

VIII. BUSINESS

Needs Assessment

Impact to the City's Economy

Hurricane Sandy's impairment of the city's economy falls into two categories. The first is the economic activity that was interrupted or irrevocably lost due to the storm. This includes activities such as cancelled tourist visits, business loss due to shuttered offices, and wages not paid to workers who could not commute into the affected region. The second is the outright damage to residential housing, buildings, businesses and public infrastructure, which can be viewed as a reduction in the city's wealth and stock of productive resources.

Disruption of City's Economy

In NYC, record-breaking storm surges hit Lower Manhattan and the coastal areas of Staten Island, Queens, and Brooklyn, damaging transportation, energy distribution, and telecommunications infrastructure, which led to sustained disruptions to businesses and their employees. The primary economic indicator of Sandy's impact is the weekly initial jobless claims data for New York State. Jobless claims jumped by about 44,000 claims in the week following the storm. Moody's Analytics estimates that in November, about 20,000 jobs were lost in the five boroughs of NYC, primarily in leisure and hospitality, local government, and education and healthcare.

Soon after Sandy moved out of the area, Moody's Analytics published initial estimates of lost output for the affected region, which stretched from Washington, DC to Bridgeport, CT. The estimates were derived from Moody's regional economic models and assumptions regarding the scope and duration of the disruption. Furthermore, their analysis took into account historical patterns noted in previous disasters; while most sectors are harmed, activity in others – such as the construction and manufacturing sectors – is actually enhanced. Moody's provided *net* estimates of base losses which account for both of these effects. From these base estimates, Moody's then scaled their values by the IMPLAN sector multipliers to include the additional impacts that losses would inflict on other parts of the economy. Their total net loss figure was \$19.9 billion for the impacted region.

These aggregate estimates (by sector) were broken down to the five boroughs of New York OMB using Moody's Analytics' county-level GDP estimates and then allocated to wage and business losses. Using this methodology, total losses in NYC economic activity is estimated to be \$5.7 billion. Of this \$5.7 billion, \$2.4 billion is in the form of lost wage earnings, while \$2.0 billion is due to lost business activity. The remaining losses were allocated to All Other. Additional details are shown in the table titled, "Sectoral Table of Economic Losses" below.

NYC OMB had to make certain assumptions to distribute the losses between wages and business surplus. The wage portion (49%) was estimated from OMB's economic model of the City and represents the total wage earnings in NYC in 2011 as a share of Gross City Product. The business share (40%) was derived from the 2010 Gross Operating Surplus for NY State as a share of NY GDP.

At the end of January 2013, Moody's published an update to their original estimates. These new results increased the total net economic losses to the affected region to \$25 billion. In addition, they provided a breakdown of losses by region, and ascribe \$10.3 billion of this loss to New York City alone, significantly

higher than the original \$5.7 billion estimate produced by OMB. However, the data that will best measure Sandy's toll on area payrolls is the Quarterly Census of Employment and Wages (QCEW) published by the U.S. Bureau of Labor. The QCEW is the most comprehensive labor survey data and covers about 98% of all jobs. Because it is only available after a six month lag, the fourth quarter 2012 data is unavailable at this time.

Table: Sectoral Breakdown of Economic Losses

Net Losses Including Multiplier Effects (\$ billions)					
Sector	Net Losses for Region	NYC Share of Losses	Wage Income Losses	Business Losses	All Other Losses
Finance & Insurance	7.00	1.99	0.98	0.78	0.22
Prof. & Business Services	4.60	1.31	0.64	0.52	0.14
Leisure & Hospitality	0.90	0.26	0.13	0.10	0.03
Information	1.80	0.51	0.25	0.20	0.06
Retail Trade	0.20	0.06	0.03	0.02	0.01
Other Services	0.50	0.14	0.07	0.06	0.02
Transportation & Utilities	0.70	0.20	0.10	0.08	0.02
Health	0.85	0.24	0.12	0.10	0.03
Education	0.85	0.24	0.12	0.10	0.03
Private Total	17.4	4.9	2.4	2.0	0.5
Government	2.60	0.74			
Total	20.00	5.67			

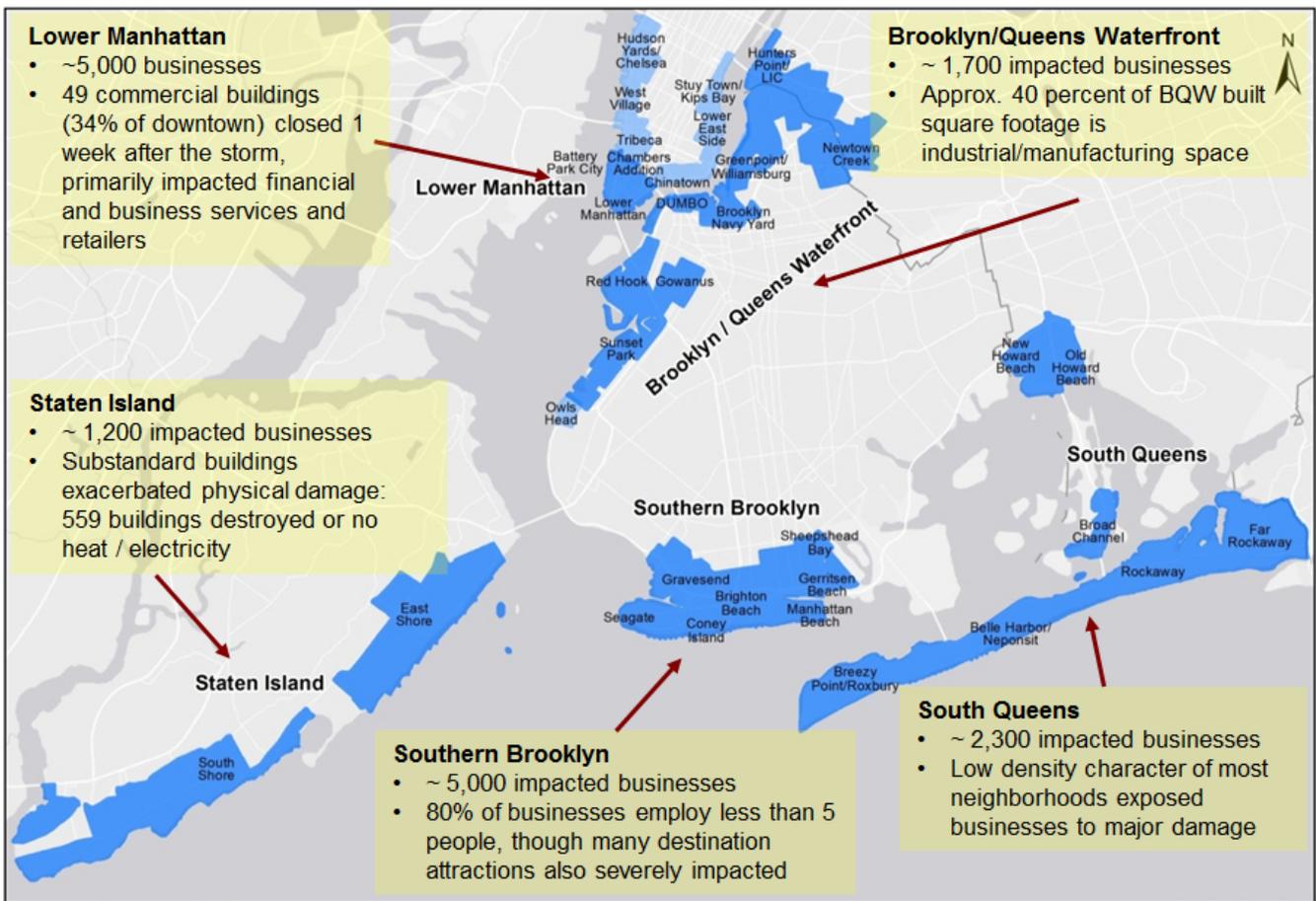
The economic losses initially estimated by NYC OMB derived from Moody's analysis resulted in a preliminary estimate that tax revenue would decline by approximately \$250 million. However, recent tax collections data suggest that this estimate should be revised downward to approximately \$160 million as there is little evidence that sales and hotel tax revenue were negatively impacted by the storm.

