split.

Two years after feeling the impacts of Superstorm Sandy and with some neighborhoods still struggling to recover, many residents of the 12 surveyed neighborhoods are not all that optimistic about their neighborhood's readiness for major storms and other disasters in the future. Twenty percent say their neighborhoods are very or extremely well prepared. Nearly one half (46 percent) estimate moderate levels of neighborhood preparedness, and just under 30 percent report their neighborhood is not too prepared or not prepared at all.

Similarly, residents are cautious in their assessments about their neighborhoods' ability to bounce back quickly if and when disaster strikes again. Nearly 3 in 10 (28 percent) say they are very or extremely confident that their neighborhoods could recover quickly from a major disaster, while nearly half (48 percent) are moderately confident, and another 2 in 10 (22 percent) are not too confident or not at all confident.

This confidence is related to the current level of neighborhood recovery from Superstorm Sandy, whether measured through the respondent's self-report or through the researcher team's a priori classification, with residents in low recovery areas less likely to feel confident. For example, on self-reported recovery, 6 in 10 of those who report low neighborhood recovery say they are not very or not at all confident about a quick recovery. This lack of confidence drops by half, to 3 in 10, among those who feel their neighborhoods have recovered about halfway, and drops by about half again, to 16 percent, among those who think their neighborhoods have recovered most or all of the way. Similarly, 1 in 4 residents in neighborhoods categorized as low recovery by the research team lack confidence in a quick recovery from a future disaster compared to 1 in 5 residents in neighborhoods categorized as high recovery.

Residents who report their community is an excellent or good place to live are twice as likely to say their neighborhood is extremely or very well prepared for a disaster (22 percent) than people who report their community is a fair or poor place to live (11 percent).

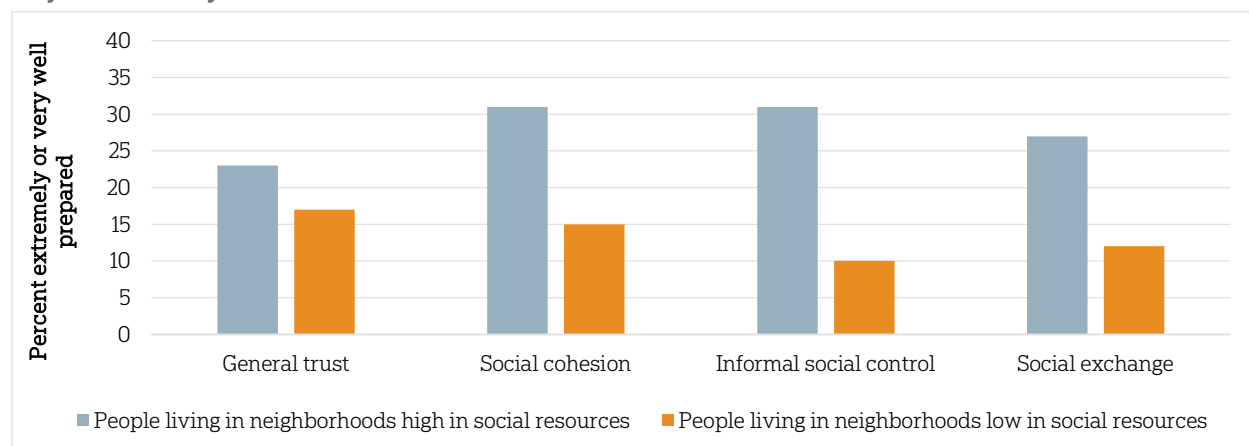
"If there's a community that already has a fabric, it's not bouncing back because it's already there. It's responding to and meeting a need."



In addition, 31 percent of people who rate their neighborhood highly as a place to live say they are extremely or very confident their neighborhood would recover quickly after a future disaster compared with only 18 percent of people who rate their community as a fair or poor place to live.

People in communities with high levels of social resources are more likely to feel their neighborhood is prepared for a disaster and more confident their community would recover quickly from a disaster than people in neighborhoods with low social resources.

Percent of respondents who say their neighborhood is extremely or very well prepared to handle a major disaster by four measures of social resources

