



**Battery Park  
City Authority**

Phase 1 of BPCA's Resilience Action Plan

# **PRELIMINARY RESILIENCE ASSESSMENT**

Author: Brett Mons, Maria Ortiz  
Date: July 31, 2019

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## Letter from the President

Dear Friends,

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. This initial assessment provides a candid and important view into the opportunities ahead while laying the groundwork for our upcoming Resiliency Action Plan. Battery Park City has come a long way, but by all of us planning responsibly – and together – the best is surely yet to come.

Sincerely,

A handwritten signature in white ink, appearing to be 'B.J. Jones', written in a cursive style.

**B.J. Jones**  
President and CEO

# 1. Introduction

## 1.1 100 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 for 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, the 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. Currently, 100RC operates in six continents, across 47 countries, and in cities with populations ranging from 40,000 to 21 million people. 100RC’s long-term objective has been to change 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. The 100RC model for identifying resilience challenges has also been piloted for smaller-scale communities and institutions that are willing to understand and confront their resilience challenges. This collaboration with Battery Park City Authority is part of this pilot endeavor.

## 1.2 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. 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.

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<sup>1</sup>. 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.

Resilience thinking demands that cities, and institutions within cities, 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, but 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.

## The City Resilience Framework

The City Resilience Framework (CRF) was developed as a lens to understand the characteristics and capacities of cities that encourage and prevent them to adapt and grow in the face of challenges<sup>2</sup>. 100RC uses this lens to frame discussions around the factors that distinguish a resilient city from one that collapses in the face of disruption. The Rockefeller Foundation partnered with the design firm Arup to develop this framework, which is the result of extensive research, including a literature review of over 150 sources, 16 case studies and fieldwork in six cities. 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 and Wellbeing, Economy and Society, Infrastructure and Environment, and Leadership and Strategy. Each dimension contains three to six “drivers,” 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.

<sup>1</sup> (100 Resilient Cities, n.d.)

<sup>2</sup> (100 Resilient Cities, n.d.)

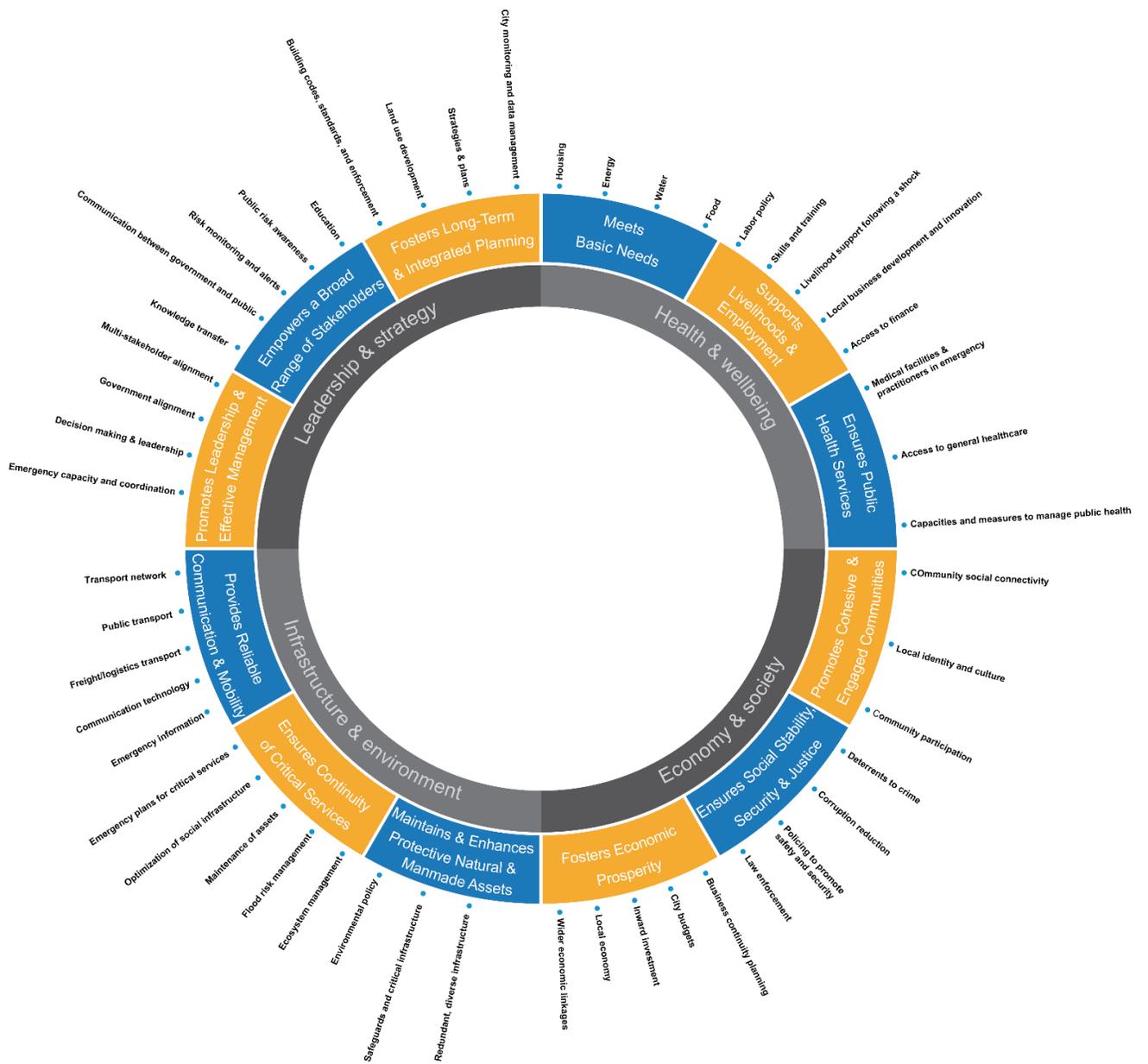


Figure 1. City Resilience Framework (CRF)