Damage to City Businesses

In addition to lost output, the City experienced significant outright damage to its wealth and stock of productive resources, including billions of dollars' in damages to businesses. Hurricane Sandy imposed significant commercial damages to neighborhoods across all five boroughs. Approximately 23,400 businesses and an associated 245,000 employees were located in flood impacted areas and faced extensive damages from loss of inventory, ruined equipment, and damage to the interiors of their space and/or structural and extensive damage to their building systems. Approximately 65% of these flood-impacted businesses were located in five neighborhoods: Lower Manhattan, the Brooklyn-Queens Waterfront, Southern Brooklyn, South Queens, and Staten Island. According to a survey done by the Department of Small Business Services, as of March 2013 nearly 20% of impacted businesses remain closed.

Impacts varied by neighborhood. Lower Manhattan, which is the fourth largest business district in the country and saw its residential population double to 45,000 residents between 2000 and 2010, experienced significant damage to large utilities and flooding in high-rise commercial and residential buildings. Along the Brooklyn-Queens Waterfront, large scale industrial businesses including port facilities and warehouses were heavily impacted, whereas Southern Brooklyn’s small businesses and nearby destination/tourist attractions experienced severe damaged. In South Queens and Staten Island, most of the impacted businesses serve the local residential population and seasonal visitors in low density neighborhoods.

Map: Neighborhood Economic Impacts from Hurricane Sandy



Note: Based on Hoover’s data for businesses located in areas with any level of inundation.

However, key similarities exist across these neighborhoods: nearly 95% of impacted businesses were small-and-medium enterprises (SMEs), employing 50 people or less, and the businesses were primarily concentrated in retail and service sectors. For these SMEs, storm damage was significant; survey reports suggest retail stores experienced thousands of dollars in lost sales for each day they remained closed and experienced equipment and inventory damage losses in the hundreds of dollars per square foot. For a small 1,000 square foot retail business that remained closed for two weeks, this would mean damages of at least \$100,000, before accounting for the impact of a reduced customer base in some residential neighborhoods.

In total, across all industries, the City’s initial estimate of private commercial direct losses was \$3.4 billion. This figure was calculated using New York City’s share of the upper range of overall insured losses from Sandy as estimated by multiple insurance and risk management companies based on data from prior storms, together with industry ratios of insured-to-uninsured and commercial-to-residential losses. Based on these ratios, the City estimated that between 1.9 billion to \$2.4 billion of commercial losses were uninsured.

While SME commercial impacts were far reaching, the City’s industrial sector, much of which is concentrated along the Brooklyn Queens Waterfront suffered some of the largest direct losses from the storm, primarily from the destruction of high-value equipment and inventory. Nearly 7,000 industrial businesses were impacted and reports from wholesale/retail trade, transportation, utilities, construction, and manufacturing firms place direct damages in the tens to hundreds of millions of dollars. Additional losses have accrued from supply chain disruptions and delivery delays.

Table 2: Summary of Business Impacts by Industry

NUMBER OF BUSINESSES IMPACTED BY INDUSTRY (NAICS Codes in Parentheses)		
INDUSTRY	# of	% of Total
SERVICES	14,163	60%
Information (51)	886	
Professional, Scientific, and Technical Services (54)	3,932	
Management of Companies and Enterprises (55)	79	
Administrative and Support and Waste Management and Remediation Services (56)	2,781	
Educational Services (61)	447	
Health Care and Social Assistance (62)	2,202	
Arts, Entertainment, and Recreation (71)	621	
Accommodation and Food Services (72)	1,084	
Other Services (except Public Administration) (81)	2,131	
FIRE	2,315	10%
Finance and Insurance (52)	1,196	
Real Estate and Rental and Leasing (53)	1,119	
TRADE	3,672	16%
Retail Trade (44-45)	2,339	
Wholesale Trade (42)	1,333	
MANUFACTURING (31-33)	796	3%
TRANSPORTATION & UTILITIES (48-49, 22)	1,066	5%
CONSTRUCTION (23)	1,417	6%
TOTAL PRIVATE	23,429	100%
Source: Hoovers Listing Data for flood-impacted businesses. Impacted businesses based on Hoover's business data for businesses that were located in areas with any level of inundation, Mayors Analytics Team.		