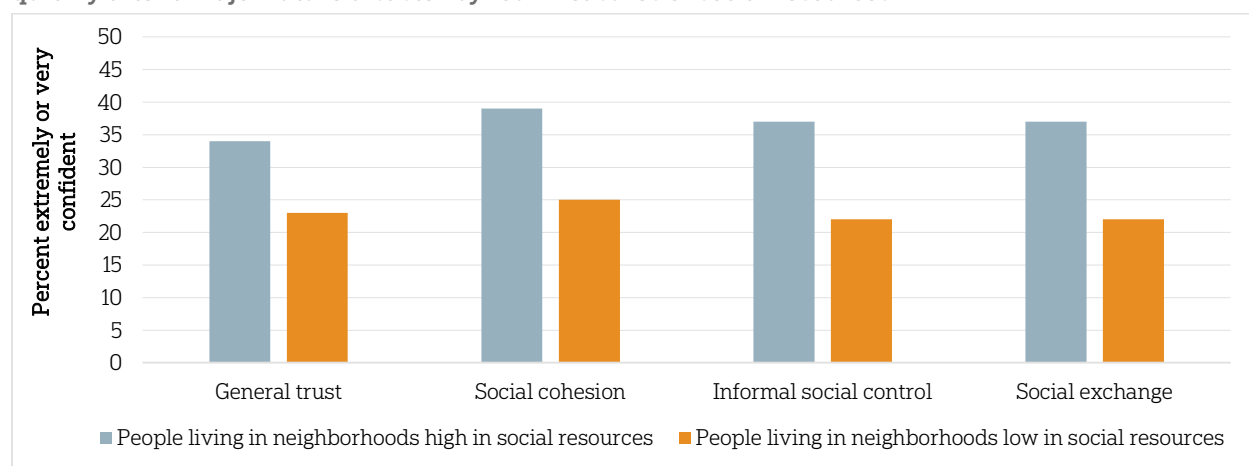


Question: Thinking again about disasters that might impact your current neighborhood. In general, how well prepared do you think your neighborhood is to handle a major disaster if it were to happen today? Would you say your neighborhood is extremely well prepared, very well prepared, moderately well prepared, not too well prepared, or not prepared at all?

The four aspects of social resources also have direct effects on people's beliefs about resilience. People living in communities with high trust, cohesion, informal control or social exchange are more likely to say their neighborhood is extremely or very well prepared to handle a future disaster than people living in communities with low levels of these social resources.

For example, 3 in 10 residents of neighborhoods with high informal social control report their community is extremely or very well prepared for a disaster compared with 1 in 10 residents of neighborhoods with low social control.

Percent of people who say they are extremely or very confident their neighborhood would recover quickly after a major future disaster by four measures of social resources



Question: How confident are you that your neighborhood would recover quickly after a major disaster in the future? Would you say you are extremely confident, very confident, moderately confident, not too confident, or not at all confident?

High neighborhood social resources are also associated with people having more confidence that their community would recover after a future disaster.

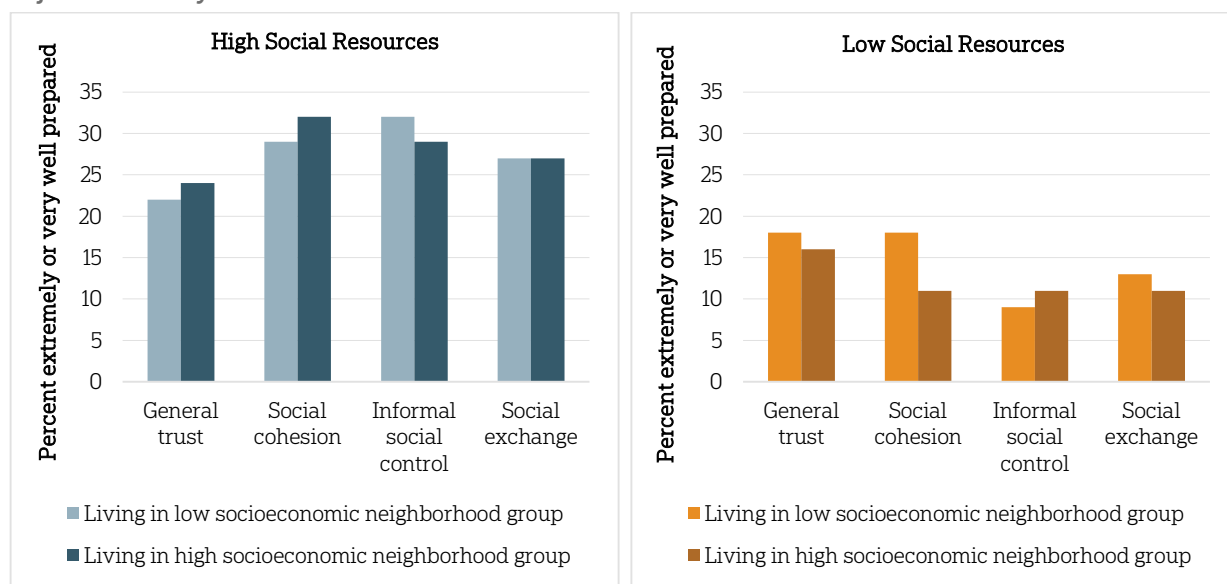
For example, people living in communities with high social exchange are more likely to report they are extremely or very confident their neighborhood would recover quickly from a disaster (37 percent) than people living in communities with low social exchange (22 percent).

SOCIAL RESOURCES STRENGTHEN COMMUNITY RESILIENCE REGARDLESS OF A NEIGHBORHOOD'S SOCIOECONOMIC STATUS.

Social resources strengthen community resilience regardless of neighborhood socioeconomic status. Social cohesion, informal social control, and social exchange are all strongly associated with people's beliefs about disaster preparedness and recovery for residents of both socioeconomic groups. Indeed, social resources can make neighborhoods with fewer financial resources more resilient, and an absence of social resources can make it more difficult for wealthier neighborhoods to recover from disasters.

The positive effects of these social resources on preparedness are relatively similar across socioeconomic groups. For example, for socioeconomic neighborhood groups, residents living in communities with high informal social control are about three times more likely to say their neighborhood is extremely or very well prepared for a disaster than people living in communities with low informal social control.

