

Battery Park City

Resilience Action Plan



BATTERY PARK CITY



NEW YORK
STATE OF
OPPORTUNITY.

Battery Park
City Authority

TABLE OF CONTENTS

Letter from BPCA President & CEO BJ Jones	5
Introduction	6
Priorities for a resilient Battery Park City.....	6
The global urban resilience movement.....	8
What is urban resilience?	9
Building a movement: The Rockefeller Foundation and 100 Resilient Cities.....	7
City Resilience Framework	10
Brief history of Battery Park City	12
Get to know BPC	14
How this Action Plan was developed	16
Process	16
What we heard	17
Action Plan for a More Resilient Battery Park City	19
Resilience priorities and Action Plan structure.....	20
How to read an action.....	21
Chapter 1: An Inclusive Community	22
Goal 1.1 Expand housing affordability and certainty	24
Goal 1.2 Promote businesses that are diverse, create social benefit, and provide services that meet the needs of our community.....	28
Goal 1.3 Make our streetscape and public spaces accessible and enjoyable to a wide range of users	29
Chapter 2: A Safe and Climate Resilient Place	30
Goal 2.1 Adapt our built environment and natural systems to a changing climate	34
Goal 2.2 Develop and implement a strategy to achieve a carbon neutral Battery Park City.....	37
Goal 2.3 Support and augment the safety and security services within BPC	39
Chapter 3: Vibrant Public Space	40
Goal 3.1 Provide dynamic and diverse programming across Battery Park City that welcomes and brings together a wide range of residents and visitors	44
Goal 3.2 Amplify and steward our world-class public spaces through forward-thinking design, quality, and craftsmanship.....	46
Goal 3.3 Remain fertile ground and an international destination for world-class public art and culture	49
Chapter 4: Leadership for the Future	52
Goal 4.1 Mobilize our organization to improve the delivery of services and efficiently accomplish our projects	57
Goal 4.2 Embrace diversity by promoting access to contracting opportunities.....	58
Goal 4.3 Integrate climate resilience and sustainability into our policies and operations.....	59
Goal 4.4 Strengthen collaboration with partners, residents, and stakeholders to promote innovation and clarity in governance practices.....	60
Goal 4.5 Establish best in class practices for stewardship of public resources	61
BPCA Resilience Action Plan Table	62
Acknowledgments	64
References	65



**HUGH L. CAREY BATTERY
PARK CITY AUTHORITY
(BPCA) BOARD OF
DIRECTORS**

- George J. Tsunis, Chair
- Martha J. Gallo, Vice Chair
- Louis J. Bevilacqua
- Donald Capoccia
- Catherine McVay Hughes
- Anthony Kendall
- Lester Petracca

Letter from BPCA President & CEO

BJ Jones



Battery Park City is a wonderful neighborhood, but important work remains. Climate change and affordability concerns beckon for greater – and faster – action. Yet we must also preserve what’s best about this neighborhood, from maintaining our beautiful public parks to keeping a small town feel in the middle of the big city. As we prepare for the future, we must honor what (and who) has made this

community what it is today. In that vein, I’m excited about our approach to developing the Authority’s first strategic plan in partnership with 100 Resilient Cities and with invaluable input from our community stakeholders. Based on the findings of the Preliminary Resilience Assessment we published earlier this year, this Resilience Action Plan sets forth a clear direction for our neighborhood – a community that’s built to last and thrive in the face of change. I’m proud of the work we’ve done together to arrive at this vision, and for the work we will continue to do to realize its full potential. This plan provides a candid and important view into the opportunities ahead. Battery Park City has come a long way, but by all of us planning responsibly – and together – the best is surely yet to come.

Introduction



Priorities for a resilient Battery Park City

In response to the key challenges and opportunities we identified in developing the Resilience Action Plan, a set of key priorities has emerged. This Action Plan is intended to ensure that Battery Park City will:

1. Be **an inclusive community**, one which supports housing affordability as a part of a diverse and livable community, ensures that a vibrant business community meets the needs of its residents, and provides an enjoyable public realm that is accessible to all.
2. Create **a safe and climate resilient place** with a built environment and natural systems that adapt to the changing climate, an implementable strategy to achieve carbon neutrality, robust infrastructure to support daily life and prepare for future weather events, and a suite of safety and security services that support resident needs.
3. Remain a **vibrant public space** featuring dynamic and diverse programming, world-class community amenities, and public art that inspires residents and visitors alike.
4. Demonstrate **leadership for the future**, dedicating the entire BPCA team to improving service and project delivery, embracing diversity in culture and operations, integrating climate resilience and sustainability policies, strengthening collaboration on innovative governance practices, and continuing its responsible stewardship of public resources.



Born of dilapidated piers crumbling into the Hudson River, Battery Park City is from its very beginnings a story of resilience. The neighborhood was created to both address urban blight plaguing the area in the mid-20th Century and to represent “the future of [New York] City,” in the words of the project’s initial mastermind, an exuberant Governor Nelson A. Rockefeller, who in 1968 told *The New York Times*, “Unless [planners] look to the future, there will be no city.”¹ This sentiment resonates as much today as it did in the 1960s. After having celebrated its 50th Anniversary in 2018, the Authority is once again looking forward to ensure that its historic principles and current operations are prepared to meet the needs of its constituents for years to come.

In the spirit of Governor Rockefeller’s optimistic hope for the future, the Hugh L. Carey Battery Park City Authority was founded with a set of operating principles and recommendations designed not to wall off a new utopian community next door to the broader metropolis, but rather to integrate with and build upon the strength and character of Lower Manhattan. Since its inception, the Authority has been dedicated to environmental responsibility through the development and ongoing maintenance of its facilities, as well as to providing positive social benefits through parks and open space, cultural facilities, schools, libraries, and year-round planned events.

Throughout its history, Battery Park City’s resilience has also been tested with a variety of natural and human-made crises; a few particular incidents stand out as particularly formative in the experience of our relatively young neighborhood. On September 11, 2001, the attacks on the World Trade Center rendered the neighborhood a crime scene, displacing many of the neighborhood’s residents and businesses for weeks or even months. Many who returned continue to feel the impact of those events on their physical and mental health to this day. Eleven years later, in 2012, Superstorm Sandy ravaged the New York metropolitan region and its coastal communities. Though other areas in New York City fared far worse, Battery Park City again was largely displaced and forced to rebuild; the storm highlighted the neighborhood’s vulnerability to coastal storm surge and severe weather. Most recently, in October 2017 a pickup truck driver killed eight people on the Hudson River Greenway near the northern entrance to Battery Park City in a terrorist attack, heightening safety concerns in the community and beyond.

In response to these events and to the growing recognition that a community cannot address its social, environmental, and economic concerns within silos, the Battery Park City Authority partnered with non-profit organization 100 Resilient Cities in May 2019 to create this Resilience Action Plan. The Plan articulates the high-level **vision**, measurable **goals**, and tactical **actions** that will guide our efforts to build a more resilient community today and into the future.

¹ (The New York Times, 1968)

The global urban resilience movement

What is urban resilience?

The world is more densely populated and more interconnected than ever before. From extreme weather to refugee crises, from disease pandemics to cyberattacks, the modern-day world requires new models of governance to mitigate risks and effectively respond to challenges. Business-as-usual models of reactive planning and siloed decision-making will not generate the fundamental strength and flexibility that is essential for us to thrive in the face of the numerous shocks and stresses of the 21st century.

Born from the exigencies of three converging trends – climate change, urbanization, and globalization – **urban resilience is the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what chronic stresses and acute shocks they experience.**² An urban resilience agenda understands that by strengthening a city's underlying fabric and by deepening its understanding of the risks that threaten its stability, a city can improve its overall trajectory and the well-being of its citizens, thereby allowing it to prosper in the face of challenges both expected and as yet unimagined.

To respond to these challenges and to enhance a city's resilience, this movement focuses on addressing the unique combination of **acute shocks** and **chronic stresses** that a community faces. Acute shocks are sudden, intense events that threaten a community, such as earthquakes, hurricanes, and terrorist attacks. The harm caused by acute shocks is exacerbated by chronic stresses – pressures that weaken the fabric of a community over time, such as recurrent flooding, high unemployment, and overtaxed or inefficient public transportation systems. Of course, cities rarely face just one challenge at a time. Instead, they are confronted by interdependent combinations of acute shocks and chronic stresses.



Resilience thinking demands that communities - and institutions with those communities - look holistically at their capacities and their risks.

Resilience thinking demands that communities – and institutions within those communities – look holistically at their capacities and their risks. Generally, the current approach to urban governance is a fragmented one, with one team designing disaster recovery plans, another team exploring sustainability measures, another focused on livelihoods and well-being, and yet another examining land-use planning and infrastructure needs. While compartmentalized planning may be an efficient way to structure the work of a city, it is not the most effective one. Cities are systems – not silos.

Planning for a resilient future entails tackling challenges and creating solutions in an integrated, inclusive, risk-aware, and forward-looking manner. Solutions developed through resilience thinking will allow cities to enjoy multiple benefits, or resilience dividends – maximizing the value of every dollar spent; reducing and even helping to prevent the impact of shocks and stresses on the city's people, economy, and physical environment; and improving residents' quality of life.

Building a movement: The Rockefeller Foundation and 100 Resilient Cities

The Rockefeller Foundation (RF) has been a leader in urban policy since the late 1950s, when it launched an Urban Design Studies program. One of its first grants from this program went to Jane Jacobs to support the writing of her groundbreaking book *The Death and Life of Great American Cities*. More than fifty years later, Jane Jacobs's book remains one of the most influential works ever written on urban design and has laid the foundations for present-day urban resilience. In 2013, RF launched 100 Resilient Cities (100RC), a non-profit organization dedicated to helping cities around the world become more resilient to the physical, social, and economic challenges of the 21st century. Between 2013 and 2019, 100RC worked with cities on six continents, across 47 countries, and with populations ranging from 40,000 to 21 million people. Throughout that work, 100RC and its partners remained focused on the long-term objective of changing the way cities plan and act by encouraging them to think proactively and collaboratively about their interconnected challenges, with the goal of helping to improve the cities' overall ability to adapt and thrive and reducing the vulnerability of millions of urban residents.

Over time, 100RC's partnership and support has enabled cities to strengthen their core resilience-building capacities; integrate resilience thinking into their processes, policies, practices, and budgets; embed resilience goals into the design and delivery of priority projects; and create resilience champions among city leadership, civil society, and other key stakeholders. It has also recognized that cities cannot address the challenges they face alone and must partner with institutions at a variety of scales and in a variety of manners to ensure that more resilient outcomes are realized. This collaboration with Battery Park City Authority



is part of an exploration of the way smaller-scale communities and institutions that are willing to understand and confront their resilience challenges can adopt a similar resilience-building model into their own practices.

100 RESILIENT CITIES NETWORK MAP



2 (100 Resilient Cities, n.d.)

City Resilience Framework

A key component of the effort to understand and improve resilience at a local level is the City Resilience Framework (CRF), a tool which allows cities (and other interested organizations like BPCA) to document and assess their resilience across a comprehensive set of factors. The Rockefeller Foundation partnered with the design and engineering firm Arup to develop the CRF as a lens to understand the characteristics and capacities of cities that encourage – and prevent – their adaptation and growth in the face of challenges.³ Based on extensive research, case studies, and fieldwork, these efforts revealed a common set of factors and systems that enhance a city’s ability to survive,

adapt, and grow in the face of adversity. The CRF identifies a series of “drivers,” or attributes, that have been proven to be necessary for a city to achieve and maintain resilience, and describes the essential systems of a city in terms of four dimensions: Health & Wellbeing, Economy & Society, Infrastructure & Environment, and Leadership & Strategy. Each **dimension** contains three **drivers**, which each themselves contain three to six **subdrivers**, which reflect the actions cities can take to improve their resilience. Refer to figure 1 for the complete CRF and table 1 for a description of the CRF.