New York City's Response to Economic Impact

In recognition of Sandy's severe impact on small businesses, Mayor Bloomberg announced the creation of Business Recovery Zones on December 5, 2012. The Zones include Lower Manhattan/South Street Seaport; Brooklyn Harbor Waterfront/Newtown Creek (DUMBO, Greenpoint/Newtown Creek, Red Hook, Gowanus, Sunset Park); South Brooklyn (Coney Island, Brighton Beach, Manhattan Beach, Sheepshead Bay, Gerritsen Beach); South Queens (Howard Beach and The Rockaways); and the South Shore of Staten Island. Business Recovery Zone leaders were assigned to each area to identify neighborhood-specific needs; coordinate action plans and follow-up; organize City resources; and provide a central point of contact for businesses and agencies. Captains of each area convened local steering committees of elected officials, community organizations, non-profit organizations, Local Development Corporations, Business Improvement Districts, small business owners, and other community representatives, to help find and implement solutions in each impacted Zone. The Mayor also announced the creation of the Recovery Business Acceleration Team: modeled after the City's New Business Acceleration Team, which helps businesses open faster by streamlining and expediting City agency processes, a Restoration Business Acceleration Team was tasked with helping to expedite inspections and allow businesses to re-open their doors faster.

NYC Department of Small Business Services (SBS)

After the storm, with the help of community-based organizations, SBS was able to determine the extent of the damage and quickly distribute information on available local/federal recovery resources. SBS' Business Outreach Emergency Response Unit worked closely with NYC's Office of Emergency Management to respond to immediate business issues including power restoration and large debris removal. In partnership with City Hall and NYCEDC, SBS quickly set up five informational meetings – one in each borough – to speak about available services and to distribute emergency loan applications. Dozens of other outreach events took place across the City. Materials on recovery programs were made available in English, Spanish, Mandarin, and Russian, and were also available both online and in print. Between October 29 and February 28, SBS handled 1,037 storm-related phone inquiries transferred from 311.

SBS' seven NYC Business Solution Centers and eight Industrial Service Providers informed impacted businesses about available recovery resources and packaged emergency loan applications. As of February 28, 2013, these centers helped 2,356 clients with storm-related issues. SBS has worked closely with SBA, which co-located two of its Disaster Recovery Centers with the NYC Business Solutions Centers in Brooklyn and Lower Manhattan.

Displaced Worker Assistance

In November, New York State received a grant for \$27.7 million in Federal National Emergency Grant (NEG) funds to assist with recovery. The grant provides resources to hire temporary workers to clean up communities impacted by the storm and to provide information and services to impacted individuals and businesses to help them get back on their feet. The grant is aimed at employing individuals who lost their job as a direct result of Sandy or who are long-term unemployed.

New York City received \$11.3 million to administer the program. SBS managed several large events where hundreds of candidates were interviewed and hired. SBS worked with the NYC Department of Parks and Recreation (DPR) to hire nearly 800 workers to clean up beaches and repair playgrounds in the Rockaways, Coney Island, Red Hook, and Staten Island. SBS is now working with DPR on a second project to hire 200 young adults (18-24) to help restore a variety of parks and beaches around Jamaica Bay. SBS also worked

with NYCHA to hire more than 400 NYCHA residents to clean up public housing developments and to collect information from impacted tenants about their needs. SBS has also worked with DSNY to hire additional Job Training Participants (JTPs). SBS has also hired several employees to assist in outreach efforts. In total, more than 1,100 individuals have been hired to date.

Support NYC Small Business Campaign

Even where businesses are reopening in impacted areas, pedestrian traffic is much lower than normal. SBS is combating this drop-off in foot traffic with marketing campaigns to attract visitors back to the hardest-hit areas. The campaigns highlight individual businesses and appeal to New Yorkers' sense of solidarity with owners who have fought to stay in their communities.

In partnership with the City Council, the Mayor's Office of Media and Entertainment and NYC & Co, SBS launched an ad campaign called *Support NYC Small Business*. The campaign highlights open businesses and their recovery stories and features them on radio, in bus shelters, and in print. These ads have been featured in major publications like the New York Daily News and the New York Post. The campaign also includes a *Support NYC Small Business* website with an interactive map that currently features over 1,300 businesses that have reopened after the storm. New Yorkers have consulted the website more than 20,000 times. SBS has also worked with 1010 WINS to highlight businesses in an "Open for Business" campaign – a daily segment on a reopened business. Segments have been done on businesses across all impacted areas.

Small Business Assistance Grants

In late January, as part of the City's effort to rebuild neighborhoods, SBS began providing Small Business Assistance Grants to businesses that have reopened but need help repairing or replacing items necessary for full recovery. SBS partnered with Barclays, Citi, and UBS to create a \$1 million fund for these grants. Businesses can apply for grants of up to \$5,000 for structural repairs, equipment repairs, or to purchase replacement equipment. As of March 4, 645 businesses have applied for a Small Business Assistance Grant and 51 have been approved.

Insurance Assistance

Through a partnership with the New York State Department of Financial Services (DFS), SBS is helping businesses receive assistance with insurance issues, including denial of coverage or unsatisfactory service. In the immediate aftermath of the storm, SBS referred more than 41 businesses to the State. SBS' outreach partnership with the State continues. Insurance workshops will take place in each impacted zone for companies still dealing with insurance issues and will include specialists to assist businesses looking to negotiate with their insurance providers.

NYC Economic Development Corporation (NYCEDC)

Neighborhood Canvassing

NYCEDC worked quickly to assess the damage done to the commercial corridors in New York City, immediately deploying neighborhood captains and beginning the process of formulating short- and long-term recovery plans. Neighborhood captains evaluated conditions, gathered economic data, documented damage, assisted impacted businesses, and coordinated with local business and non-profit organizations. The captains led teams collecting business surveys and helped organize business information sessions in the impacted areas. This work focused on commercial corridors in eight neighborhoods and resulted in the

November 2012 joint NYCEDC / SBS report *Hurricane Sandy: An Assessment of Impacted Commercial Corridors and Recommendations for Revitalization*. The communities covered in the report were later organized as five BRZs. This collective work was instrumental in identifying challenges and opportunities that informed the Business Recovery Zones (BRZ) and Special Initiative for Rebuilding and Resiliency (SIRR) efforts that followed.