Percent of respondents who say their neighborhood is extremely or very well prepared to handle a major disaster by four measures of social resources



Question: Thinking again about disasters that might impact your current neighborhood. In general, how well prepared do you think your neighborhood is to handle a major disaster if it were to happen today? Would you say your neighborhood is extremely well prepared, very well prepared, moderately well prepared, not too well prepared, or not prepared at all? High collective efficacy is associated with people believing their community is more prepared for a future disaster in both low and high socioeconomic neighborhoods.

In Monmouth Beach, a small high-income community where 3,351 residents live within one-square mile and there is high social exchange, about half of people report their neighborhood is extremely or very well prepared for a disaster. In another high-income neighborhood, Babylon, which has low social exchange, only about 1 in 10 residents say their neighborhood is extremely or very well prepared for a disaster.

In Midland Beach, a low-income community that had a stable population before Sandy and has high social control, many residents believe their neighborhood is prepared for a disaster. Residents of Midland Beach are three times more likely to say their neighborhood is completely or very prepared for a disaster (23 percent) than residents of Long Branch (7 percent), a low-income neighborhood with low social control.

The positive effects of social resources on a neighborhood's ability to bounce back after disaster are also similar for people in the low socioeconomic group and the high socioeconomic group.

Within both groups, living in a community with high social cohesion, informal social control, or social exchange is associated with a 10- to 20-percentage point increase in confidence in the ability for the neighborhood to bounce back compared to living in a community with low social resources.

People in neighborhoods with higher levels of collective efficacy and social capital are more confident their community will recover quickly from a disaster, regardless of neighborhood socioeconomic status.

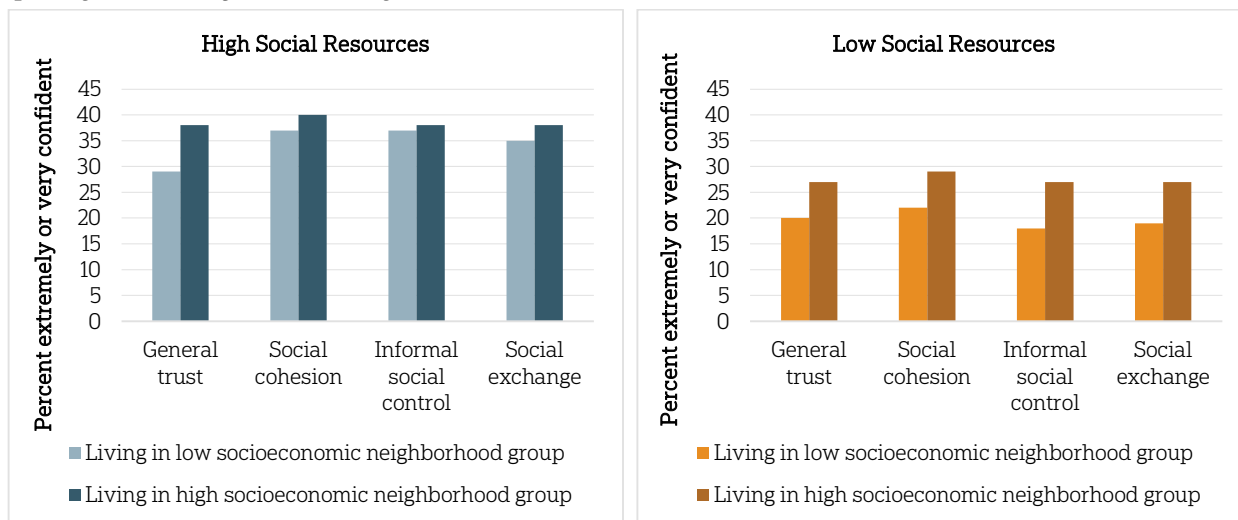
In one high-income neighborhood, Hoboken, where there is a pilot program to create floor captains to assist public housing residents in future disasters, there is high public trust and more than 2 in 5 residents are extremely or very confident their neighborhood would recover quickly. In contrast, less than 1 in 5 residents in Breezy Point, a high-income community but with lower trust, are extremely or very confident their neighborhood would recover quickly.

In the low-income neighborhood of Point Pleasant, churches, schools, volunteer groups and residents worked to help those impacted by Sandy, and there is high social cohesion and confidence in recovery. Residents of Point Pleasant are nearly twice as likely to believe their neighborhood would recover quickly from a disaster (34 percent) than residents of the Lower East Side (18 percent), a low-income neighborhood with low social cohesion.

How Neighborhoods Come Together

In one of the study's lower income neighborhoods, Point Pleasant-Point Pleasant Beach, NJ, churches bused in volunteers from other areas to help with the Superstorm Sandy recovery. The Masonic lodge coordinated and staged efforts, groups gave out cleaning supplies and a local high school raised money for teachers impacted by the storm. One resident with a full house generator opened up his home and had about 20 people over nightly to eat. One neighbor even stayed over with pet parrots because it was too cold in her powerless house for the pets. This type of behavior gave residents a feeling of community support.