FIGURE 1: CITY RESILIENCE FRAMEWORK

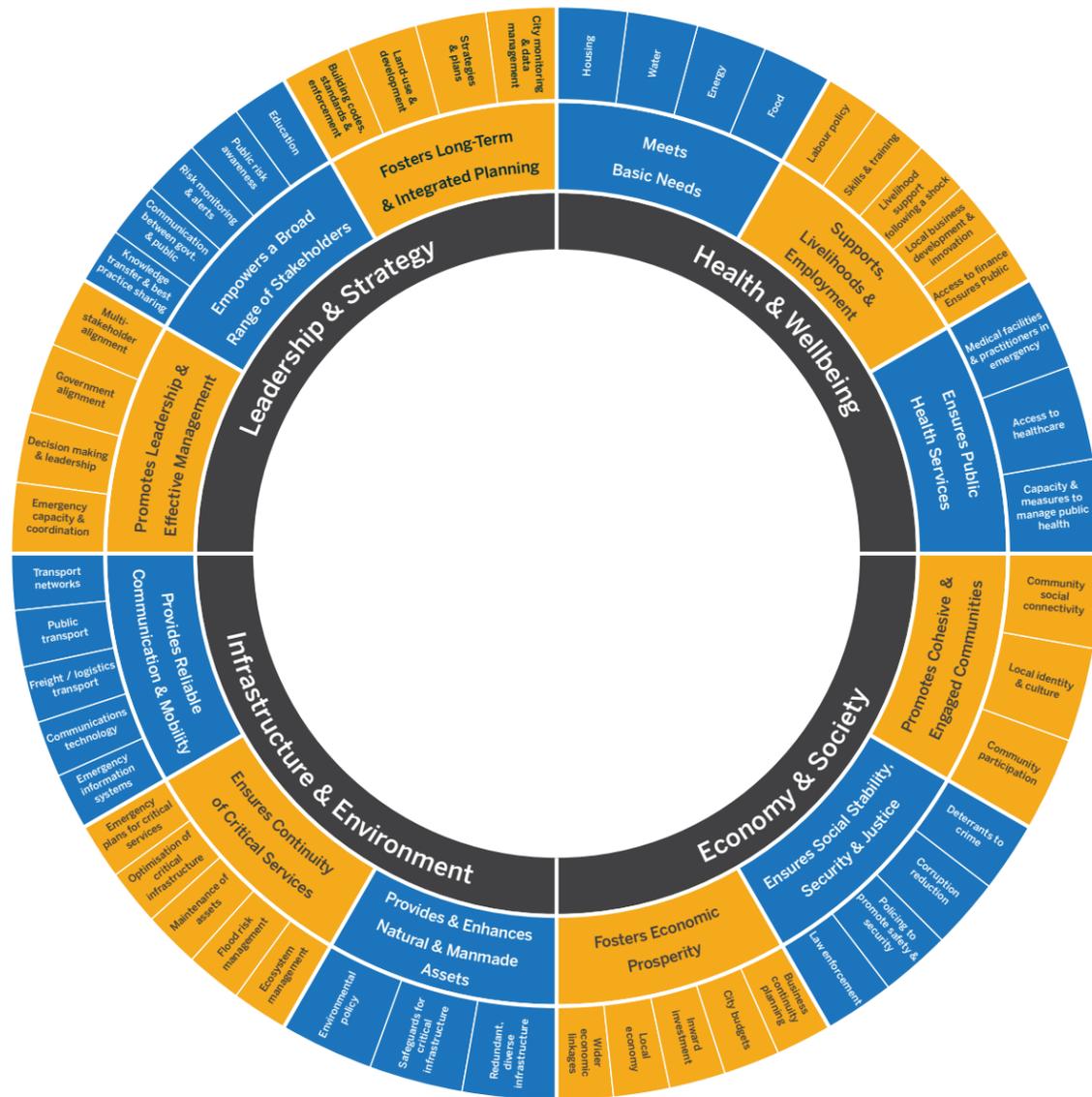


TABLE 1: CITY RESILIENCE FRAMEWORK OVERVIEW

Dimension	Driver	Driver description
HEALTH & WELLBEING	Meets Basic Needs	Provision of essential resources required to meet a person’s basic physiological needs.
	Supports Livelihoods & Employment	Livelihood opportunities and support that enable people to secure their basic needs. Opportunities might include jobs, skills training, or responsible grants and loans.
	Ensures Public Health Services	Integrated health facilities and services, and responsive emergency services. Includes physical and mental health, health monitoring, and awareness of healthy living and sanitation.
ECONOMY & SOCIETY	Promotes Cohesive & Engaged Communities	Community engagement, social networks and integration. These reinforce collective ability to improve the community and require processes that encourage civic engagement in planning and decision-making.
	Ensures Social Stability, Security & Justice	Law enforcement, crime prevention, justice, and emergency management.
	Fosters Economic Prosperity	Important economic factors include contingency planning, sound management of city finances, the ability to attract business investment, and a diverse economic profile and wider linkages.
INFRASTRUCTURE & ENVIRONMENT	Provides & Enhances Natural & Manmade Assets	Environmental stewardship, appropriate infrastructure, effective land use planning, and enforcing regulations. Conservation of environmental assets preserves the natural protection afforded to cities by ecosystems.
	Ensures Continuity of Critical Services	Diversity of provision, redundancy, active management and maintenance of ecosystems and infrastructure, and contingency planning.
	Provides Reliable Communication & Mobility	Diverse and affordable multi-modal transport networks and systems, ICT and contingency planning. Transport includes the network (roads, rail, signs, signals, etc.), public transport options, and logistics (ports, airports, freight lines, etc.)
LEADERSHIP & STRATEGY	Promotes Leadership & Effective Management	Relating to government, business, and civil society. This is recognizable in trusted individuals, multi-stakeholder consultation, and evidence-based decision-making.
	Empowers a Broad Range of Stakeholders	Education for all, access to up-to-date information, and knowledge to enable people and organizations to take appropriate action. Along with education and awareness, communication is needed to ensure that knowledge is transferred between stakeholders and between cities.
	Fosters Long-Term & Integrated Planning	Holistic vision, informed by data. Strategies/plans should be integrated across sectors and land-use plans should consider and include different departments, users, and uses. Building codes should create safety and remove negative impacts.

3 (100 Resilient Cities, n.d.)

Brief history of Battery Park City

In 1968, Governor Rockefeller signed the Battery Park City Authority Act, which authorized the creation of a “coordinated community” on Manhattan’s Lower West Side by a new public benefit corporation, the Hugh L. Carey Battery Park City Authority, which would build and manage it. After extensive public input and negotiations between State and City government entities, the Authority began construction on the 92-acre neighborhood, largely with the landfill excavated in the creation of the original World Trade Center site. Development was halting at first, in large part due to New York City’s fiscal crisis of the 1970s.

In 1979, the Authority and the administrations of Governor Hugh L. Carey and Mayor Edward I. Koch commissioned the publication of a Master Plan for the neighborhood, written by urban design firm Cooper Ekstut Associates. The introductory paragraphs of the Plan set forth in dire terms the untapped potential of the site:

“BATTERY PARK CITY IS A PARADOX. IT OCCUPIES ONE OF THE MOST SPECTACULAR AND POTENTIALLY VALUABLE SITES IN THE WORLD. YET IT HAS BEEN UNABLE TO GENERATE DEVELOPER ACTIVITY. FOR FIVE YEARS, ITS LANDFILL HAS STOOD SUBSTANTIALLY COMPLETE, BUT UNUSED. RARELY HAS SUCH A DEVELOPMENT OPPORTUNITY — 92 ACRES OF VACANT LAND IMMEDIATELY ADJACENT TO DOWNTOWN MANHATTAN — GONE UNHEEDED.”⁴

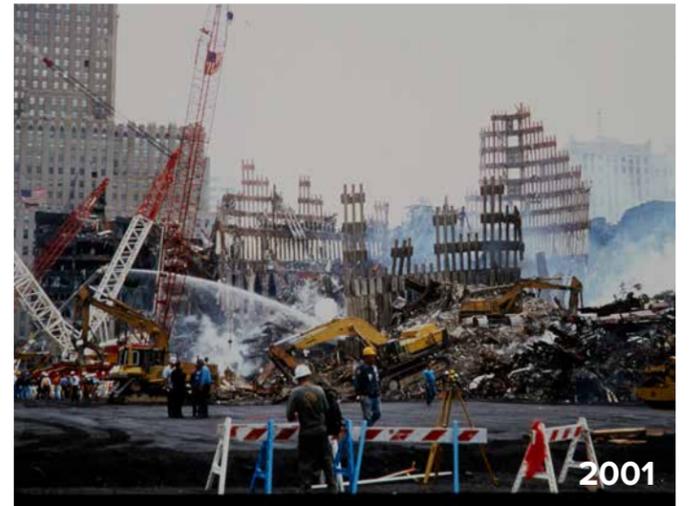
Construction began the next year. From the groundbreaking for Gateway Plaza in 1980, to the completion of the last development site, Liberty Luxe, in 2011, the site has undergone tremendous physical change over its short history. The changes were not necessarily all to the community’s benefit; whereas the initial plans for the neighborhood were to include a mix of luxury, middle-income, and low-income housing, that plan was jettisoned in favor of one for a luxury neighborhood whose revenues could subsidize affordable housing elsewhere in the city. Today, Battery Park City is one of New York City’s most desirable neighborhoods, with rents and home prices to match. As a result, many residents share similar concerns with other New Yorkers regarding affordability. As a *New York Times* headline read in 2001, “Battery Park City Is a Success, Except for Pledge to the Poor.”⁵

Battery Park City has also seen a number of critical shocks throughout its existence, including the impacts of the terrorist attacks of September 11th, 2001, the destruction from Superstorm Sandy in 2012, and the 2017 truck attack on the Hudson River Greenway that killed eight people.

As we turn to the next 50 years of Battery Park City, we look to honor the memory of those tragedies, celebrate our accomplishments while acknowledging our current shortcomings, and build upon our history to strengthen BPC for all.

TIMELINE OF BPCA CREATION AND MAJOR BPC SHOCKS

- 1968** Battery Park City Authority Act
- 1970** Demolition begins - first dilapidated pier demolished
- 1976** Landfilling complete
- 1979** Masterplan adopted
- 1982** First residents move in
- 1988** World Financial Center (currently Brookfield Place) completed
- 1992** Stuyvesant High School opens
- 2001** 9/11 Terrorist attacks on World Trade Center
- 2002** Commercial/Institutional Environmental Guidelines issued
- 2004** First LEED Certified high rise residential building in the United States (BPC's The Solaire)
- 2008** Great Recession financial crisis
- 2012** Superstorm Sandy
- 2017** Truck attack along bike path
- 2018** BPC launches design and engineering of its resiliency program to provide flood protection



4 (Alexander Cooper Associates, 1979)
5 (Lipton, 2001)

Get to know BPC

Did you know much of BPC was built on 1.2 million cubic yards of landfill, much of which was excavated during the construction of the World Trade Center?



residential space
7.2
MILLION SQUARE FEET



parks
36
ACRES



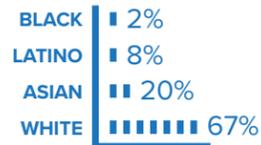
family households
32%
Households with children under 18 years old



15,885
residents



45,000+
workers



racial makeup



32%
educational attainment
Graduate or professional degree



30% OWNER
70% RENTER
residential occupancy



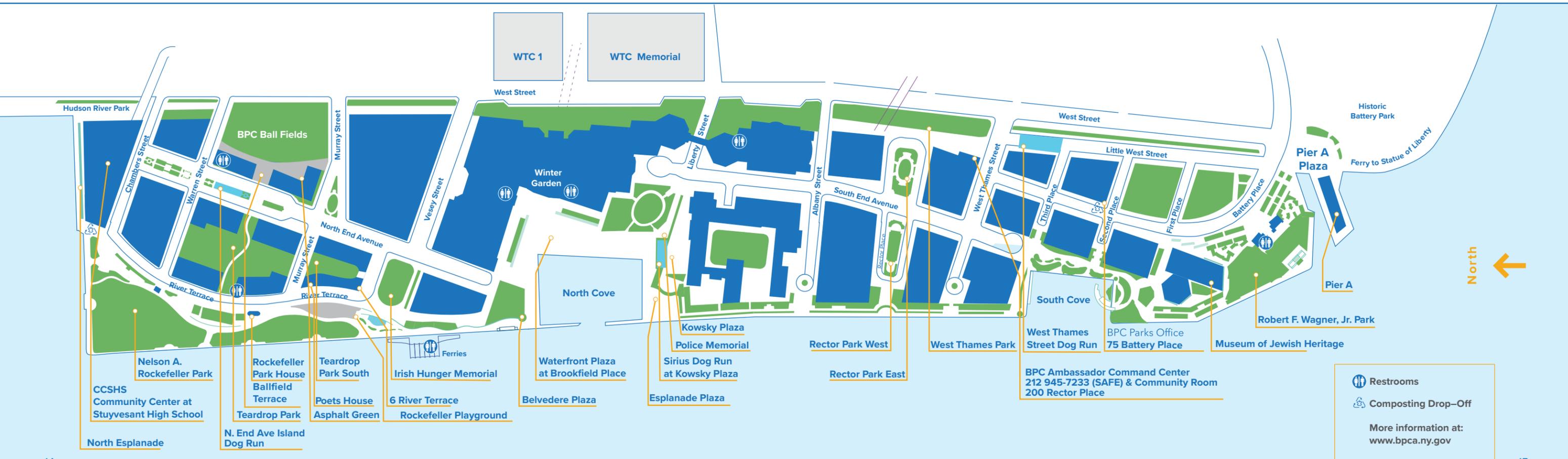
public schools
4



commercial space
10
MILLION SQUARE FEET



housing cost burden
27%
Calculated by gross rent 35% or more as % of household income



How this Action Plan was developed

Over the first 50 years of our existence, BPCA was largely focused on building out the neighborhood to realize the original plan. Now, it is time to look to the next 50 years and create a new vision and goals that are equally as ambitious as creating a new neighborhood from scratch. With that in mind, we partnered with 100RC in May 2019 to develop a Resilience Action Plan. This process was intended to build upon previous efforts in and knowledge about BPC, foster alignment between resilience principles and BPCA’s goals, and incorporate stakeholder perspectives in an inclusive planning process. The typical 100RC resilience planning process was adapted to accommodate a shorter timeline and the sub-city jurisdiction of Battery Park City.