Loan and Grant Program

NYCEDC launched a loan and grant fund to address the immediate business needs of SMEs in the days following the storm. A \$20 million loan fund was created with funds provided by NYCEDC and Goldman Sachs and 23 other commercial banks. The Mayor's Fund to Advance New York City and the Partnership for NYC also provided \$5.5 million for a matching grant program. The program offered maximum loans of \$25,000 with matching grants of up to \$10,000. Thus far, nearly 550 businesses have been assisted with loans and/or grants. The average loan size is \$22,803, and 85% of loans received have been for the maximum amount. Based on the current rate of applications and approvals, the loan fund is expected to be exhausted early in the second quarter of 2013.

Hurricane Emergency Sales Tax Exemption Program

The New York City Industrial Development Agency (NYCIDA) provided emergency assistance to SMEs by establishing the Hurricane Emergency Sales Tax Exemption Program ("HESTEP"), to provide sales tax exemptions in an amount not to exceed \$100,000 for each affected company on purchases of building, construction, and renovation materials; machinery and equipment; and other items of personal property and related services to such businesses. The program is limited to 250 applicants and the deadline to apply for the assistance is April 1, 2013. Thus far, 79 businesses have been approved to obtain the necessary paperwork to obtain the sales tax exemptions.

Space Matching

NYCEDC partnered with the commercial real estate and development community to make temporary office and industrial space available at no rent to businesses displaced by Hurricane Sandy. Within three days after the storm, NYCEDC began advertising donated space on the NYCEDC website, detailing all necessary information about donated space in an easily accessible online location. As of February 2013, NYCEDC had secured more than 300,000 square feet of space for displaced businesses. Through this program, more than 45 companies with 680 employees, including those with disabilities, were able to move into temporary space and get back to work.

Remaining Unmet Economic Needs

According to the revised Moody's figures, the region suffered total net economic losses of \$25 billion, which included direct private losses. Using a combination of insured loss estimates from multiple insurance and risk management companies and estimates of past storm ratios of insured-to-uninsured losses, initial cost estimates following Hurricane Sandy placed private direct losses, both commercial and residential at \$8.6 billion, \$3.8 billion of which was insured and \$4.8 billion of which was uninsured. Internal analysis based on industry sources estimated the commercial share of private uninsured losses to range from 40 to 50% or from \$1.9 to \$2.4 billion. While NYCEDC and SBS acted quickly to make capital available to impacted businesses immediately following the storm, it is clear that there is a significant unmet commercial need,

especially amongst the significant amount of business owners, small and medium sized enterprises and industrial companies, that lacked business continuity or flood insurance to help weather the storm.

Additionally, approximately 23,400 businesses were located in Inundation Areas, many outside FEMA’s 100-year flood zone. The revised preliminary FEMA Advisory Base Flood Elevation (ABFE) Maps have nearly doubled the number of NYC buildings located in the 100-year flood zone, suggesting that approximately 71,000 buildings could be at risk for wave action or flooding in future storms. Sea level rise will further expand vulnerable areas, and unchecked storm surges in the future could cause damage equal to or greater than Hurricane Sandy.

Based on the determination of applying the unmet needs formula and the available data to date, the City of New York had incurred \$10.3 billion in business and economic losses. After subtracting the insured losses of \$4.1 billion and the loans provided by the SBA of \$478.8 million, the City of New York is left with an unmet business and economic need of \$5.7 billion. Of the 22,042 applications received by SBA thus far, 8,218 have been approved. The City anticipates that this unmet need will continue to grow as additional details and data is available and updated insurance, SBA and other subsidy data becomes available.

Table 3: Small Business Administration Disaster Loan Applications

County	Applications Received	Applications Approved	Amount Approved
Bronx	272	71	\$1,837,700
Kings	6,974	2,285	\$106,257,900
New York	880	137	\$4,084,000
Queens	9,424	3,680	\$239,093,200
Richmond	4,492	2,045	\$127,549,200
Total:	22,042	8,218	\$478,822,000

Economic Goals

Job creation is one of the most important catalysts to establishing a sustainable long term recovery. To that end, the City of New York is placing specific emphasis on assisting and helping small businesses recover quickly and efficiently. The City is focusing its efforts on getting businesses reopened and allowing businesses to be able to sustain current employment levels as well as hire new staff. The City of New York will employ additional strategies to sustain, attract and recruit new businesses and capital to areas most impacted by the storm. In addition, the City will create an environment to foster new technologies to encourage both existing and new businesses to deploy mitigation measures to minimize the impact of future disasters and catastrophes.

Economic objectives include:

1. Help small and medium-sized businesses recover and rebuild resiliently, while minimizing their reliance on high-interest debt.
2. Anchor new or existing industry clusters and catalyze significant long-term economic growth in the five BRZ’s and adjacent impacted areas.

3. Protect businesses in vulnerable floodplain areas of the City by incentivizing proactive investments in resiliency measures.
4. Improve building and infrastructure resiliency through competitions that identify and deploy the most promising and cost effective technologies.

Private capital is best leveraged with public investment to create public-private partnerships in order to foster economic and social economic empowerment with low and moderate income communities. The CDBG-DR program will provide resources to further the long term recovery effort in neighborhoods throughout the communities whose businesses and overall quality of life have been negatively impacted. Also, stabilization of businesses and their employee base will lessen the relocation of residents seeking job opportunities in other parts of the city.

Business Programs

Business Loan and Grant Program

PROGRAM OBJECTIVE AND DESCRIPTION: Nearly 95% of impacted businesses were small-and-medium enterprises (SMEs), employing 50 people or less, and were primarily concentrated in retail and service sectors. For these SMEs, storm damage was significant; survey reports suggest retail stores experienced thousands of dollars of lost sales for each day closed and estimated equipment and inventory damage losses in the hundreds of dollars per square foot. In response, the New York City Economic Development Corporation (NYCEDC) launched a loan and grant fund to address immediate business needs in the days following the storm. A \$20 million loan fund was created with funds provided by NYCEDC and Goldman Sachs as well as 23 other commercial banks. The Mayor's Fund to Advance New York City and the Partnership for NYC also provided \$5.5 million for a matching grant program. The program offered maximum loans of \$25,000 with matching grants of up to \$10,000. From data collected through on-the-ground canvassing and surveying of applicants, it is clear that the need far surpasses the funds that are currently available. While this program was able to quickly respond to the immediate needs of businesses, it was always anticipated that this program would be insufficient given the vast extent of damage and losses incurred by small businesses. Based on the current rates of application and approval, the funds will be exhausted in early 2013. The significant damage sustained by these SMEs, many of which did not carry flood insurance, as well as the strong response to the existing program, demonstrates the overwhelming need for a significantly larger and more generous loan and grant program to directly assist businesses with working capital requirements, incurred losses, and other recovery and rebuilding efforts.