Percent of people who say they are extremely or very confident their neighborhood would recover quickly after a major disaster by four measures of social resources



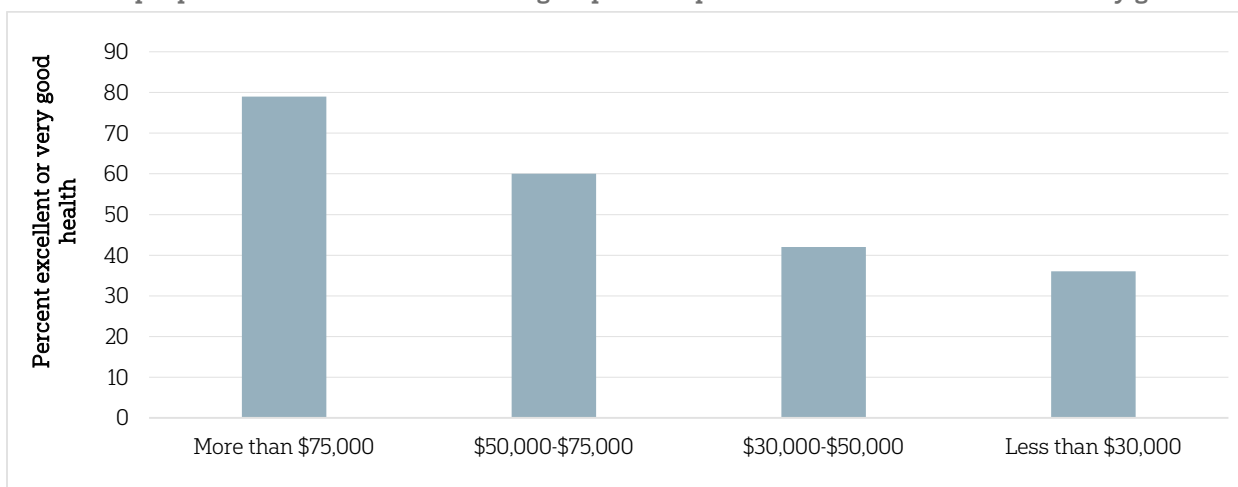
Question: How confident are you that your neighborhood would recover quickly after a major disaster in the future? Would you say you are extremely confident, very confident, moderately confident, not too confident, or not at all confident?

NEIGHBORHOODS WITH HEALTHIER RESIDENTS – BOTH PHYSICAL HEALTH AND MENTAL HEALTH – ARE MORE LIKELY TO BE RESILIENT.

Across the study neighborhoods, a large majority of people report they are healthy, but there are significant differences based on people's income and age. When asked about their general health, 57 percent say excellent or very good, 26 percent say good, and 16 percent say fair or poor.

Higher household income is associated with higher levels of self-reported health. People with household incomes of more than \$75,000 a year are more than twice as likely to report being in excellent or very good health (79 percent) than people with household incomes less than \$30,000 a year (36 percent).

Percent of people in each household income group who report their health is excellent or very good



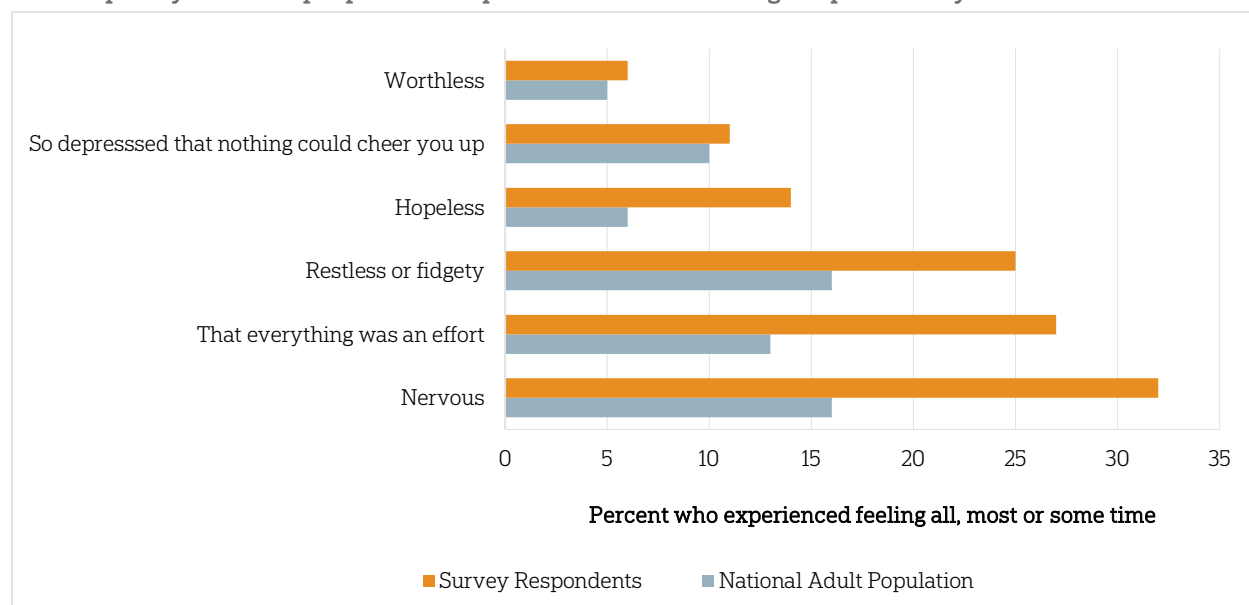
Question: Would you say that in general your health is excellent, very good, good, fair, or poor?