PROCESS

Broadly, the development of this Action Plan was divided into two phases.

1 In the first phase of this resilience planning process, 100RC and BPCA reviewed existing documents and records, issued an online questionnaire, conducted in-depth interviews with key stakeholders, and hosted a cross-sectoral public workshop to assemble a holistic picture of the community’s **perceptions** of resilience, the existing **actions** that impact Battery Park City’s resilience, and the **shocks and stresses** of greatest concern to constituents. Detailed results of this engagement and analysis process can be found in the Preliminary Resilience Assessment released in July 2019 and available on the Battery Park City website (bpca.ny.gov).

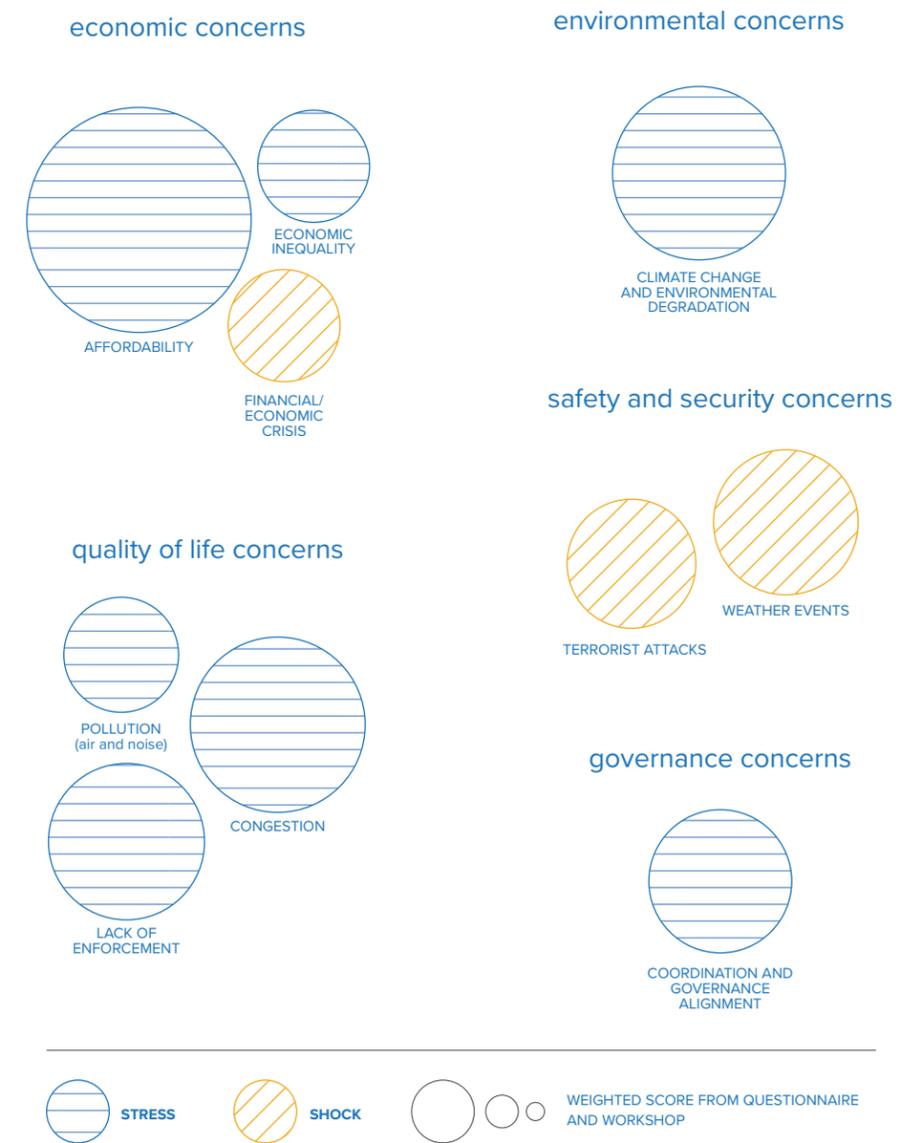
2 The second phase built upon the outcomes of the first, leveraging the key findings (outlined below) to craft a set of actionable projects, programs, and initiatives that will address Battery Park City’s key resilience challenges. Continuing BPCA’s commitment to openness, this action planning process remained an inclusive and iterative one, with repeated consultation of key stakeholders, development of multi-sectoral partnerships for implementation of actions, and continued transparency and collaboration with the public. As part of this planning process, BPCA’s President and CEO discussed the planning process with members of the public at the meeting of the Battery Park City Committee of Community Board 1, taking feedback and input into the further drafting of the Action Plan.

WHAT WE HEARD

To prioritize areas for action, we looked at two components of the work from the information and input gathering phase. First, constituents’ prioritization of shocks and stresses helped to focus work on the challenges of greatest concern. Second, the intersection of stakeholder perceptions of areas of strength and weakness and the ongoing actions

that BPCA (or others) are already taking allowed for the identification of opportunities and gaps that can be addressed. Of the various shocks and stresses that Battery Park City faces, priorities fall into five main categories: economic concerns, environmental concerns, quality of life concerns, safety and security concerns, and governance concerns.

FIGURE 2. PRIORITIZED SHOCKS AND WEIGHTED SCORES





To assess Battery Park City’s strengths and areas for improvement, we used the City Resilience Framework (CRF) to compare current actions with constituent perceptions. Overall, BPCA has a positive reputation among the stakeholders participating in this assessment. Residents applaud the parks’ maintenance and community programming, and acknowledge BPCA’s thoughtfulness in interacting with the community. Stakeholders also consistently praise BPCA’s leadership in increasingly responsible use of water and energy.

Stakeholders do see shortcomings in a few areas, including housing affordability and uncertainty, fostering inclusive economic prosperity for all, ensuring that leadership’s current values are instilled permanently in the organization, and increasing the speed at which the robust infrastructure planning actions are implemented.

A few key areas for action include:

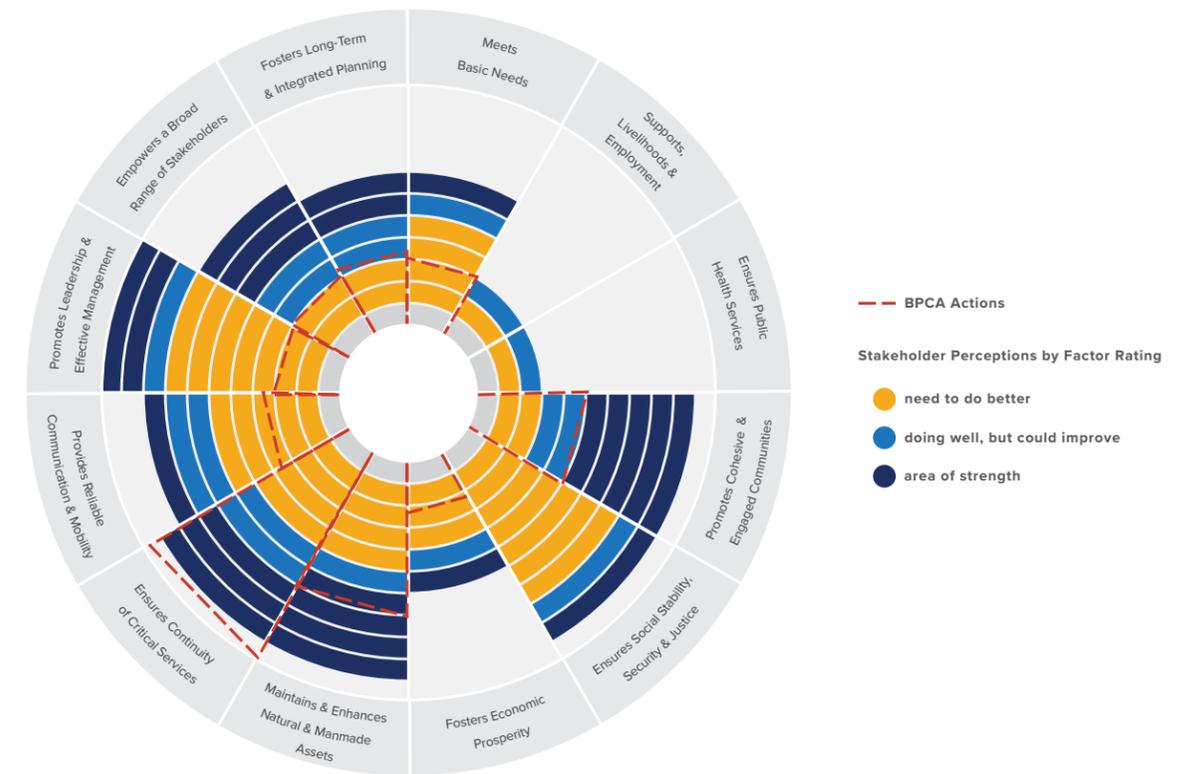
Affordability (an economic concern, but one that is interrelated with many other shocks & stresses) was the most reported stakeholder concern. Affordability concerns extend beyond housing affordability to include concerns about commercial rents and the availability of businesses that serve the community’s basic needs.

BPC stakeholders expressed concern about the way both the causes and effects of **climate change & environmental degradation** impact the neighborhood. With Superstorm Sandy still fresh in mind, the community is concerned about sea

level rise, increased storm frequency, and flooding. However, BPC stakeholders are also thinking about the community’s contributions to climate change and environmental degradation and about how the community can continue and enhance its leadership in the effort to combat those issues.

As a world class destination, BPC stakeholders emphasized the importance of balancing the continued development and promotion of this asset while ensuring that various forms of **congestion** – and attendant issues such as noise and air pollution – are adequately addressed.

FIGURE 3: COMPARISON OF CONSTITUENT PERCEPTIONS AND CURRENT ACTIONS



Action Plan for a More Resilient Battery Park City

Through public input, conversations with key stakeholders, and review of existing work, a set of clear priorities has emerged. The Resilience Action Plan is comprised of one vision (divided in four chapters) – each with 3-5 supporting goals – and a total of 30 actions designed to achieve those goals. Throughout this process and continuing into the implementation of this Action Plan, we have consistently prioritized open communication and engagement, seeking to strengthen ourselves as a balanced community committed to welcoming a diversity of residents, businesses, and community partners in building a better Battery Park City for the next 50 years.

Our goals are as follows:

An Inclusive Community

- Goal 1.1** Expand housing affordability and certainty
- Goal 1.2** Promote businesses that are diverse, create social benefit, and provide services that meet the needs of our community
- Goal 1.3** Make our streetscape and public spaces accessible and enjoyable to a wide range of users

Vibrant Public Space

- Goal 3.1** Provide dynamic and diverse programming across Battery Park City that welcomes and brings together a wide range of residents and visitors
- Goal 3.2** Amplify and steward our world-class public spaces through forward-thinking design, quality, and craftsmanship
- Goal 3.3** Remain fertile ground and an international destination for world-class public art and culture

A Safe and Climate Resilient Place

- Goal 2.1** Adapt our built environment and natural systems to a changing climate
- Goal 2.2** Develop and implement a strategy to achieve a carbon neutral Battery Park City
- Goal 2.3** Support and augment the safety and security services within BPC

Leadership for the Future

- Goal 4.1** Mobilize our organization to improve the delivery of services and efficiently accomplish our projects
- Goal 4.2** Embrace diversity by promoting access to contracting opportunities
- Goal 4.3** Integrate climate resilience and sustainability into our policies and operations
- Goal 4.4** Strengthen collaboration with partners, residents, and stakeholders to promote innovation in governance practices
- Goal 4.5** Establish best in class practices for stewardship of public resources

KPIs

For these goals, we will be tracking a set of Key Performance Indicators (KPIs) to hold ourselves accountable as we work to achieve them.

For instance, we will track our utilization of minority- and women-owned business enterprises, if we are moving the needle on goals around affordability, and the emissions of our buildings. We will also explore a KPI measuring community wellness to track our impact on mental and physical well-being.