Experience with the existing program indicates that, while it has provided an important service to affected small businesses, additional funding is needed to both increase the number of businesses that can be served by the program and increase the size of the loans and grants that are provided. These programs will impact businesses that are currently in need of low- or no-interest, direct investment.

The program would have two components that would A) contribute to expanding the current program, which may undergo minor changes if necessary, and B) launch a competitive RFP that would seek one or more additional administrators and creative solutions to strengthen the small business loan and grant offerings, in order to more effectively reach markets and communities that may be underserved by the current program. Businesses that can demonstrate extreme hardship may be eligible to receive, at the City's discretion, a grant without receiving a loan.

HUD ELIGIBILITY CATEGORY: Economic Development or Recovery Activity that Creates / Retains Jobs

NATIONAL OBJECTIVE: Urgent Need; Low- and Moderate-Income Job Creation/Retention; and Low- and Moderate-Income Area

CDBG-DR Allocation: \$80 Million

PROJECTED ACCOMPLISHMENTS: At least 750 businesses assisted and approximately 7,500 jobs retained.

PROGRAM ADMINISTRATION: The administrator of the current program may continue in this capacity, but at least one more Community Development Financial Institution (CDFI) or other entity may be chosen to administer the program as well.

ELIGIBLE APPLICANTS / PROPERTIES: Borrowers shall be credit-worthy small businesses, as defined by the Small Business Administration, that experienced business loss, damage, or interruption as a result of the storm and demonstrate an ability to repay the loan. In the event that NYCEDC receives applications from businesses larger than the SBA definitions, NYCEDC may apply for a waiver of this requirement.

ELIGIBILITY CRITERIA: Businesses must demonstrate loss or damage as a result of the storm, be located within an impacted area, and exhibit ability to repay loans. It is anticipated that this program will provide funds to eligible borrowers on a first-come, first-served basis.

GRANT/LOAN SIZE LIMIT: Much of the current program will likely remain consistent, but loans of up to \$150,000 would be made available to borrowers demonstrating an ability to repay the loan, with matching grants of up to \$60,000. Existing borrowers would have the opportunity to increase loan size within the parameters of eligibility as well.

Applicants that demonstrate significant need exceeding the resources described above may, on a discretionary basis as determined by NYCEDC and the City, be eligible for loans up to \$1,000,000 and grants up to \$100,000.

PROGRAM PRIORITIES: It is anticipated that this program will provide funds to eligible borrowers that demonstrate need on a first-come, first-served basis.

GEOGRAPHIC AREA TO BE SERVED: Areas impacted by flooding or power outages throughout the five boroughs would be eligible.

PROGRAM START AND END DATES: Funds will initially be disbursed in Summer 2013 and the program will expire when funds are exhausted.

OTHER FUNDING SOURCES: As mentioned previously, businesses will be required to apply for a Disaster Loan from SBA before receiving CDBG-DR assistance. SBA assistance received for the purpose of providing compensation for economic losses arising from Hurricane Sandy will be deducted from grants provided through this program.

Business Resiliency Investment Program

PROGRAM OBJECTIVE AND DESCRIPTION: During the recent storm, approximately 23,400 businesses were located in the Inundation Area, many in areas that were outside FEMA's 100-year flood zone. The revised preliminary FEMA Advisory Base Flood Elevation (ABFE) Maps have nearly doubled the number of NYC buildings located in the 100-year flood zone, suggesting approximately 71,000 buildings could be at risk for wave action or flooding in future storms. Sea level rise will further expand vulnerable areas, and unchecked storm surges in the future could cause damage equal to or greater than Hurricane Sandy.

While the storm resulted in direct physical impacts in certain areas, it may also affect the commercial viability of business districts within all vulnerable areas. For example, businesses located in the 100-year floodplain may now consider moving out of the floodplain, and businesses that previously considered locating in the floodplain may no longer be willing to do so. As such, citywide resiliency investments made as a result of this program will help to preserve the commercial viability of these districts, many of which employ low-income workers.

CDBG-DR funds will be used to provide funds to companies for physical investments to improve resiliency to severe weather. By helping businesses make long-term, strategic improvements to property, buildings and infrastructure, we reduce the future cost and impact of weather.

Post-storm analysis has identified several strategies that can dramatically reduce the impact of future storms. The program will incentivize businesses to make these investments now by reimbursing a portion of the costs.

- Elevation of critical building systems
- Dry flood-proofing of ground floor
- Wet flood-proofing of certain uses

The program is anticipated to fund between 50-75%, up to \$2 million, of the cost of specified physical improvements that increase the resiliency of buildings or businesses to future storms. Above that amount, reimbursements or additional grants will be at NYCEDC's discretion.

HUD ELIGIBILITY CATEGORY: Economic Development or Recovery Activity that Creates / Retains Jobs

NATIONAL OBJECTIVE: Urgent Need; Low- and Moderate-Income Job Creation/Retention; and Low- and Moderate-Income Area

CDBG-DR Allocation: \$100 million.

PROJECTED ACCOMPLISHMENTS: Up to 13 million square feet of commercial space that was impacted by Sandy or is otherwise currently at risk will be made significantly more resilient.

PROGRAM ADMINISTRATION: NYCEDC will provide general administration of the program. An administrator for this program will be selected by competitive RFP.

ELIGIBLE APPLICANTS / PROPERTIES: It is currently anticipated that eligibility would be based on the following:

- Small businesses as defined by the Small Business Administration
- Businesses must undertake one or more of the prescribed resiliency measures
- Only commercial space is eligible
- Businesses must be located within FEMA’s advisory 100-year floodplain
- Properties worth more than a threshold amount per square foot will be ineligible for this program
- Demonstrate maximum impact to low- and moderate-income communities or employees

In the event that NYCEDC receives applications from businesses larger than the SBA definitions, NYCEDC may apply for a waiver of this requirement.