Younger people are also more likely to report being healthy. About 83 percent of adults 18-29 report being in excellent or very good health compared with 64 percent of those 30-49, 50 percent of those 50-64, and 40 percent of those 65 and older.

When asked a series of questions about how they have felt in the past 30 days, a majority of respondents report feeling neither nervous, depressed, hopeless, worthless, restless, nor that everything was an effort.

More respondents report feeling nervous than any of the other five emotions asked about on the survey, with about 3 in 10 people saying they felt nervous all, most, or some of the time. Twenty-seven percent say they felt that everything was an effort, and 1 in 4 report they felt restless at least some of the time.

The frequency in which people have experienced certain feelings in past 30 days



National data from the 2012 National Health Interview Survey

Question: The following questions ask about how you have been feeling during the past 30 days. For each question, please select the option that best describes how often you had this feeling.

The percent of survey respondents who report having felt such emotions is significantly higher than adults nationwide.

When compared with the findings of a 2012 survey of 34,500 adults nationwide, the Sandy survey respondents are twice as likely to have felt nervous (32 percent versus 16 percent), hopeless (14 percent versus 6 percent) or everything was an effort (27 percent to 13 percent).³⁵

Respondents' answers to these questions about emotions can be used to calculate Kessler 6 mental health scores.³⁶ Based on this commonly used scale, 83 percent of the Sandy area survey respondents

³⁵ U.S. Department of Health and Human Services. 2014. Summary Health Statistics for U.S. Adults: National Health Interview Survey, 2012. http://www.cdc.gov/nchs/data/series/sr_10/sr10_260.pdf

³⁶ Kessler, R.C., Barker, P.R., Colpe, L.J., Epstein, J.F., Gfroerer, J.C., Hiripi, E., Howes, M.J., Normand, S.L.T., Manderscheid, R.W., Walters, E.E., & Zaslavsky, A.M. (2003). Screening for serious mental illness in the general population. *Archives of General Psychiatry* 60(2), 184-189.

have no psychological distress, 11 percent have mild to moderate distress, and about 6 percent have serious distress.

Sandy survey respondents are about twice as likely to have serious distress (6 percent) as people in the general population (3 percent).³⁷

Household income is associated with distress, a trend consistent with the national figures. Respondents with household incomes under \$30,000 a year are five times more likely to have serious distress (10 percent) than people with household incomes over \$75,000 a year (2 percent).

At the neighborhood level, both self-reported health and mental health are connected to resilience. This association mirrors a body of individual-level research showing that people with better health are more personally resilient.^{38,39}

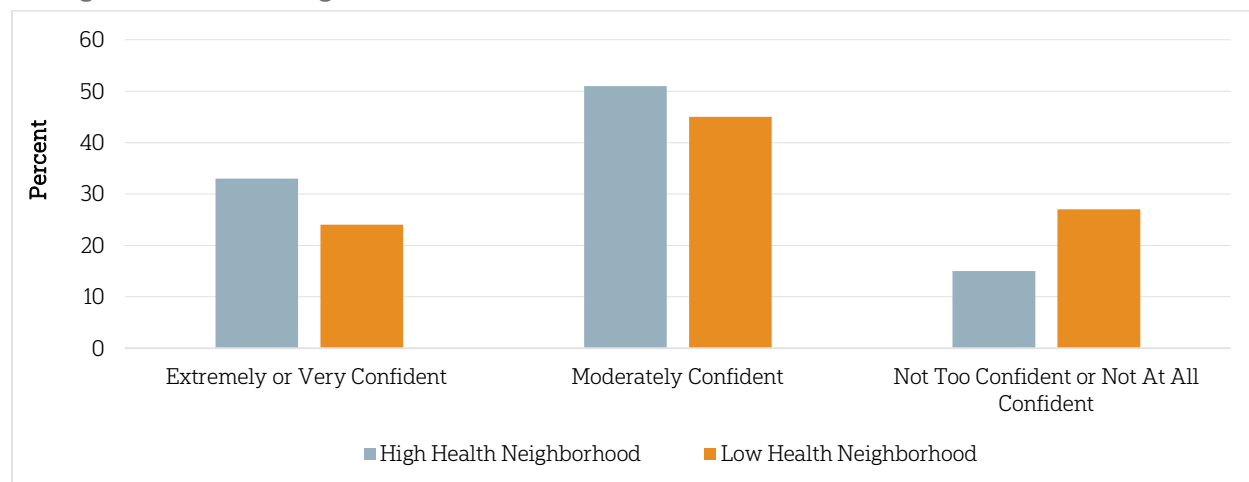
Residents in neighborhoods with high physical health are more likely to report they are extremely or very confident their community would recover quickly from future disaster (33 percent) than those in neighborhoods with low physical health (24 percent).⁴⁰

A resident of Long Branch, 55 and in poor health, moved four days before the storm to an oceanside apartment.