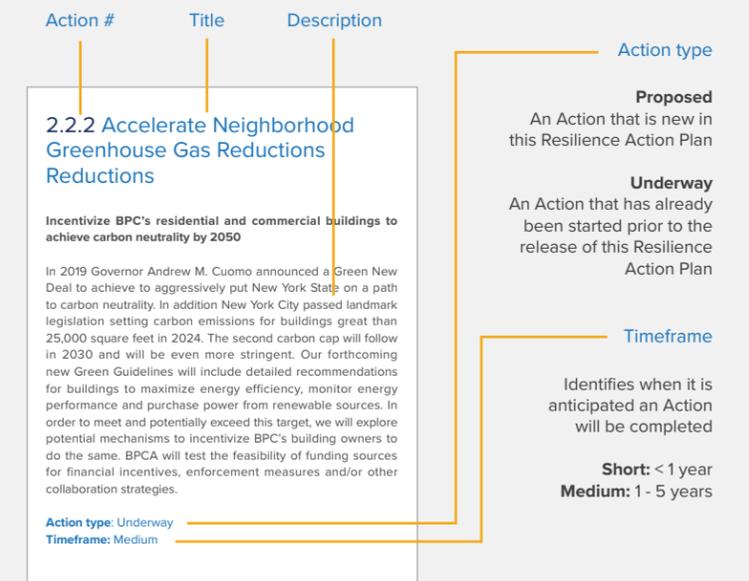
The KPIs will be publically available, allowing the community to track our progress and make sure we're meeting the expectations that your input has helped us set. To see the full set of KPIs, take a look in each of the following chapters, and look for progress updates on the BPCA website.

How to read an action

Resilient Battery Park City includes four chapters, 14 goals, and 30 actions.

Approximately one-third of the actions are steps that are currently underway, another third are actions that build on existing efforts using a resilience lens, and the final third are new actions that address gaps and further resilience.

The 30 actions within Resilient Battery Park City follow a consistent format and are organized by goal. Each action has a title and description and identifies timeframe.



CHAPTER 1

An Inclusive Community



Goal 1.1
Expand housing affordability and certainty

.....

Goal 1.2
Promote businesses that are diverse, create social benefit, and provide services that meet the needs of our community

.....

Goal 1.3
Make our streetscape and public spaces accessible and enjoyable to a wide range of users

Context

From the groundbreaking for Gateway Plaza in 1980, to the rise of what was then called the World Financial Center (now Brookfield Place) in the mid-1980s, to the completion of Liberty Luxe, in 2011, Battery Park City has undergone tremendous change in its built environment over its short history. Community residents who at first crossed the West Side Highway into acres of vacant land in order to reach their front door now navigate the challenges of urban density and a booming real estate market. Rather than being surrounded by a landfill “beach” as they were in the 1980s, their residential buildings are now nestled among 36 acres of world-class parks and public spaces, cultural institutions, and public art installations that serve both as a respite in the city and an attraction for more than a half-million residents, workers, and visitors annually.



Battery Park City is home to nearly 16,000 residents.

Accompanying the transformation of the physical environs has been a dramatic increase in the number of people who live, play, and work in Battery Park City. Home to nearly 16,000 residents, more than 45,000 workers converging on the neighborhood’s 10.7 million square feet of office space, schools, cultural institutions, and a lively mix of restaurants and retail businesses along corridors and in signature new developments, Battery Park City today teems with activity. With that activity and population growth, however, have come challenges to the way residents, workers, and visitors experience the neighborhood and each other on a daily basis and in the long term. A growing lack of affordability and fears of being ‘priced-out,’ congestion on streets and sidewalks, and a perceived lack of racial and socio-economic diversity among the people and institutions that make up Battery Park City is contributing to a sense of a loss of community.

As Battery Park City looks ahead to the next 50 years and beyond, we have the opportunity to promote affordable housing and greater income diversity among our residents, strengthen local businesses and institutions, and enhance the safety of the public realm in order to foster an environment where all residents and neighbors can thrive.



 **Key Performance Indicators**

INCREASE IN # / % OF AFFORDABLE RENTAL UNITS

.....

EXTENDED MEAN EXPIRATION DATE OF AFFORDABLE UNITS

.....

INCREASED DIVERSITY IN BUSINESS / NON-PROFIT TYPOLOGIES WHILE REDUCING COMMERCIAL VACANCY RATE

.....

ZERO PEDESTRIAN OR CYCLING FATALITIES



Shocks and Stresses

- AFFORDABILITY
- CONGESTION
- ECONOMIC INEQUALITY
- FINANCIAL/ECONOMIC CRISIS

Goal 1.1

Expand housing affordability and certainty

1.1.1 Create a forward-looking agenda for a more balanced residential community

Develop a housing strategy that aligns public and private investments around a common vision for Battery Park City's residential units that enhances income diversity and livability now and into the future

Battery Park City was originally planned to include a balance of housing types, including rental units accessible to those with a mix of low, moderate, and high incomes. That plan evolved into one in which tax and rent revenues from luxury units would support the construction and rehabilitation of affordable housing outside of the neighborhood. Meanwhile, in the decades that followed, rental prices in BPC surged, and the neighborhood has become one of the most desirable and expensive in the country for renters. To better fulfill our initial mandate and restore a more balanced mix of housing in the neighborhood that rises to the challenges of the 21st century, we will develop a forward-looking road map that includes an economic analysis that informs our vision for a balanced mix and articulates goals for greater income diversity among residents throughout the neighborhood.

Action type: Proposed
Timeframe: Medium

1.1.2 Expand BPCA's toolkit of affordable housing and rent stabilization mechanisms

Conduct a landscape analysis to source new and existing policy levers that increase the supply of affordable units and offer alternative mechanisms to preserve affordability

We will source a range of affordable housing mechanisms and programs from across the nation that can be replicated within the Battery Park City context, including methods for tracking the number and location of affordable and rent stabilized units in the community. As part of this analysis, we will explore closer collaboration with City and State agencies, as well as non-profit thought partners to identify a range of low-cost housing financing options—such as affordable housing for seniors and middle income options for families—that lower barriers to affordable home ownership. Beyond these local options, we will source innovative and tested solutions from other international and U.S. cities to create a robust menu of options that can support the neighborhood's vision for a more balanced residential community while keeping building financially viable.

Action type: Proposed
Timeframe: Medium

1.1.3 Preserve and expand affordability and increase certainty in existing residential buildings through ground lease negotiations

Partner with building owners and government stakeholders to restructure building ground leases with terms that support stability and affordability

The Authority's building ground leases are a powerful means for BPCA to ensure stewardship of a more balanced residential urban fabric. As the 2069 lease expiration date approaches on each of its residential buildings and ground rent increases draw nearer, we have the opportunity to explore new means of allowing for a greater proportion of affordable housing that ensures long-time residents can stay in their homes and address concerns of potentially sharply escalating costs and long term uncertainty for both rentals and condominiums.

Action type: Underway
Timeframe: Medium

Goal 1.2

Promote businesses that are diverse, create social benefit, and provide services that meet the needs of our community

1.2.1 Analyze the neighborhood retail landscape to foster balanced commercial corridors

Conduct a local market analysis that combines an assessment of existing businesses and commercial spaces, as well as local resident surveys, to understand gaps and opportunities to enhance BPC's commercial areas

Battery Park City residents, workers, and visitors enjoy proximity to abundant businesses and nonprofits serving the neighborhood. However, a perceived lack of diversity in the goods and services, as well as price points, that these establishments offer presents an opportunity for us to take a closer look at how commercial space throughout the community is leveraged. We will perform a neighborhood retail market analysis to understand the types of establishments that could enhance the existing mix of local businesses. In addition, this analysis will include engagement with community members to better understand their needs and vision for the local commercial corridor experience, including a focus on non-profit or social enterprise organizations. We will leverage this analysis to inform its approach to planning and activating the commercial space throughout the neighborhood.

Action type: Proposed
Timeframe: Medium

1.2.2 Explore new approaches to promote existing businesses and attract new businesses and social enterprises to support the neighborhood's needs

Create a toolkit of mechanisms BPCA can leverage to curate a more balanced mix of retail and social enterprises within its commercial areas

The Authority currently issues permits to a broad array of organizations that host events in its parks and public spaces. These events offer an untapped mechanism for elevating the profile of local BPC businesses to both local residents and visitors. By incorporating local business promotion requirements in its permitting process (e.g., through the distribution of business directories, maps, and signage), we will enhance visitors' and residents' knowledge of the diversity of retail offerings available to them and drive more foot traffic to the businesses that serve the community year-round. Beyond this existing lever, we will research other tools for attracting new enterprises to neighborhood commercial areas such as flexible leasing agreements (pop-ups), rental subsidies for social enterprises, or other targeted incentives to reduce storefront vacancies and provide a broader range of services for the community.

Action type: Underway
Timeframe: Medium

Goal 1.3

Make our streetscape and public spaces accessible and enjoyable to a wide range of users

1.3.1 Create a safe and vibrant South End Avenue corridor

Build on the collaborative process between The New York City Department of Transportation (NYC DOT), BPCA, Community Board 1, and local stakeholders to implement a range of capital improvements that enhance safety and traffic flow for all users of the South End Avenue corridor

South End Avenue is home to a diverse collection of housing and retailers and welcomes a robust mix of residents, workers, and visitors to the area each day. Traffic congestion, service vehicle conflicts, and inadequate crosswalks detract from these users' street-level experience and sense of safety. To help address these concerns, BPCA has worked with government and community stakeholders to conceptualize safety improvements such as curb bump-outs, sidewalk extensions, raised crossing areas, designated bike lanes, and other enhancements to South End Avenue. After detailed designs and construction drawings are developed, construction of these measures is expected to begin in late 2020, and last between 18 and 24 months. We will leverage this pilot intervention in the South End Avenue area to inform streetscape interventions elsewhere in the community, including on other busy corridors like North End Avenue and Vesey Street.

Action type: Underway
Timeframe: Medium

1.3.2 Develop inclusive street and public realm design guidelines that embrace all users, regardless of age or ability

Create a new standard for universal access and age-friendly road, streetscape, and public realm design for BPC's streets and public spaces

For many residents and visitors to Battery Park City, the streets and public spaces are challenging to navigate due to the daily flow of local pedestrian, bicycle, public transportation, and vehicular traffic. For seniors or people with disabilities, these challenges can be compounded by design features that diminish their ability to navigate the neighborhood freely. To help foster safe and convenient access for all, we will work with a diverse group of stakeholders, including local senior groups, the MTA, the Mayor's Office for People with Disabilities, the NYC DOT, and New York State agencies to enhance street and public space design guidelines. Drawing on the principles of Complete Streets, as well as age-friendly and universal access best practices, we will create a new standard that will transform the public realm throughout the neighborhood.

Action type: Proposed
Timeframe: Medium

CHAPTER 2

A Safe and Climate Resilient Place



Goal 2.1
Adapt our built environment and natural systems to a changing climate

.....

Goal 2.2
Develop and implement a strategy to achieve a carbon neutral Battery Park City

.....

Goal 2.3
Support and augment the safety and security services within BPC

Context

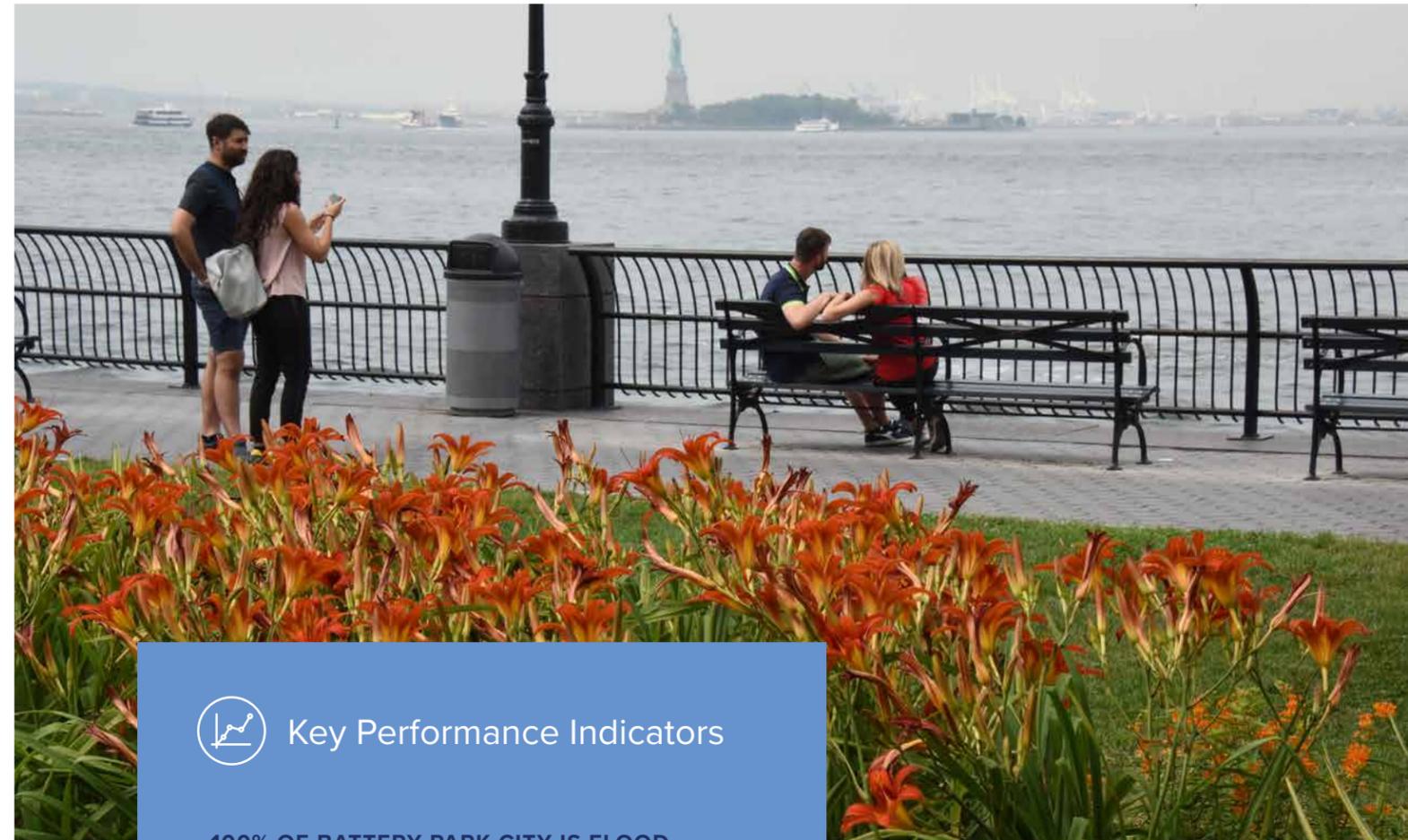
Battery Park City’s resilience has been tested in recent history. The terrorist attacks of September 11, 2001 happened in our backyard, causing displacement of residents and testing our neighborhood’s resolve. Superstorm Sandy in 2012 brought a storm surge that ravaged New York City’s coastal communities and demonstrated Battery Park City’s need to protect and adapt our neighborhood to the threat of flooding. Climate change predictions are becoming even more dire, as seas continue to rise, 100 year storms become more probable in the near future, and New York City’s average temperature is expected to rise 5.7 degrees Fahrenheit by 2050.