ELIGIBILITY CRITERIA: Only commercial space within FEMA’s advisory 100-year floodplain will be eligible. Resiliency measures will be pre-approved, with the ability to additionally approve measures at NYCEDC’s discretion. It is anticipated that priority will be given to businesses that were impacted by Sandy and that can demonstrate maximum impact to low- and moderate-income communities or employees.

PROGRAM PRIORITIES: Although it is anticipated that funds would be disbursed on a first-come, first-served basis, NYCEDC reserves the right to prioritize if demand exceeds the program size, and to ensure that a mix of large and small, and industrial and non-industrial businesses are served.

GEOGRAPHIC AREA TO BE SERVED: Businesses within FEMA’s advisory 100-year floodplain.

PROGRAM START AND END DATES: Program will launch in Summer 2013 and last until all funds are disbursed

OTHER FUNDING SOURCES: TBD

Neighborhood Game Changer Investment Competition

PROGRAM OBJECTIVE AND DESCRIPTION: As a result of Hurricane Sandy, entire neighborhoods experienced widespread damage, closure of businesses, and loss of jobs. The neighborhoods most severely impacted are the East Shore/South Shore of Staten Island, Lower Manhattan, Southern Brooklyn, the Brooklyn-Queens Waterfront, and South Queens. Businesses within these neighborhoods employ more than 143,000 individuals, and many experienced damage from flooding, high winds, and/or fire that has forced them to close on a temporary or permanent basis. Unfortunately, many of these neighborhoods already faced economic challenges, and the sudden increase of vacancies and decreased demand for services due to nearby residential displacement could severely hamper future growth and potentially reverse the revitalization that has occurred in recent years without immediate and meaningful investment in revitalization.

The goal of this competition is to identify and fund projects or programs that will anchor new or existing industry clusters and catalyze significant long-term economic growth in each of the targeted neighborhoods. Recipients would demonstrate an ability to generate full-time jobs and bring permanent investment to target areas, leverage public funds to attract private investment, and develop hard and soft infrastructure to increase resiliency.

Through a Request for Proposals, NYCEDC will harness the best ideas from public and private individuals and organizations to restore neighborhood vitality and economic strength. It is anticipated that because each neighborhood faces specific challenges, the winning idea(s) for each neighborhood will be tailored to those needs. The targeted neighborhoods are:

East Shore/South Shore of Staten Island:

The East and South Shores of Staten Island include multiple residential neighborhoods, totaling nearly 70,000 residents. Out of the approximately 58 million built square feet in the areas, approximately 75% of that space is residential. 1-2 family homes make up 95% of the East and South Shore housing stock and 84% of the East and South Shore housing units. As with Staten Island as a whole, the percentage of homeowners for both areas is higher than the City average (53%).

While most businesses in the area are under five employees (78%), more than half of the area's employees work for larger businesses (> 100 employees) such as the Staten Island University Hospital. The retail and service sectors (which include healthcare) are both major employers. Public beaches, the 2.5-mile FDR boardwalk, and portions of the Gateway National Recreation Area serve as attractions to the area, especially during the summer months. With the exception of Hylan Boulevard, the area is comprised of small business commercial corridors primarily serving the local residential population and additional Staten Island residents during warm weather months. Hylan Boulevard is an auto-oriented retail strip that serves as the primary commercial corridor.

Though both areas have densities well-below City averages, prior to Sandy, the East and South Shores were each growing steadily. From 2000-2010 the total population of these areas grew by 11%.

Development in the East and South Shores has occurred within and adjacent to historic marshlands and wetlands, creating risks. During Sandy, the combination of increased population and inherent vulnerability proved particularly potent. With only 13% of all buildings in the City's inundation zones, the East and South Shores accounted for 52% of all NYC tagged buildings, 31% of all NYC red-tagged buildings, and 40% of all recommended NYC post-storm demolitions. A majority of the City's storm-related deaths occurred on Staten Island.

More than 25,000 housing units were located in areas that experienced inundation, with impacted businesses employing more than 9,400 people. 1- to 2-family homes, many not built for year-round occupancy, sustained the heaviest damage. The damage is especially concentrated near the beaches, resulting in significant harm to retail and commercial structures and public infrastructure. Local retail corridors serving and relying on residents experienced damage and market loss, with many businesses still closed (e.g., Midland Ave., with 51 of 72 retailers closed as of February 2013). Businesses experienced significant loss of equipment as well as damage to interiors and to building systems. Lack of customer base going forward (due to widespread residential destruction) will become the greatest concern as businesses hardest hit are dependent on local residents who themselves are displaced or have restricted funds and mobility.

Lower Manhattan:

Lower Manhattan, roughly the area south of Chambers Street includes the historic financial center, City Hall and City government offices, Battery Park City, and numerous tourist attractions. The area is the nation's fourth-largest central business district. Of the 132 million built square feet in Lower Manhattan, about 90

million sq. ft. is commercial. Over the past decade Lower Manhattan has also grown as a residential neighborhood with more than 45,000 residents in 2010.

Lower Manhattan in the fall of 2012 had 312,000 workers and an office vacancy rate of 9.3%. The local economy includes a strong governmental presence but over the past decade has been diversifying from a heavy dependence on finance, insurance, and real estate to include other areas such as technology, media, legal services, and architecture.

Lower Manhattan includes regional attractions like the National September 11 Memorial & Museum, the Statue of Liberty, the New York Stock Exchange, the Brooklyn Bridge, and the South Street Seaport. Over the past decade, tourism has expanded with an increase in the number of hotel rooms. Lower Manhattan saw more than 11.5 million visitors in 2012.

Lower Manhattan has experienced two major economic shocks (9/11 and the Great Recession (2008/2009)) in the last decade prior to Sandy. After 9/11, vacancy rates increased and asking rents decreased in the area. These rents began recovering just as the Great Recession occurred, causing a similar trend. While the World Trade Center and immediate blocks surrounding it will represent new construction, most of the commercial office stock in Lower Manhattan is significantly older with the largest percentage of buildings built pre-1950 in the U.S.

As Lower Manhattan recovered from its second major setback in a decade, Sandy created one more challenge. Sandy caused inundation in Lower Manhattan that affected nearly 35% of the office space, 30% of retail businesses, and 20% of the residential units⁷. While no buildings were destroyed in Lower Manhattan, inundation caused significant damage to building systems in the area.