He had no family close by and most of his friends, also hit by Sandy, could not offer help. Churches were packed with those in need so he was one among many. "It really set me back," he said.

While hoping to move to different housing, he has witnessed a number of violent crimes but he remains optimistic that his future will be different. "It takes time," he said. "I tell myself I'm better off than I was. Every day is another day, a better day."

Residents' confidence their neighborhood would recover quickly from a future disaster based on average health for the neighborhood



Question: Would you say that in general your health is excellent, very good, good, fair, or poor?

³⁷ U.S. Department of Health and Human Services. 2014. Summary Health Statistics for U.S. Adults: National Health Interview Survey, 2012. http://www.cdc.gov/nchs/data/series/sr_10/sr10_260.pdf

³⁸ Gooding, P.A., Hurst, A., Johnson J., & Tarrier, N. (2012). Psychological resilience in young and older adults. *International Journal of Geriatric Psychiatry* 27(3), 262-270.

³⁹ Wells, M. (2009). Resilience in rural community-dwelling older adults. *Journal of Rural Health* 25(4), 415-419.

⁴⁰ The mean of self-reported health was calculated for each neighborhood, and the twelve neighborhoods were divided between those above the median across the neighborhoods (high physical health neighborhoods) and those below the median (low physical health neighborhoods).

Likewise, the average mental health of a neighborhood is associated with resilience. Twenty-three percent of residents living in neighborhoods with high average mental health report their community is extremely or very well prepared for a disaster compared with 17 percent of those in neighborhoods with low average mental health.⁴¹

SECTION 4: LOOKING FORWARD

These results suggest that social resources at the neighborhood level are consequential for resilience. Regardless of the economic status of the community, neighborhoods with higher levels of social cohesion, informal social control, social exchange, and trust were viewed by their residents as more resilient – better prepared for and able to respond to the next disaster in whatever form it might take. This implies that economic resources can only go so far to shape the immediate recovery to a disaster or to increase the likelihood of effective rebuilding efforts.

The study findings suggest that measuring a community's social resources can be an important disaster preparedness tool for governments and other stakeholders trying to take a proactive approach to building resilient communities. Although further research is needed to identify the precise metrics, measuring social bonds before disaster strikes can help identify communities that need assistance to shore up this important resource so that it is available for residents and neighborhoods to draw from when they need it.

The capacity of communities to come together for the common good is central to these findings. Building social connections in a community yields important benefits in its own right. Facilitating interaction, for instance, may stave off loneliness and social isolation in the short run, but may, over time, lay the foundation for a community that is better equipped to sustain the physical and emotional challenges that accompany a disaster. Investment in neighborhood-based institutions and programs that encourage engagement with neighbors – community centers, public art installations, block parties, Meals on Wheels – may be a cost-effective way to prepare a community to withstand damage and effectively rebuild the community. Resilience, in the aftermath of Superstorm Sandy, may hinge on characteristics of the community that emerge from social investments.

SECTION 5: ABOUT THE PROJECT

This is the second report of a multi-part project based on surveys, focus groups, key informant interviews, systematic neighborhood observations and analysis of administrative data, conducted from January 2014 through September 2014. The project was funded through a grant from The Rockefeller Foundation and by additional support from NORC at the University of Chicago. The objectives of the project are to tell the story of the recovery from Superstorm Sandy as well as to understand the contribution that social factors make to the resilience of urban areas.

SURVEY METHODS

This survey, funded by The Rockefeller Foundation, was conducted by the Associated Press-NORC Center for Public Affairs Research between June 28 and September 9, 2014. Staff from NORC at the University of Chicago and The Associated Press collaborated on all aspects of the study.

⁴¹ The mean Kessler score was calculated for each neighborhood, and the twelve neighborhoods were divided between those above the median across the neighborhoods (high mental health neighborhoods) and those below the median (low mental health neighborhoods).

The survey, which includes 1,009 completed interviews with residents of 12 neighborhood areas in New York and New Jersey, was conducted using a multi-mode address-based (or ABS) approach that allowed residents to complete the interview via web, telephone, or in-person. In households that included more than one adult resident age 18 or older, we used a process in the telephone and in-person modes that randomly selected which eligible adult would be interviewed. The sample included 300 respondents who completed the survey via the web, 316 who completed by telephone, and 393 respondents who completed in-person interviews. All survey modes were offered in both English and Spanish, depending on respondent preference. All telephone and in-person interviews were completed by professional interviewers who were carefully trained on the specific survey for this study.

Neighborhood Selection Process. The 12 neighborhood areas in New York and New Jersey were selected through a rigorous data-informed process. As the Phase 2 project was being developed, two factors—recovery status and neighborhood socioeconomic status—were central to neighborhood selection. Our approach resulted in a 2x2 design with median household income (measured using data from the U.S. Census Bureau via the American Community Survey) and recovery status (which was measured using Phase 1 data and key informant interviews) as key selection factors.