As we learn from the past and plan for the future, we know that a resilient Battery Park City is one that is safe, sustainable, and adaptable. We must continue to trailblaze in our sustainability efforts. For instance, BPCA issued our first Green Guidelines in 2000 and updated them in 2005, leading to LEED Gold and LEED Platinum certification for several new residential buildings in Battery Park City, including The Solaire, the first LEED certified residential high-rise building in the U.S. As we look to the future, we have the goal to make BPC carbon neutral by 2050 – sooner if possible – by focusing on greenhouse gas (GHG) reduction and having 100% clean energy for our operations.



New York City’s average temperature is expected to rise 5.7 degrees Fahrenheit by 2050.

We also have the opportunity to be a model for protective and sustainable infrastructure and climate proofing. Protection of our neighborhood is critical to our continued success, and that includes protecting not only physical assets, but also the people who live, work, and enjoy our public spaces. Therefore, we will ensure our infrastructure and natural environment enable us to withstand the effects of climate change by implementing our flood resiliency projects and ensuring our infrastructure projects incorporate future climate projections. We will also safeguard our residents and visitors from other potential shocks, such as terrorist attacks, by maintaining and developing protective infrastructure and emergency response mechanisms. Collectively, these actions strive to ensure our community will not only survive, but also thrive in the face of any challenge.



Key Performance Indicators

100% OF BATTERY PARK CITY IS FLOOD RESISTANT

ZERO EMITTED METRIC TONS OF CARBON DIOXIDE

100% OF COMMUNITY MEMBERS RECEIVE READYBPC EMERGENCY PREPAREDNESS INFORMATION AND MATERIALS

ZERO PEDESTRIAN OR CYCLING FATALITIES



Shocks and Stresses

- CLIMATE CHANGE AND ENVIRONMENTAL DEGRADATION
- WEATHER EVENTS
- TERRORIST ATTACK
- POLLUTION (AIR AND NOISE)

Goal 2.1

Adapt our built environment and natural systems to a changing climate

2.1.1 Adapt and protect Battery Park City from the threat of coastal flooding

Make BPC flood resistant and continue to integrate our projects into existing efforts for Lower Manhattan

During Hurricane Sandy, Battery Park City sustained extensive damage to Pier A, the BPC Ball Fields and the adjacent Community Center as storm surge waters poured in from Pier A Plaza in the south of BPC and West Street on its eastern boundary. On the western side of BPC, public parks were inundated as well. In anticipation of even more severe storms in future years as the threat of climate change accelerates, BPCA is undertaking four interrelated resiliency projects to protect Battery Park City from the threats of storm surge, intense precipitation events, and sea level rise. These endeavors will comprise a significant portion of the overall Lower Manhattan Coastal Resiliency project, and are designed to protect BPC from a 100-year storm surge in the 2050s.

- The South Battery Park City Resiliency Project contemplates creation of a continuous flood barrier from the Museum of Jewish Heritage, through Wagner Park, across Pier A Plaza, and along the northern border of Historic Battery Park.

- The Ball Fields Resiliency Project contemplates a flood barrier system to protect a geographic low point in the neighborhood, the BPC Ball Fields that are used by some 50,000 local youth each year. This project will provide redundancy upon completion of the South and North Battery Park City Resiliency Projects (in 2022 and 2023, respectively), and therefore can be eventually removed after completion of those projects.
- The North Battery Park City Resiliency Project will span BPC's North Esplanade and entail a deployable barrier crossing West Street / Route 9A. This area represents one of BPC's (and Lower Manhattan's) most vulnerable points for storm surge inundation and flooding.
- Finally, the Battery Park City Western Perimeter Resiliency Project will be achieved by employing garden/park walls to create a new line of flood protection along the water's edge.

In addition, the Authority will work with building owners to determine how best to provide build-specific protection as well, through retrofits and other flood protection measures.

Action type: Underway
Timeframe: Medium



2.1.2 Incorporate adaptation and sustainability standards and certifications where applicable

BPCA will explore leveraging green certifications and adaptation design principles for its own facilities, residential and commercial buildings, as well as public spaces

In order for our built and natural environment to withstand and protect us from the effects of climate change while advancing environmental goals, we must consider the incorporation of certifications and design standards to create an adaptive and sustainable neighborhood. For instance, all new projects and upgrades should leverage resilient design strategies that incorporate climate risk and mitigation techniques. We will ensure our buildings, infrastructure, and green space are protecting us from an ever changing climate by promoting and incorporating these design principles into project preparation and design.

- **Buildings:** All buildings have an environmental impact throughout their lifecycle and are not typically built to withstand the effects of an extreme climate event. For these reasons, building owners should leverage the many available standards and certifications to ensure that buildings can mitigate and adapt in the face of climate change.
- **Infrastructure/Public Space:** From innovative flood management techniques to creating shade to mitigate extreme heat, upgrades to our infrastructure and public space should incorporate sustainability and adaptation design guidelines.

Action type: Proposed
Timeframe: Medium

2.1.3 Explore innovative financing, operating, and maintenance mechanisms for upgrading our infrastructure and minimizing risk

Determine whether bundling two or three of BPCA's major flood mitigation capital projects would achieve cost, schedule, and/or quality improvements

In order to accelerate the completion of neighborhood flood protection—which will help mitigate both safety and financial risks—we will explore whether restructuring the framework of the services needed to build those projects could get them completed more quickly and at a lower cost. Doing so for capital projects elsewhere has facilitated quicker completion and fewer cost overruns or change orders than those that have been built traditionally. Under such a scenario, we would retain ownership of all of our assets, but we would transfer responsibility of building, financing, operating, and maintaining the projects to a single third-party entity for a 30-year period. BPCA would not pay for any element of the project until all three projects are complete and tested—incentivizing the third-party entity to complete work as soon as possible. For this to be feasible, it would also need to continue to foster the community engagement and transparency that has been core to our current efforts. We will work with a team of consultants expert in this area to determine whether adopting this approach would be in the best interest of all stakeholders.

Action type: Underway
Timeframe: Short

Goal 2.2

Develop and implement a strategy to achieve a carbon neutral Battery Park City

2.2.1 Develop a sustainability plan that includes new green guidelines

Create a 10-year sustainability plan for Battery Park City, including new sustainability guidelines

Environmental responsibility is a key component of our mission. As climate change projections become more dire, we will engage in a sustainability planning process that will accelerate our reduction in the emission of greenhouse gases (GHGs) and enhance our overall sustainability. The plan will focus on specific areas and activities that can accelerate implementation that include enforcement tools, collaboration strategies, and incentives. The plan will also build on and modernize our prior leading efforts by creating new Green Guidelines for the neighborhood and providing tactical guidance to stakeholders, such as building owners and local businesses.

Action type: Underway
Timeframe: Short

2.2.2 Accelerate neighborhood greenhouse gas reductions

Incentivize BPC's residential and commercial buildings to achieve carbon neutrality by 2050

In 2019 Governor Andrew M. Cuomo announced a Green New Deal to aggressively put New York State on a path to carbon neutrality. In addition New York City passed landmark legislation setting carbon emissions for buildings greater than 25,000 square feet in 2024. The second carbon cap will follow in 2030 and will be even more stringent. Our forthcoming new Green Guidelines will include detailed recommendations for buildings to maximize energy efficiency, monitor energy performance and purchase power from renewable sources. In order to meet and potentially exceed this target, we will explore potential mechanisms to incentivize BPC's building owners to do the same. BPCA will test the feasibility of funding sources for financial incentives, enforcement measures and/or other collaboration strategies.

Action type: Underway
Timeframe: Medium

2.2.3 Explore district scale energy efficiency and clean energy solutions

Leverage Battery Park City’s scale to amplify energy efficiency, retrofits, and clean energy improvements

Energy efficiency and energy assurance are critical components of a more resilient Battery Park City. By exploring district scale energy solutions, Battery Park City could leverage the best technology to ensure we are accelerating the reduction of greenhouse gas emissions while also ensuring backup power in the case of an emergency. Therefore, we will investigate the feasibility of various district scale energy management options like Power Purchase Agreements, Community Choice Aggregation structure, Load Serving Entity designation, energy master planning, grid ownership, and upgrades. We will also investigate opportunities to leverage local manufacturing and distribution for equipment and systems where feasible. We will do this through robust stakeholder engagement to increase participation and collaboration on this initiative with residents, BPC building owners and managers, and key BPCA Energy stakeholders.

Action type: Underway
Timeframe: Medium



Photo credit: David Paler

Goal 2.3

Support and augment the safety and security services within BPC

2.3.1 Launch the ReadyBPC program to ensure residents are prepared for future shocks and stresses

Educate and engage our community around risk awareness, preparedness, and disaster response

We will work with community and external stakeholders to get alignment on unified, community-wide planning and messaging for disaster mitigation and response. We will also inventory and leverage State and City preparedness resources to integrate, not duplicate, Battery Park City preparedness resources. We will conduct community tabletop exercises to test preparedness and identify vulnerabilities. Finally, we will continually share all findings and resources publicly to ensure transparency and collaboration.

Action type: Proposed
Timeframe: Medium

2.3.2 Ensure safe and strong infrastructure by assessing risk and designing solutions in coordination with key partners

BPCA will design a unified site security assessment in partnership with other large BPC stakeholders

We have engaged a security consultant to assess threats and vulnerabilities in our streetscape, and to inform improvements we will make to our physical site security. To ensure that the improvements meet the needs of the community, we will engage the relevant property owners and other stakeholders in advance of deployment.

Action type: Underway
Timeframe: Short

CHAPTER 3

Vibrant Public Space



Goal 3.1
 Provide dynamic and diverse programming across Battery Park City that welcomes and brings together a wide range of residents and visitors

.....

Goal 3.2
 Amplify and steward our world-class public spaces through forward-thinking design, quality, and craftsmanship

.....

Goal 3.3
 Remain fertile ground and an international destination for world-class public art and culture

Context

Battery Park City is home to world-class public spaces that foster social cohesion, advance wellness, and promote connectivity to nature. Battery Park City’s 36 acres of parks are a civic treasure, a natural haven in one of the world’s most bustling cities. On any given day children climb, splash, and slide in our playgrounds; joggers and dog walkers tour the Esplanade; and families and friends sit in conversation under native Willow Oaks. Our public plazas and pathways are accessible and help connect us to our waterfront. Battery Park City is also home to a rich collection of public art and an array of cultural institutions, making arts and culture the centerpiece of our thriving neighborhood. Finally, our extensive array of programming and events throughout the year ensures that our residents and visitors can experience these spaces in new ways while ensuring our public spaces are vibrant and connected.

Vibrant public spaces are critical to advancing a more resilient Battery Park City: they further strengthen our community connections while providing innovative ways to mitigate and adapt to our changing climate. Green spaces not only provide a place for activity and respite – they can also mitigate the effects of heavy rainfall or extreme heat. Vibrant public spaces also promote learning opportunities to help the public understand our neighborhood’s history and how we can embolden a more resilient future.

As Battery Park City looks towards that future, we must build upon our legacy through forward thinking design and stewardship. We must also sustain and improve our use of programming and continue to develop cultural offerings to further connect residents and New Yorkers to our community while educating them about our resilience priorities.