Southern Brooklyn:

Southern Brooklyn consists of seven neighborhoods including, Sea Gate, Coney Island, Brighton Beach, Manhattan Beach, Gravesend, Sheepshead Bay, and Gerritsen Beach. Much of the area is built on barrier islands, on historic marshland, or over urbanized natural creeks and inlets. The area is home to approximately 200,000 residents and hosts a diverse mix of incomes, ethnic enclaves, varying housing stock, and disparate socioeconomics. The area is largely residential, with some key neighborhood commercial corridors, key destination attractions, and large institutional presences. Density is concentrated in Brighton Beach, Sheepshead Bay, Coney Island, and Gravesend, with the remaining neighborhoods of much lower density and mostly single-family homes. The area features a concentration of vulnerable populations and building stock, including more than 18,000 residents in public housing, more than 8,200 units of Mitchell-Lama housing, and more than 500 nursing home beds. The area features an oceanfront coastline and a 3-mile boardwalk as well as inlets and bays including Coney Island Creek, Sheepshead Bay, and Gerritsen Inlet.

There are more than 5,000 businesses in Southern Brooklyn, the majority of which are small, with fewer than five employees. Nevertheless, of the approximately 26,000 employees in the area, one-third works at one of 30 businesses that employ more than 100 employees. The most significant sectors in the local economy are in services—particularly healthcare and business services—and in retail—including amusement attractions and other entertainment. The largest employer in the area is Coney Island Hospital, a NYC Health and Hospitals Corporation facility with more than 3,000 employees.

Southern Brooklyn emerged in the early 20th century as a bustling waterfront escape from the City, featuring unique attractions, a wide variety of leisure activities, and a beautiful south-facing beach. Mirroring citywide trends during the period, the area neighborhoods experienced decline beginning

primarily in the 1960s, including the severe contraction of the amusement area, shifting demographics including population decrease, and an uptick in crime and social ills. Since the 1990s, Southern Brooklyn has witnessed a renaissance in some neighborhoods, such as Brighton Beach where a fast-growing immigrant population has turned the area into a bustling enclave. In Coney Island, recent major investments by the City, including the development of new amusement parks and a comprehensive rezoning, have ushered in increased visitation at the historic amusement area and have set a road-map for future neighborhood growth and economic recovery.

Hurricane Sandy had a dramatic impact on Southern Brooklyn, inundating more than 3,800 acres of inland property, wreaking havoc along the oceanfront, and flooding neighborhoods through inlets, bays, and creeks. At the peak of the storm, the ocean met the bay in many locations, and as much as 350,000 tons of sand was displaced from the Coney Island/Brighton Beach coastline, which itself was raised in the '90s by the Army Corps of Engineers to provide wave attenuation protection and was largely successful during the storm. Nevertheless, in areas where coastal protections were inadequate, some structures suffered direct wave impacts, and generally without exception all buildings experienced debilitating flooding that impacted building systems and ground floor uses. In the days and weeks following the storm, utility outages plagued both single-family buildings and multi-family high rises, with significant temporary displacement of local residents. Nearly all ground floor spaces in the area experienced flood damage of 3 to 8 feet of water, and as of five months after the storm as many as 30% of businesses in some neighborhoods are still closed. The amusement area and attractions were greatly impacted, with significant damage to the New York Aquarium, the amusement parks, and the Brooklyn Cyclones stadium, but all are currently working towards full restoration of their facilities and each plan to move forward with pre-storm expansion and enhancement plans.

The Brooklyn/Queens Waterfront:

The Brooklyn/Queens Waterfront, which stretches from Sunset Park to Long Island City, and inland along the Gowanus Canal and Newtown Creek, is a compilation of eight distinct and diverse neighborhoods. In total, the Waterfront is home to nearly 100,000 residents. The waterfront is characterized by diversity: of people, buildings, and commerce. Neighborhoods range from some of the city's most low-income, such as Red Hook with a 32% unemployment rate, to the City's wealthiest, such as DUMBO with only an 8% unemployment rate. 48% of residential units are multi-family walk-ups, but every other type of housing is present, including multi-family elevator buildings, mixed-use buildings, and 1-2 family homes. Nearly half of all businesses on the waterfront are industrial businesses.

Hurricane Sandy resulted in significant damage to the waterfront. The damage was primarily caused by still water flooding, not waves, which resulted in basement and ground floor flooding and loss of power, but not completely destroyed buildings. Key highlight include: significant losses to industrial businesses, which often keep their valuable equipment on the ground floor, and major impacts to the residents of NYCHA's Red Hook Houses who were without power, heat, and running water for 1-3 weeks following the storm. On a positive note, new waterfront residential developments fared quite well.

There have been numerous, significant investments along the Waterfront in the past several years, including a rezoning of Long Island City, Williamsburg and Greenpoint. These efforts will continue with the full confidence of the City. New developments include Hunters Point South in Long Island City, and Greenpoint Landing in Greenpoint.

South Queens:

South Queens encompasses 17 neighborhoods spanning Howard Beach, Hamilton Beach, Broad Channel and the Rockaway Peninsula. The area is mostly residential, made up of older, 1-2 family homes. Density is concentrated in Rockaway and Far Rockaway although all neighborhoods are less densely populated than average for New York City. The area includes the wetland estuary of Jamaica Bay and miles of beaches on the Peninsula.

There are around 1,300 businesses in South Queens, the majority of which are small, with fewer than five employees. Larger businesses typically provide healthcare services and include nursing homes, St. John's hospital, or adult care facilities.

Sandy inundated the entire area of South Queens, with the exception of the center portion of Far Rockaway. In addition to extensive flooding, parts of the area were exposed to direct wave action which caused severe damage and destruction to many communities. A few areas were also hit by fires, most severely in Breezy Point where 126 homes burned down and another 22 were seriously damaged. For the entire area, of all damaged buildings (destroyed or tagged yellow or red by DOB), 68% were destroyed or deemed unsafe to enter (red). Around 2,275 businesses were impacted. On the Peninsula, a commercial strip along B.129 was destroyed, more than 50 businesses experienced severe loss from fire and flooding on Rockaway Beach Boulevard from B.116-B.100 and more than 40 businesses on B. 116 were seriously flooded. 2-4 businesses were destroyed in Breezy Point and all were affected in Broad Channel. About 100 businesses along Cross Bay Boulevard in Howard Beach were also impacted. Far Rockaway's main commercial corridor on Mott Avenue experienced less impactful physical damage, but like the rest of the Peninsula the long term power outages led to economic loss. Five months following Sandy, businesses remain closed and of those open, many are struggling to rebuild.