Census tracts were our basic units in neighborhood selection, as these were defined by the Census Bureau to maintain community boundaries using input from local participants whenever possible (U.S. Census Bureau 2010). We used official Neighborhood Tabulation Areas (NTAs) in as our basic neighborhood unit in New York City, as they were created by the Department of City Planning to respect historical neighborhood boundaries while maintaining a minimum population of 15,000 (New York City Department of City Planning 2013). In Jersey City, New Jersey, we used official neighborhood definitions, and unofficial real-estate-based neighborhood boundaries in Atlantic City, New Jersey. Because Hoboken, New Jersey does not have official neighborhoods or neighborhood boundaries, we selected the northern portion of the municipality, which was geographically bounded by 7th Street, an accepted north-south division of the city. For the remainder of our study area in New York and New Jersey, we used townships as a primary geographic unit because residents would be expected to have similar socio-demographic characteristics, the same city services, and common public school districts.

In order to help ensure that these preliminary neighborhood areas were generally similar in size, whenever possible we grouped similar adjacent townships and neighborhood areas together if the total population of the individual townships was below our threshold of having a population of approximately 40,000 residents. Similarly, most townships and neighborhood areas which had more than 40,000 residents were subdivided based on well-established physical boundaries (e.g., highways, rail, and rivers).

Sample Design. The survey was conducted using a multi-mode address-based sample (ABS) design. The design was motivated by the need to be flexible across a mixture of urban, suburban, and rural communities that were expected to behave differently while at the same time maximize coverage and response rates. The flexible ABS design allowed for considerably higher coverage rates for the generally hard-to-reach populations in our selected neighborhood areas and had special advantages in neighborhoods with low income and recovery levels.

Our sampling frame was based on an extract of the U.S. Postal Service delivery-sequence file (DSF or CDSF). NORC geocoded the DSF and then created subsets of the 12 targeted communities. Households were then randomly sampled within each community. To facilitate contact via telephone, Marketing

Systems Group, matched landline telephone numbers to approximately 45% of the sampled households.

Data Collection Methodology. A multi-step process was used to engage sampled households in the survey. Our first step was to mail advance letters to each of the sampled households in our 12 neighborhood areas. These letters introduced the study, directed respondents to a URL to complete the survey, and provided a toll-free number for respondents to call to complete the survey if they did not have internet access. Those cases with matched landline telephone numbers were dialed after a two-week delay accounting for mail delivery in order to complete the interview by phone. Two weeks after the initial mailing, a sample of cases that did not have matched landline telephone numbers were sent to NORC's team of field interviewers for in-person data collection. Neighborhood residents who completed the survey in-person were offered a \$20 for participating, as compensation for their time. Subsequent reminder mailings were sent to randomly selected samples of non-responders with \$2 or \$5 pre-paid incentives.

Response Rates and Analysis: The final response rate was 24 percent, based on the American Association of Public Opinion Research (AAPOR) Response Rate 3 method. Sampling weights were calculated to adjust for sample design aspects (such as unequal probabilities of selection, number and type of contact attempts) and for nonresponse bias arising from differential response rates across various demographic groups. Poststratification variables included age, sex, race, and education. The weighted data, which thus reflect the population of the twelve neighborhoods, were used for all analyses. The overall margin of error was +/- 4.3 percentage points, including the design-effect resulting from the complex sample design.

All analyses were conducted using STATA (version 13), which allows for adjustment of standard errors for complex sample designs. All differences reported between subgroups of neighborhood area residents are at the 95 percent level of statistical significance, meaning that there is only a 5 percent (or less) probability that the observed differences could be attributed to chance variation in sampling. Additionally, bivariate differences between subgroups are only reported when they also remain robust in a multivariate model controlling for other demographic and socioeconomic covariates. The unweighted sample sizes for the main demographic groups evaluated in the report are listed in the table below.

Selected Neighborhoods/Community Areas Categorized on Income and Recovery Status

	Higher Recovery	Lower Recovery
Mid-High Income	NJ: Hoboken (north of 7th St.) NY: Long Beach NY: Islip (southern portion)	NJ: Monmouth Beach NY: Breezy Point-Belle Harbor-Rockaway Park NY: Babylon (southern portion)
Low Income	NJ: Jersey City (Bergen Lafayette) NY: Gravesend NY: Lower East Side	NJ: Long Branch NY: Midland Beach/New Dorp Beach (Staten Island) NJ: Point Pleasant-Point Pleasant Beach

Recovery: measured using Phase 1 data and through verification interviews with key informants in each neighborhood.

Income: measured using Census information at tract level. Low Income defined as median annual household income less than \$73,600;

Mid-High

Income defined as \$73,601 or greater.

A comprehensive listing of all study questions, complete with tabulations of top-level results for each question, is available on the AP- NORC Center's website: www.apnorc.org.

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ABOUT THE ASSOCIATED PRESS-NORC CENTER FOR PUBLIC AFFAIRS RESEARCH

The AP-NORC Center for Public Affairs Research taps into the power of social science research and the highest-quality journalism to bring key information to people across the nation and throughout the world.

- The Associated Press (AP) is the world's essential news organization, bringing fast, unbiased news to all media platforms and formats.
- NORC at the University of Chicago is one of the oldest and most respected, independent research institutions in the world.

The two organizations have established the AP-NORC Center for Public Affairs Research to conduct, analyze, and distribute social science research in the public interest on newsworthy topics, and to use the power of journalism to tell the stories that research reveals.