Key Performance Indicators

NUMBER OF PROGRAMS INCLUDING FREE PROGRAMS

NUMBER OF DIVERSE PLANTS AND SPECIES



Shocks and stresses

- POLLUTION (AIR AND NOISE)
- CONGESTION
- LACK OF ENFORCEMENT
- CLIMATE CHANGE AND ENVIRONMENTAL DEGRADATION
- COORDINATION AND GOVERNANCE ALIGNMENT

Goal 3.1

Provide dynamic and diverse programming across Battery Park City that welcomes and brings together a wide range of residents and visitors

3.1.1 Promote well-being and lifelong learning through our world-class events, arts, and natural environment

Leverage play, active recreation, artistic expression, the natural environment, and creative arts performance to foster public spaces that strengthen our community's connection to Battery Park City

Each year BPCA offers more than 1,300 free programs to the Battery Park City community and beyond, which collectively draw more than 70,000 attendees to the neighborhood. Building on this strong foundation, we will leverage our programs to promote physical and mental well-being for all and further a culture of lifelong learning. We will continue to advance programming that promotes positive health outcomes and diverse experiences for people of all ages. This will further promote Battery Park City as the destination to experience culture, environmental awareness, and the natural environment in lower Manhattan.

Action type: Underway
Timeframe: Medium

3.1.2 Create a comprehensive portfolio of activities and events

Improve coordination with permittees to ensure we create a balanced approach to aligning events and activities in public spaces

A 2018 Parks User Count and Study we commissioned in partnership with faculty and students at Borough of Manhattan Community College found that a plurality of parks users had visited for passive enjoyment – just to be here. At times, however, the late-summer crush of neighborhood events – including large-scale runs and walkathons – can make Battery Park City feel over-programmed, resulting in congestion, noise, and other disruption. Using data from past years and in coordination with annual permittees, BPCA will proactively plan a calendar of large-scale events in BPC – both those programmed and those permitted by BPCA – to provide a more holistic understanding of the impact on residents and visitors, identify areas of programmatic overlap or need, and preempt any logistical challenges.

Action type: Proposed
Timeframe: Short



3.1.3 Highlight programs and events to a broader audience

Develop creative and effective communications that highlight programs and events to broader audiences through social media platforms and other innovative forms of outreach

Battery Park City residents and visitors alike enjoy our world class programming, which is actively promoted in three annual Programming and Event Guides, regular BPCA email newsletters, throughout social media, and other press outreach. To ensure greater awareness of these programs within the neighborhood and across the city, as stewards of public parks we will increase these outreach efforts – including through previously unexplored media outlets – to entice enthusiasts and solicit interest from all corners of New York City.

Action type: Proposed
Timeframe: Short

Goal 3.2

Amplify and steward our world-class public spaces through forward-thinking design, quality, and craftsmanship

3.2.1 Establish BPC as a biodiversity haven in NYC

Build on the BPCA Parks Operations team's efforts to make Battery Park City a sanctuary for nature

When considering that Battery Park City is built on landfill – and in its initial years had no topsoil of its own – it is remarkable that the neighborhood is now home to an array of diverse flora and fauna. Through careful maintenance and a dedicated horticulture team, BPC has evolved from infill to a small oasis for different plants, pollinators and animal species in NYC. This has the potential to draw new visitors to the neighborhood and further contribute to NYC's and the region's ecological recovery. BPCA's Parks Operations Department is creating the mechanism to report and record observations of new wildlife in our parks and public spaces, which we'll make available to the public. We will also collaborate with various conservation groups and neighboring parks to ensure cross promotion of these attributes and enable them to share our best practices. Finally, we will work to ensure that our built environment is safe for those animals who call BPC home, through bird-friendly construction and other means.

Action type: Underway
Timeframe: Short



BPC NATURE FUN FACTS

Despite being a dense urban neighborhood built upon landfill, BPC is home to a remarkable wealth of flora and fauna, truly making it a biodiversity hub in the city. For example:

- Approximately 60% of BPC's landscape is comprised of **native plants**
- Our parks are home to many native birds, including the **Wood Thrush, Common Yellowtail, Red-tailed Hawk, and Eastern Phoebe**
- We're also home to many beneficial insects, which prey upon the harmful ones. These tiny community members include **Ladybugs, Praying Mantises, Lacewings, and Ground Beetles**



NATURE-BASED ATTRACTIONS AND STEWARDSHIP

As a part of our management of our 36 acres of parks and public space, we work daily to enhance the neighborhood's biodiversity, which also aids in its climate resilience. Our Parks Programming department leverages this strength to proactively connect parks users with their natural environment and the flora and fauna who call it home.

As a steward of our natural resources, BPCA is committed to ensuring that we have up-to-date information about our ecosystem and showcasing it to the public:

- BPCA Parks Operations is currently formalizing procedures to conduct **wildlife surveys** to systematically track the diverse wildlife in BPC so we can better understand the creatures that live in and visit our neighborhood, from monarch butterfly migrations to even the occasional egret.
- Similarly, BPCA recently conducted a **tree census** to map and evaluate the 1,897 trees (as of 2018) that grace our parks and sidewalks, ensuring that they remain healthy and well maintained.

We are also taking steps to make sure that residents and visitors can celebrate this unique ecosystem with us. A few current initiatives include:

- The **Empire State Trail** is a state recreation route under construction that will begin near the southern tip of the West Side Highway and stretch a total of 750 miles, both due north to Canada and all the way west to Buffalo. In the coming years, a trail marker will be unveiled in BPC marking the starting point of this regional recreation gem.
- To celebrate some of our beautiful local fauna, BPCA is releasing a **Birds of BPC Calendar** to highlight the neighborhood's role as a haven for biodiversity.
- In early fall 2019, BPCA kicked off our fall festivities with a celebration of our migratory creatures at the **Migration Celebration**, which featured opportunities for birdwatching, making art, and taking in a variety of live performances.

3.2.2 Enhance the beauty and excellence of our public spaces

We will continue to maintain, improve, and pioneer world class public spaces

Battery Park City is a destination for its parks and beautiful public realm. We do this by keeping our natural assets of Battery Park City accessible, safe, and clean for today and tomorrow’s users through proactive directed investments and maintaining best-in-class condition of our footpaths, fixtures, and other public service amenities. We also do this by continuing to cultivate gardens that showcase artistry and reinforce urban ecology. To meet our staff’s high standard of maintenance, we supplement our ongoing work with a robust capital plan to address our capital and preventative maintenance needs.

As we continue to maintain and upgrade these spaces, we will incorporate new, enhanced resilience design protocols into our existing design guidelines that provide harmony with the surrounding streetscape and take into account best practices for mitigating extreme heat, preventing flooding, and promoting health and well-being. Finally, we will encourage businesses and property owners to adhere to these enhanced design guidelines and maintain a high standard for the public-facing sidewalks and spaces they manage as well.

Action type: Underway
Timeframe: Short



BPCA PARKS OPERATIONS FAST FACTS

BPCA’s Parks Operations team makes Battery Park City’s public spaces a world-class amenity for residents and visitors alike, and is a major part of our collective efforts to provide a safe and sustainable neighborhood. Our Parks Operations employees oversee the maintenance of BPCA assets, and do so with an eye toward sustainability. Some examples include:

- Maintenance Technicians use **only plant-based cleaning products** and place trash receptacles with strategic line of sight to minimize littering
- Electricians manage approximately **1,750 light poles**, which will transition to LED fixtures in the years ahead
- Carpenters maintain and refurbish the neighborhoods **5.1 linear miles of slats in our park benches**, and use only low- to zero-VOC paint when they do
- Stone Masons maintain **more than 5 miles of footpaths** using repurposed and upcycled sand from our playgrounds for paving, anchoring waste receptacles, and for footpath traction after snowstorms.
- Beyond managing the neighborhood’s extensive irrigation network and other infrastructure, our Plumbers install and maintain the waterless urinals in our restrooms, each of which **saves 40,000 gallons each year**.
- Auto mechanics manage our vehicle fleet, over **80% of which is zero emission**

Goal 3.3

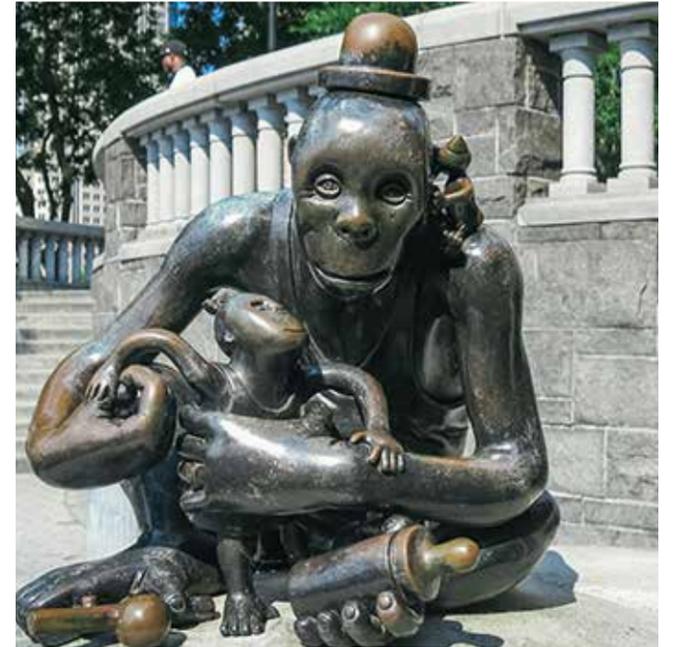
Remain fertile ground and an international destination for world-class public art and culture

3.3.1 Inspire our community and visitors through public art projects

We will maintain and restore our existing public art while creating and promoting new temporary public art

Public art can transform public space, encourage social cohesion, and promote awareness about cultural and civic challenges. BPC has a rich collection of culturally diverse and historically important art projects – both temporary and permanent. We will invest in conserving our permanent collection to ensure that it can be enjoyed for current BPC residents and future generations. We will also build on the success of our most recent temporary art installation, *Sunrise, Sunset (Revolution)*, which rekindled that tradition in the neighborhood after years of dormancy, to develop a pipeline of temporary public art that educates and informs the public about building community resilience throughout Battery Park City.

Action type: Underway
Timeframe: Medium



3.3.2 Maintain and amplify partnerships with local cultural and educational institutions

BPCA will support our treasured cultural institutions through partnership

From the Museum of Jewish Heritage – A Living Memorial to the Holocaust and the Skyscraper Museum near our southernmost tip, to Poets House in the north, Battery Park City is a worldwide destination for cultural enrichment and exploration. We also collaborate closely with our local public library and school institutions from early education, elementary, high school, special needs, and Borough of Manhattan Community College (BMCC). As these organizations' honored host, BPCA will maintain and strengthen our connections with them by partnering on events and installations that further enrich participants within their institutional walls and throughout our community – and by including their organizations' leadership in key neighborhood planning processes.

Action type: Underway
Timeframe: Medium



OUR CULTURAL AND EDUCATIONAL PARTNERSHIPS

Battery Park City is home to a rich variety of cultural and educational institutions.

Museums and libraries:

- Located near the south end of BPC, the **Museum of Jewish Heritage** ensures that visitors – including more than 60,000 schoolchildren a year – never forget the horrors of the Holocaust.
- **The Skyscraper Museum**, located at 39 Battery Place, celebrates New York's architectural history and explores the design, technology, location, investment, and habitation of tall buildings.
- Founded in 1985 and calling BPC home since 2009, **Poets House** is a free library open to the public which invites poets and readers to draw inspiration from their collection of more than 70,000 books and other materials.
- Manhattan's first green LEED-certified branch of the New York Public Library, **Battery Park City Library** offers dedicated reading spaces for community members of all ages, multipurpose programming space for the neighborhood and a collection more than 23,000 items.

Public schools:

- Located at the very north end of BPC since 1992, **Stuyvesant High School** is one of New York's preeminent public high schools, with a group of notable alumni that includes four Nobel laureates.
- Housed within Stuyvesant High School, **P226M** is a part of the Department of Education's District 75, which provides highly specialized instructional support for students

with disabilities. P226M provides 18-21 year olds with academic and vocational support as transition to the working world.

- **PS/IS 276 (Battery Park City School)** serves neighborhood students in southern BPC, with both lower and middle school classes from Pre-K through 8th grade.
- **PS 89 (Liberty School)** serves neighborhood students from northern BPC, with classes Pre-K through 5th grade.

Post-secondary education:

- Since 2015, the **Institute of Culinary Education** – one of the country's premier culinary schools – has made its home at 225 Liberty Place, where it trains future chefs and restaurateurs in cutting-edge techniques, while also offering a variety of classes to the recreational cook.
- Just across West Street from BPC, the **Borough of Manhattan Community College** is a local anchor, serving more than 26,000 students in over 50 Associate degree programs, and recently conducted BPCA's first parks user study.