HUD ELIGIBILITY CATEGORY: Economic Development or Recovery Activity that Creates / Retains Jobs

NATIONAL OBJECTIVE: Urgent Need; Low- and Moderate-Income Job Creation/Retention; and Low- and Moderate-Income Area

CDBG-DR ALLOCATION: \$100 million

PROJECTED ACCOMPLISHMENTS: Identification and implementation of significant new investments intended to accelerate economic recovery in the five most impacted areas of New York City.

PROGRAM ADMINISTRATION: NYCEDC will administer the RFP release and selection process, with administration of winning proposals to be determined.

ELIGIBLE APPLICANTS / PROPERTIES: Those proposals able to demonstrate the above mentioned impact on at least one of the impacted neighborhoods. NYCEDC may seek a waiver of the small business requirement.

ELIGIBILITY CRITERIA: Ability to demonstrate the above mentioned impact on at least one of the impacted neighborhoods. Proposals should include a plan to create new jobs, demonstrate significant investment on the part of the respondent, be permanent in nature, and primarily impact a neighborhood that experienced severe damage as a result of Hurricane Sandy. The winning ventures should generate meaningful economic growth both directly, through new job creation, and indirectly, by anchoring new or existing industry clusters and catalyzing significant secondary benefits to the local economy.

GRANT/LOAN SIZE LIMIT: Up to \$20 million

PROGRAM PRIORITIES: Priority will be given to those proposals best able to demonstrate an ability to meet the stated program goals and feasibility.

GEOGRAPHIC AREA TO BE SERVED: The five neighborhoods that experienced significant storm damage, as described above.

PROGRAM START AND END DATES: March 2013 through December 2013 for RFP process; TBD for program administration

OTHER FUNDING SOURCES: TBD

Infrastructure and Building Resiliency Technologies Competitions

PROGRAM OBJECTIVE AND DESCRIPTION: Hurricane Sandy exposed significant vulnerabilities to critical infrastructure networks and building systems. Affected NYC infrastructure included, but was not limited to:

- Electric power (more than 800,000 customers lost power due to transmission substation failure, overhead line damage and customer equipment flooding);
- Liquid fuels (supply chains disrupted on multiple levels, resulting in a three-week citywide gas shortage); and
- Telecommunications networks (power outages and flooding resulted in outages leaving thousands without landline, cable, and mobile service).

If the winning submission is a utility then NYCEDC may apply for a waiver of the prohibition on assistance to utilities.

The revised preliminary FEMA Advisory Base Flood Elevation (ABFE) Maps have nearly doubled the number of NYC buildings located in the 100-year flood zone, suggesting approximately 71,000 buildings could be at risk for wave action or flooding in future storms. Sea level rise will further expand vulnerable areas, and unchecked storm surges in the future could cause damage equal to or greater than Hurricane Sandy.

CDBG-DR funds will be used to improve building and infrastructure resiliency through competitions that identify and deploy the most promising and cost-effective technologies. Addressing these vulnerabilities will require investment in technologies to prepare critical networks and building systems for future risks. Post-storm analysis identified priority areas to prepare for the future, but sourcing specific, cost-effective, innovative technologies remains difficult. The goal of this competition is to competitively allocate funds to identify and deploy the most promising technologies that improve the resiliency of NYC's buildings and critical networks.

Proposals submitted under the competitions will be selected via a competitive process. NYCEDC – in coordination with the Mayor's Office of Long-Term Planning and Sustainability – may convene a technical advisory panel of industry experts and key stakeholders to evaluate proposals submitted under the

competition tracks. The proposal evaluation process may take the form of several rounds to ultimately select and award grants to the most potentially impactful and cost-effective solutions.

HUD ELIGIBILITY CATEGORY: Economic Development or Recovery Activity that Creates / Retains Jobs

NATIONAL OBJECTIVE: Urgent Need

CDBG-DR ALLOCATION: \$45 million

PROJECTED ACCOMPLISHMENTS: Innovative, impactful, and cost-effective solutions will be identified and implemented in order to aid impacted and at-risk businesses and networks.

PROGRAM ADMINISTRATION: NYCEDC – in coordination with the Mayor’s Office of Long-Term Planning and Sustainability – will procure a partner with sufficient technical expertise to advise on the design and implementation of a two-track program that includes competitions to identify technologies and measures that improve the resiliency of (1) critical infrastructure networks and (2) building systems. The competitions will outline current solutions, challenging industry to provide better and/or cheaper alternatives. Program tracks include:

1. Critical Infrastructure Resiliency Competition: grants to measures that increase resiliency of critical infrastructure networks, including power, liquid fuel, other energy (steam and natural gas) and telecommunications.
2. Building Resiliency Technologies Competition: grants to technologies that buildings can adopt to make their building systems more resilient.

NYCEDC and the Mayor’s Office may convene a technical advisory panel of industry experts and key stakeholders to evaluate proposals submitted under the competition tracks and may award grants to the most potentially impactful and cost-effective solutions.

ELIGIBLE APPLICANTS / PROPERTIES: Entities that demonstrate the ability to successfully implement proposed projects using impactful and cost-effective resiliency measures.

ELIGIBILITY CRITERIA: TBD

GRANT/LOAN SIZE LIMIT: While NYCEDC intends to competitively award the \$45 million grant to multiple proposals under each competition track, award amounts will be based upon the proposal-specific proven financial need.

PROGRAM PRIORITIES: Proposals may be judged by a combination of NYCEDC and the Mayor’s Office employees and a technical advisory panel of industry experts to evaluate proposals, prioritizing based on technical potential and cost-effectiveness.

GEOGRAPHIC AREA(S) TO BE SERVED: Citywide

PROGRAM START AND END DATES: Key program milestones and timing may include:

- NYCEDC to release solicitation and procure a technical consultant (Q2 2013)

- NYCEDC to launch program and solicit proposals under two competition tracks, anticipated shortly after HUD approval.
- Select proposals and award grants (Q3 / Q4 2013)

OTHER FUNDING SOURCES: TBD