The founding principles of the AP-NORC Center include a mandate to carefully preserve and protect the scientific integrity and objectivity of NORC and the journalistic independence of AP. All work conducted by the Center conforms to the highest levels of scientific integrity to prevent any real or perceived bias in the research. All of the work of the Center is subject to review by its advisory committee to help ensure it meets these standards. The Center will publicize the results of all studies and make all datasets and study documentation available to scholars and the public.

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ABOUT THE ROCKEFELLER FOUNDATION

For more than 100 years, The Rockefeller Foundation's mission has been to promote the well-being of humanity throughout the world. Today, The Rockefeller Foundation pursues this mission through dual goals: advancing inclusive economies that expand opportunities for more broadly shared prosperity, and building resilience by helping people, communities and institutions prepare for, withstand, and emerge stronger from acute shocks and chronic stresses. To achieve these goals, The Rockefeller Foundation works at the intersection of four focus areas – advance health, revalue ecosystems, secure livelihoods, and transform cities – to address the root causes of emerging challenges and create systemic change. Together with partners and grantees, The Rockefeller Foundation strives to catalyze and scale transformative innovations, create unlikely partnerships that span sectors, and take risks others cannot – or will not. To learn more, please visit www.rockefellerfoundation.org.

PHOTO CREDITS

Long Beach Photo 1 & Long Beach Photo 2: Rebuilding in Long Beach is a patchwork, like along Pennsylvania Street in the West End of this city on a barrier island. Some homes are raised many feet into the air, others still show signs of flood damage while a handful of lots are vacant from demolition. (Photo by Emily Dooley, 2014)

Breezy Point 5: Habitat for Humanity and other groups have helped residents rebuild in Breezy Point, which was devastated by fire and storm surge when Superstorm Sandy hit this barrier island in Queens, New York.

Staten Island 3: A house damaged by Superstorm Sandy along Cedar Grove Avenue in Staten Island, which suffered extreme flooding. (Photo by Emily Dooley, 2014)

Staten Island 4: This house along Roma Avenue in Staten Island still shows signs of the aftermath of Superstorm Sandy with a spray-painted note to emergency responders saying there were no fatalities inside. Several property owners in this area have been offered a buyout from federal officials to knock down the homes and return the lots to marshland. (Photo by Emily Dooley, 2014)

Seaside Boardwalk in Ruin: The Fun Town Pier in Seaside Heights, New Jersey, has been heavily damaged by Superstorm Sandy. Wednesday, Oct. 31, 2012. (Photo by David Gard/The Star-Ledger, POOL)

Lucky's Ruins: FILE - In this Thursday, Nov. 22, 2012 file photograph, debris left by Superstorm Sandy lay where the boardwalk had been in front of Lucky Leo's arcade in Seaside Heights, N.J. Visitors to the Jersey shore this Memorial Day weekend will find many of their favorite beaches and boardwalks

ready for summer, thanks to a massive rebuilding effort after Superstorm Sandy. While several neighborhoods remain damaged, all but one of the storm-wrecked boardwalks should be ready for Memorial Day weekend, and amusement rides will still be available from Keansburg to Wildwood. Most beaches will be open, despite losing sand during the storm. (AP Photo/Mel Evans, File)

SS Boardwalk Lucky's rebuilt: People walk past open attractions along the newly rebuilt boardwalk in Seaside Heights, N.J., Saturday, May 18, 2013. Visitors to the Jersey shore this Memorial Day weekend will find many of their favorite beaches and boardwalks ready for summer, thanks to a massive rebuilding effort after Superstorm Sandy. While several neighborhoods remain damaged, all but one of the storm-wrecked boardwalks should be ready for Memorial Day weekend, and amusement rides will still be available from Keansburg to Wildwood. Most beaches will be open, despite losing sand during the storm. (AP Photo/Mel Evans)

Neighbor cooks Brooklyn 2: Kiva Kahl pours hot tea for neighbor Buddy Sammis, right, after she prepared it on a wood-stoked fire and cooking setup she and her fiancé created in the street in front of their house on Beach 91st Street in the Rockaways, Saturday, Nov. 3, 2012, in New York. More New Yorkers awoke Saturday to power being restored for the first time since Superstorm Sandy pummeled the region, but patience wore thin among those in the region who have been without power for most of the week. (AP Photo/Kathy Willens)

Neighbor NJ 2: FILE - In this file photo of Nov. 3, 2012, Carol Arnold, left, and her neighbor Beverlee Johannsen carry belongings that Arnold salvaged from her house after it was damaged by the surge from Superstorm Sandy on Cedar Bonnet Island, N.J. A poll conducted by The Associated Press-NORC Center for Public Affairs Research found that after the storm in New York and New Jersey, friends, family and neighbors were cited as the most helpful sources of assistance and support. (AP Photo/Patrick Semansky, File)

Neighbors shovel rockaways: Neighbors volunteering to help another neighbor in need move deep sand from the house on Beach 121 Street in the Rockaway Park neighborhood of the borough of Queens, New York, Sunday, Nov. 11, 2012, in the wake of Superstorm Sandy. (AP Photo/Craig Ruttle)