BPCA partners frequently with all of these institutions on programs and initiatives that enhance the vibrancy and opportunity in our community. For just one example, since 2017, 24 students from P226M have trained and worked year-round with BPCA's Parks Operations team as part of their work-readiness education – a program for which BPCA was honored at the 2018 District 75 Annual Student Recognition and Business Awards Ceremony. In 2018, one student in this program was hired as an Authority employee.

CHAPTER 4

Leadership for the Future



Goal 4.1
Mobilize our organization to improve the delivery of services and efficiently accomplish our projects

.....

Goal 4.2
Embrace diversity by promoting access to contracting opportunities

.....

Goal 4.3
Integrate climate resilience and sustainability into our policies and operations

.....

Goal 4.4
Strengthen collaboration with partners, residents, and stakeholders to promote innovation and clarity in governance practices

.....

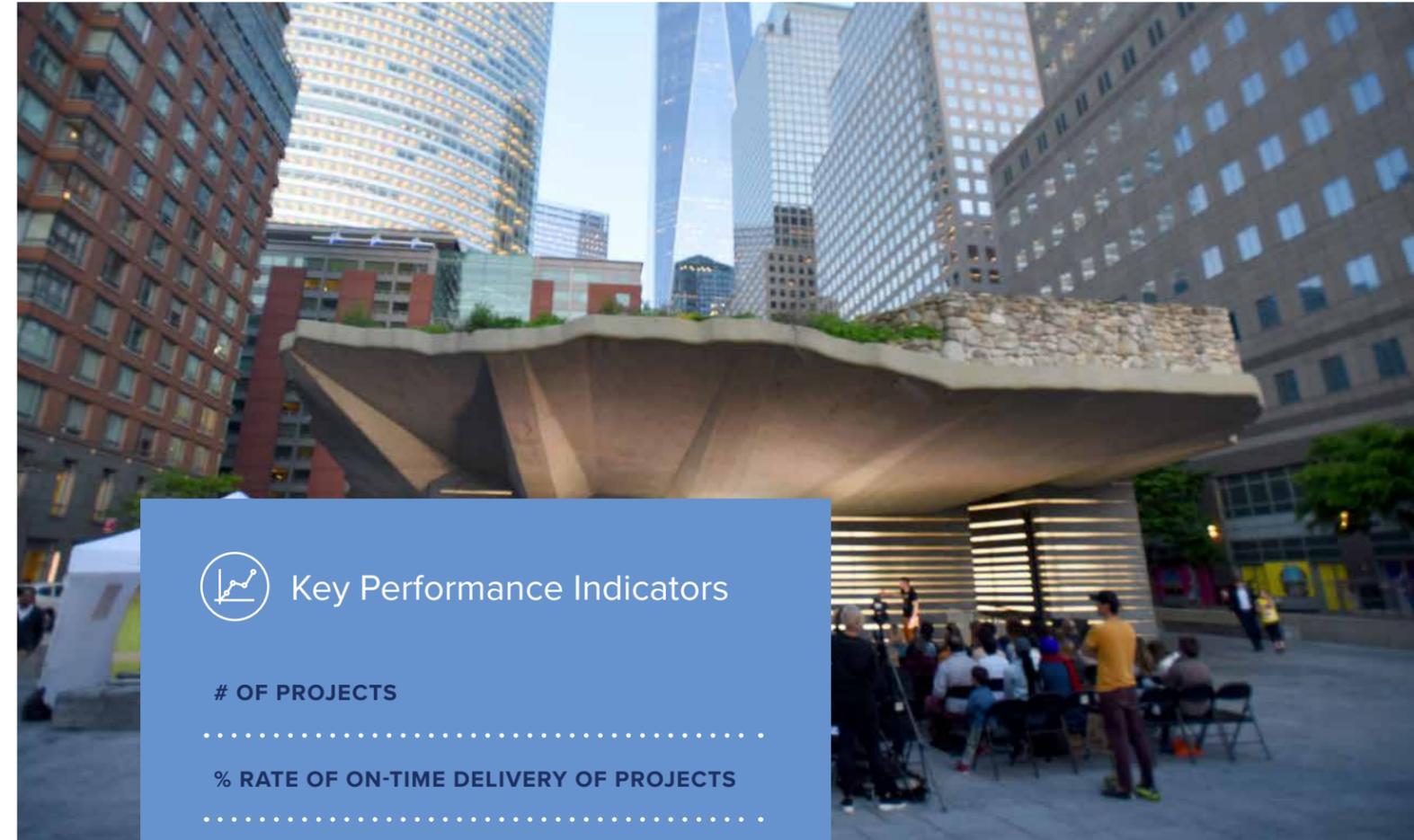
Goal 4.5
Establish best in class practices for stewardship of public resources

Context

The Battery Park City Authority was founded in 1968 with the mission to plan, create, coordinate, and sustain a balanced community of commercial, residential, retail, and park space within our designated 92-acre site on the lower west side of Manhattan. State and city leaders at the time recognized the critical need for an entity to serve as a stable and thoughtful steward of the design, development, and maintenance of the community across political and economic cycles. Throughout our history, BPCA has embraced this charge and partnered with community members, private developers, and public agencies to co-create the dynamic, mixed-use neighborhood Battery Park City is today.

As we prepare to embark on our next 50 years of leadership, the context in which we will deliver on that original mission has evolved. A shift away from parcel development requires a greater focus on innovative and sustainable maintenance strategies that meet the challenges of a changing climate. A diverse and ever-growing ecosystem of public and private entities involved in the neighborhood demands stronger coordination and clarity of roles for all stakeholders. Cutting across these trends, a focus on thoughtful fiscal and operational stewardship for the long-term will be required to meet the known and unknown challenges of the future.

Planning for this future presents a unique opportunity for us to engage in new ways with the entire Battery Park City community – residents, building owners, businesses, public agencies, BPCA staff, and others. Bringing that same spirit of foresight that led to the Authority’s founding, we also have the opportunity to build the internal governance and operational infrastructure that will serve our community for the next half century and beyond.



Key Performance Indicators

OF PROJECTS

% RATE OF ON-TIME DELIVERY OF PROJECTS

INCREASE IN % OF MWBE AND SDVOB UTILIZATION

CERTIFICATION AS A ZERO-WASTE ORGANIZATION

100% OF CAPITAL PROJECTS COMPLIANT WITH LATEST RESILIENCE AND SUSTAINABILITY DESIGN GUIDELINES

OF COMMUNITY ENGAGEMENT ACTIVITIES / TACTICS

\$ AMOUNT OF EXCESS REVENUES TRANSFERRED TO NEW YORK CITY

CREDIT RATING STABILITY



Shocks and Stresses

- COORDINATION AND GOVERNANCE ALIGNMENT

BPCA FINANCE OVERVIEW

As a **New York State public benefit corporation**, BPCA has unique relationships with both New York State and New York City governments, designed to help further its mission to plan, create, coordinate, and sustain a balanced community of commercial, residential, retail, and park space in Battery Park City. BPCA owns the 92 acres that comprise BPC and has ground sub-leases with tenants of its sites, who in turn manage the respective properties. The BPCA financing structure has and continues to support the BPC neighborhood and the city at large.

What is ground rent?

Most of Battery Park City was developed through public-private partnerships. Most parcels throughout BPC were competitively bid to private developers who then entered into ground sub-leases with BPCA to construct and operate residential and commercial buildings. As part of those sub-lease agreements, buildings pay ground rent to BPCA for use of the land for the duration of their respective lease.

How does BPCA debt work?

BPCA is able to issue its own bonds but has a legally-mandated cap on allowable debt. In 2019, legislation to increase BPCA's debt cap by \$200 million in order to finance critical infrastructure, including resilience projects, was approved by the State Legislature. The legislation is currently before the Governor for final approval.

BPCA Fiscal Year 2019 highlights*

Revenues:	\$316.6 million
Operating Expenditures:	\$29.2 million
Debt Service:	\$83.7 million
Outstanding debt:	\$966.0 million
Excess revenues:	\$195.1 million
Excess revenues earmarked for affordable housing initiatives:	\$41.0 million

*Approximate and rounded totals

The unique relationship with the City extends to BPCA's capital planning and financing. The BPCA Board approves the annual operating and capital budgets, while the multi-year capital plan is approved by the Mayor and Comptroller of New York City. Additionally, the City has the ability to purchase BPCA for \$1 at any time, which includes taking on all of the Authority's outstanding debts and other obligations.

BPCA generates the bulk of its revenue through the collection of Payments In Lieu of Taxes – commonly known as “PILOT” – and ground rent from its lessees. BPCA is authorized to issue bonds, which are used to finance capital projects. Revenues are used to fund debt service and operating expenses. Excess revenues then flow primarily to the City, a portion of which goes toward affordable housing.

How does PILOT work?

BPCA is not a taxing authority, but rather serves as an intermediary by collecting PILOT, the amounts of which are determined by the New York City Department of Finance. These payments to the City help fund various services, which may include water, sewer, police, fire, and public education, among other City programs.

Goal 4.1

Mobilize our organization to improve the delivery of services and efficiently accomplish our projects

4.1.1 Focus on continual improvement of service delivery

Empower staff to actively partner with constituents, the private and public sectors, and other stakeholders to deliver high quality services that help achieve Authority goals in a fiscally responsible manner

With an ambitious capital plan, a high standard of operational excellence, and a commitment to fiscal responsibility, our ability to deliver services efficiently is critical. This work necessarily requires building strong institutional capacity while empowering our staff with the flexibility and creativity to continually improve the effectiveness and impact of our work.

To ensure proper prioritization and timely implementation of critical work, we will continue to leverage and improve the effectiveness of our Project Management Office (PMO), which tracks status of organization initiatives against their schedules and provides a forum for interdepartmental coordination. The PMO will focus on how to best achieve the goals of BPCA with resources available, seeking to leverage new processes and technologies to improve operations, fiscal controls and quality of service. We will also identify and publish regularly-updated key performance indicators publicly and explore implementing an indicator dashboard for even greater accountability.

To improve the effectiveness of resources, we will continue to invest in the development of staff by providing professional development and leadership opportunities. Further, we will work to ensure competition on procurements by providing the private sector with clear guidance on how to participate with BPCA.

Action type: Underway
Timeframe: Medium



BOSTON CITYSCORE

Case Study: Public Transparency and Accountability

Since 2015, the City of Boston has been using a novel approach to give decision-makers and residents access to daily updates on how the City is performing in areas including trash collection, repairs & maintenance, and crime. Known as [CityScore](#) and published daily on the City's website, the initiative aggregates a variety of key performance indicators into a single number, providing an easy-to-read picture of whether or not performance is exceeding expectations at any given time.

BPCA will explore a similar publicly available dashboard to enhance the community's awareness of progress toward key performance indicators and service delivery goals.

Goal 4.2

Embrace diversity by promoting access to contracting opportunities

4.2.1 Maintain and expand BPCA’s leadership in inclusive procurement efforts

Redouble BPCA’s efforts to maximize utilization of Minority and Women Owned Business Enterprises (MWBEs) and Service Disabled Veteran Owned Businesses (SDVOBs)

We have taken great strides to foster a diverse employee base and build a culture that embraces diversity across our operations. A clear manifestation of that commitment has been through the Authority’s utilization of MWBEs, which, as part of the enabling legislation that created BPCA in 1968, has been a central initiative of our organization since its founding and remains core to our work today. With the more recent advent of the SDVOB program, we have led the charge on engaging this vendor community as well. Last fiscal year, we exceeded the ambitious New York State utilization rate goals for MWBEs and SDVOBs, reaching 39.15% and 8.95% against the targets of 30% and 6% respectively. This included issuing the largest contract to an SDVOB in the program’s history (\$9.8 million to Walker Diving for pile remediation work along the BPC Esplanade).

Action type: Underway
Timeframe: Short

4.2.2 Elevate the Authority’s role as convener and connector for the region’s diverse small businesses

Connect MWBEs and SDVOBs to opportunities within Battery Park City and beyond by serving as both a hub and spoke for small businesses seeking opportunities

Beyond our internal diversity practices, BPCA plays an active leadership role in the broader ecosystem of MWBE and SDVOB networks at the State and City levels. Through our long-standing support of the Competitive Edge annual conference, BPCA has helped to link the region’s diverse small businesses with opportunities in both the public and private sectors. BPCA also plays a leading role in Statewide procurement activities, including the MWBE forum and supporting networking events for small businesses year-round.

Action type: Underway
Timeframe: Short

Goal 4.3

Integrate climate resilience and sustainability into our policies and operations

4.3.1 Incorporate and bolster sustainability programs throughout our operations

Build on BPCA’s longstanding efforts to integrate sustainability concepts and practices into our daily work

BPCA is incorporating sustainability into our internal organizational DNA through targeted policies and programs that will help build the climate resilience of our community. BPCA staff are leading the way toward ensuring that we reduce our carbon footprint by helping the organization become a certified Zero Waste Organization. This effort, combined with our Dog Waste Composting program (which seeks to absorb the 3.5 tons of dog waste collected annually in BPC’s dog parks), our expansion of food waste composting, and our efforts to address our water usage through improved irrigation practices, will transform BPCA’s operations, making them an even greater exemplar model for other public entities, both in the region and beyond.

Action type: Underway
Timeframe: Medium



FUN FACTS ABOUT BPCA SUSTAINABILITY

BPCA, our partners, and other local stakeholders already have a number of sustainability efforts underway in Battery Park City which help improve our community, our city, and our world.

- Our composting program has made great progress in 2019. We’ve increased our neighborhood’s composting from about 20,000 lbs. in 2018 to **more than 33,000 lbs. of compost** already this year (as of mid-October)
- In 2018, we collected and **recycled 1,800 trees worth of paper**
- BPC is home to **7 LEED Certified buildings**
- Stations in BPC served **18,000 Citibike riders** in 2018
- Our recently-initiated **dog waste reduction** program has already collected more than 150 lbs. of waste since the program’s launch one month ago

Goal 4.4

Strengthen collaboration with partners, residents, and stakeholders to promote innovation and clarity in governance practices

4.4.1 Create a comprehensive all-seasons Public Engagement Plan for our stakeholders

Identify and adopt new, best-in-class approaches to engaging the community across all of BPCA's planning and operations

Given BPCA's broad range of programming, events, and capital projects impacting the community, we have an opportunity to build on our strong foundation of openness and transparency and apply a more comprehensive approach to how we communicate and engage with key stakeholder groups. We will source innovative stakeholder engagement and outreach strategies to create a robust Public Engagement Plan that aligns with our calendar of commitments and projects across our entire organization. BPCA also has the opportunity to embed these practices into our standard operating procedures to ensure that principles of engagement and transparency withstand changes in executive leadership.

Action type: Proposed
Timeframe: Medium

4.4.2 Build greater public awareness of BPCA's role within the Lower Manhattan public sector ecosystem

Increase clarity for BPCA constituents on the Authority's specific roles and responsibilities within BPC, New York City, and New York State

Throughout the 2019 strategic planning process, stakeholders expressed a lack of understanding of BPCA's responsibilities and jurisdiction within the neighborhood alongside other State and City Agencies. This confusion can contribute to dissatisfaction with BPCA and government as a whole, as well as erode the trust and public engagement that is critical to achieving BPCA's inclusive vision for the future. We will develop clear and user-friendly materials that explain the Authority's roles and responsibilities, as well as its relationship to other public authorities at work in the Battery Park City community. To ensure broad distribution and uptake of this information, we will incorporate these materials into our work with tenant associations and other local groups, as well as our online presence.

Action type: Proposed
Timeframe: Short

Goal 4.5

Establish best in class practices in our stewardship of public resources

4.5.1 Maintain the Authority's return on its operating dollar and its submission of excess revenues

Maintain a world-class neighborhood balanced with transparent fiscal stewardship

Over the course of our neighborhood's history, BPCA has balanced two competing priorities to varying degrees: making the 92 acres of Battery Park City a world-class community and providing the funds to support State and City programs and services more broadly. Our work to improve Battery Park City must meet our operational and strategic goals as set forth in this document – but it's not paid for with a blank check: It is critical that all resources we expend are accounted for and efficiently utilized, as any unused ground rent and PILOT revenues we collect are transferred to the City of New York to support the City's overall initiatives, including the development of affordable housing and the provision of services to Battery Park City including police, fire, water, sewer, public education, and more.

Action type: Underway
Timeframe: Short

4.5.2 Modernize our management of leased assets to improve accountability, transparency, and effectiveness across the entire portfolio

Leverage technology to streamline the enforcement of BPCA's lease portfolio and ensure all leases are supporting our long term goals

It is critical that all assets within the BPC neighborhood are working to support our long-term goals and vision. Because BPCA owns the land on which BPC's buildings sit and leases it to those building's owners, we have the opportunity and responsibility to ensure that all these assets meet the Authority goals. BPCA will develop and automate lease reporting protocols to more clearly communicate expectations, goals, and a shared vision to building owners — creating enhanced transparency and dialogue between our staff and our lessees.

Action type: Underway
Timeframe: Medium

BPCA Resilience Action Plan Table

Chapter	Goal	Action	
1 An Inclusive Community	1.1 Expand housing affordability and certainty	1.1.1 Create a forward-looking agenda for a more balanced residential community	
		1.1.2 Expand BPCA's toolkit of affordable housing and rent stabilization mechanisms	
		1.1.3 Preserve and expand affordability and increase certainty in existing residential buildings through ground lease negotiations	
	1.2 Promote businesses that are diverse, create social benefit, and provide services that meet the needs of our community	1.2.1 Analyze the neighborhood retail landscape to foster balanced commercial corridors	
		1.2.2 Expand new approaches to promote existing businesses and attract new businesses and social enterprises to support the neighborhood's needs	
	1.3 Make our streetscape and public spaces accessible and enjoyable to a wide range of users	1.3.1 Create a safe and vibrant South End Avenue corridor	
		1.3.2 Develop inclusive street and public realm design guidelines that embrace all users, regardless of age or ability	
	2 A Safe and Climate Resilient Place	2.1 Adapt our built environment and natural systems to a changing climate	2.1.1 Adapt and protect Battery Park City from the threat of coastal flooding
			2.1.2 Incorporate adaptation and sustainability standards and certifications where applicable
2.1.3 Explore innovative financing, operating, and maintenance mechanisms for upgrading our infrastructure and minimizing risk			
2.2 Develop and implement a strategy to achieve a carbon neutral Battery Park City		2.2.1 Develop a sustainability plan that includes new green guidelines	
		2.2.2 Accelerate neighborhood greenhouse gas reductions	
		2.2.3 Explore district scale energy efficiency and clean energy solutions	
2.3 Support and augment the safety and security services within BPC		2.3.1 Launch the ReadyBPC program to ensure residents are prepared for future shocks and stresses	
		2.3.2 Ensure safe and strong infrastructure by assessing risk and designing solutions in coordination with key partners	

Chapter	Goal	Action
3 Vibrant Public Space	3.1 Provide dynamic and diverse programming across Battery Park City that welcomes and brings together a wide range of residents and visitors	3.1.1 Promote well-being and lifelong learning through our world-class events, arts, and natural environment
		3.1.2 Create a comprehensive portfolio of activities and events
		3.1.3 Highlight programs and events to a broader audience
	3.2 Amplify and steward our world-class public spaces through forward-thinking design, quality, and craftsmanship	3.2.1 Establish BPC as a biodiversity haven in NYC
		3.2.2 Enhance the beauty and excellence of our public spaces
	3.3 Remain fertile ground and an international destination for world-class public art and culture	3.3.1 Inspire our community and visitors through public art projects
	3.3.2 Maintain and amplify partnerships with local cultural and educational institutions	
4 Leadership for the Future	4.1 Mobilize our organization to improve the delivery of services and efficiently accomplish our projects	4.1.1 Focus on continual improvement of service delivery
	4.2 Embrace diversity by promoting access to contracting opportunities	4.2.1 Maintain and expand BPCA's leadership in inclusive procurement practices
		4.2.2 Elevate the Authority's role as convener and connector for the region's diverse small businesses
	4.3 Integrate climate resilience and sustainability into our policies and operations	4.3.1 Incorporate and bolster sustainability programs throughout our operations
	4.4 Strengthen collaboration with partners, residents, and stakeholders to promote innovation and clarity in governance practices	4.4.1 Create a comprehensive all-seasons Public Engagement Plan for our stakeholders
4.4.2 Build greater awareness of BPCA's role within the Lower Manhattan public sector ecosystem		
4.5 Establish best in class practices for stewardship of public resources	4.5.1 Maintain the Authority's return on its operating dollar and its submission of excess revenues	
	4.5.2 Modernize our management of leased assets to improve accountability, transparency, and effectiveness across the entire portfolio	

Acknowledgements

The success of this plan is a credit to the dedication, attention, and thoughtfulness of the broad range of stakeholders who contributed to it — including Battery Park City Authority Board members and staff; the administrations of Governor Andrew M. Cuomo and Mayor Bill de Blasio and all local elected officials for their input and advocacy; Community Board 1; Borough of Manhattan Community College; residential and commercial landlords and tenant leadership; community residents; and leaders of our local cultural institutions and schools. Special thanks go to the team at 100 Resilient Cities and Resilient Cities Catalyst, for shepherding our community through this process, and for their thoughtful engagement throughout.

References

100 Resilient Cities. (n.d.). *What is Urban Resilience?* Retrieved July 3, 2019, from 100 Resilient Cities: <http://100resilientcities.org/resources/#section-1>

Alexander Cooper Associates. (1979). *Battery Park City Draft Summary Report* and 1979 Masterplan. New York.

Battery Park City Authority. (2017, July 24). *Battery Park City An Open Community Meeting July 2017*. Retrieved June 28, 2019, from <http://bpca.ny.gov/wp-content/uploads/2015/03/BPC-Open-Community-Meeting-July-24-2017-FINAL-1.pdf>

Battery Park City Authority. (2017, March 22). *Battery Park City Open Community Meeting March 22 2017*. Retrieved June 28, 2019, from <http://bpca.ny.gov/wpcontent/uploads/2015/03/Full-deck-correct-date.pdf>

Battery Park City Authority. (2017, November 14). *Battery Park City Open Community Meeting November 14 2017*. Retrieved June 28, 2019, from <https://www.onstage.live/bpca/bdmtg111417/>

Battery Park City Authority. (2018, June 6). *Battery Park City Open Community Meeting June 6 2018*. Retrieved June 28, 2019, from <https://bpca.ny.gov/wpcontent/uploads/2018/06/BPC-Open-Community-Meeting-June-6-2018.pdf>

Battery Park City Authority. (2018, March 5). *Battery Park City Open Community Meeting March 5 2018*. Retrieved from <http://bpca.ny.gov/wpcontent/uploads/2018/03/March-Community-Meeting-Draft.pdf>

Battery Park City Authority. (2019, February 13). *Battery Park City Open Community Meeting February 13*. Retrieved June 28, 2019, from <https://bpca.ny.gov/wpcontent/uploads/2019/02/February-2019-BPC-Open-Community-Meeting.pdf>

Battery Park City Authority. (2019, June 28). *Report to Manhattan Community Board 1 – Battery Park City Committee, Wednesday, March 6, 2019*. Retrieved from Battery Park City Authority: <https://bpca.ny.gov/wp-content/uploads/2019/04/BPCCommittee-Report-March-6-2019.pdf>

Battery Park City Authority. (2019, June 28). *Report to Manhattan Community Board 1 – Battery Park City Committee, Wednesday, September 5, 2018*. Retrieved from Battery Park City Authority: <https://bpca.ny.gov/wp-content/uploads/2018/09/BPC-Committee-Report-September-5-2018.pdf>

Battery Park City Authority. (2019, June 28). *Resiliency and Sustainability*. Retrieved from Battery Park City Authority: <https://bpca.ny.gov>

Battery Park City Authority. (2019, March 12). *South Battery Park City Resiliency: Community Engagement Meeting*. Retrieved from <https://bpca.ny.gov/wpcontent/uploads/2019/03/SBPC-Community-Engagement-Meeting-2-March-1220192.pdf>

Crowe Horwath LLP. (2018). *Battery Park City Authority Risk Assessment Results and Proposed Internal Audit Plan*.

De Avila, J. (2011, May 11). *Battery Park City in Land Deal*. Retrieved from The Wall Street Journal: <https://www.wsj.com/articles/SB1000142405274870386420457631558425488600>

Fenton, M. (2017, April 13). *Flip This Affordable Housing Unit*. Retrieved from The Broadsheet: <https://www.ebroadsheet.com/flip-affordable-housing-unit/>

Jacobsen, A. (2018, August 15). *Battery Park City: A Resort-Like Community Built on Landfill*. Retrieved May 2, 2019, from <https://www.nytimes.com/2018/08/15/realestate/battery-park-city-a-resort-likecommunity-built-on-landfill.html>

Lipton, E. (2001, January 2). *MISSING ELEMENT/A special report.; Battery Park City Is Success, Except for Pledge to the Poor*. Retrieved from The New York Times: <https://www.nytimes.com/2001/01/02/nyregion/missing-element-special-report-battery-park-city-success-except-for-pledge-poor.html>

NYC Department of City Planning. (n.d.). *NYC Population Factfinder*. Retrieved July 1, 2019, from <https://popfactfinder.planning.nyc.gov/>

Public Authorities Law, Article 8. Miscellaneous Authorities, Title 12. Battery Park City Authority. (n.d.). NY CLS Pub A § 1971, 1972, 1973. NY.

Ronda, M., & Isserles, R. (2018). *Battery Park City Authority Parks User Count and Study 2017-2018*. Borough of Manhattan Community College.

The New York Times. (1968, October 23). *Mayor and Governor View Battery Park Renewal Site*. Retrieved from The New York Times: <https://www.nytimes.com/1968/10/23/archives/mayor-and-governor-view-battery-park-renewal-site.html>