Table 1. CRF description

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

### 1.3 Project context and purpose

Battery Park City's story is one of resilience. Borne of dilapidated piers crumbling into the Hudson River, the neighborhood was created both to address urban blight plaguing the area in the mid-20<sup>th</sup> Century, and also to represent "the future of [New York] City," in the words of the project's initial mastermind, an exuberant Governor Nelson Rockefeller. "Unless [planners] look to the future, there will be no city," he said to the New York Times in 1968<sup>3</sup>. That year, 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 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."*

What followed were a series 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. Construction began the next year.

From the groundbreaking for Gateway Plaza in 1980, to the rise of the then-named World Financial Center towers (now Brookfield Place) in the mid-1980s, to the completion of the last development site, Liberty Luxe, in 2011, the site has undergone tremendous physical change 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 a landfill "beach" of the 1980s, their apartment buildings are now surrounded by 36 acres of world-class parks and public spaces that now serve both as a respite and attraction for more than a half-million residents, workers, and visitors annually.

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 with one for a luxury neighborhood whose rent and payment-in-lieu-of-taxes (PILOT) 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 as do 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."<sup>4</sup>

Since its inception, the Authority has been dedicated to environmental responsibility through the development and ongoing maintenance of its facilities. Battery Park City is home to the first high-rise residential building in the U.S. certified with LEED Gold Status, and the first condominium in New York certified with LEED Platinum Status. In addition to environmental responsibility, the Authority provides positive social benefits through parks and open space, cultural facilities, schools, a library, and year-round planned events. The Authority has a robust capital plan that furthers its goals towards sustainability, resiliency, and other social benefits.

Battery Park City's resilience has been tested throughout this history of development. On September 11, 2001, the attacks on the World Trade Center rendered the neighborhood a crime scene, displacing the neighborhood's residents and businesses for weeks and months. Many who returned continue to feel the impact of those events on their physical and mental health to this day. Years later, 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. Five years later, a pickup truck driver killed eight people on the Hudson River Greenway near the northern entrance to Battery Park City in a suspected terrorist attack, heightening safety concerns in the community and beyond.

Having celebrated its 50<sup>th</sup> Anniversary Golden Jubilee in 2018, the Authority is once again looking to the future. In partnership with 100RC and by incorporating a broad range of stakeholder perspectives, the Authority will align resilience principles and the organization's strategic goals to create a coordinated and actionable set of plans that will further strengthen Battery Park City's resilience in the years and decades to come.

<sup>3</sup> (The New York Times, 1968)

<sup>4</sup> (Lipton, 2001)

BPC by the numbers

What's here



36 acres of parks



4 public schools



10 M SqFt commercial space



7.2 M SqFt residential space

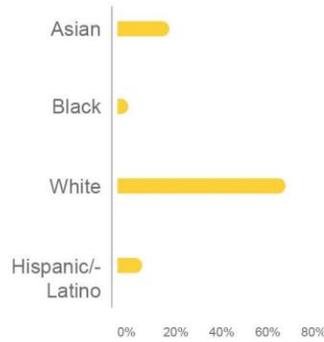
Most of BPC is built on 1.2 million cubic yards of dirt and rocks that were excavated during the construction of the World Trade Center.

Population



15,885

Racial makeup

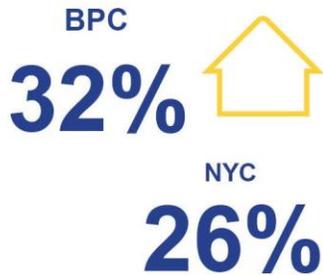


Educational attainment



graduate or professional degree

Households



households with own children under 18 years

Housing tenure



renter occupied

Housing cost burden



% of households in BPC that are rent-burdened

Timeline of formative events in BPC



## 1.4 Overview of activities and methodology

### Developing a Resilience Action Plan for BPCA

In early May, BPCA partnered with 100RC to develop a Resilience Action Plan. The process focuses on maximizing the use of information that already exists, building alignment between resilience principles and BPCA's goals, and incorporating stakeholder perspectives. 100RC adapted their resilience planning process to accommodate a shorter timeline and the sub-city jurisdiction of Battery Park City. 100RC designed a two-phase process that includes:

- Phase 1: Preliminary Resilience Assessment
- Phase 2: Resilience Action Plan

Phase 1 of this endeavor is designed to leverage the insights and knowledge already gathered by BPCA staff and select stakeholders to create a holistic overview of BPCA's resilience-building opportunities and challenges. This phase also entails synthesizing diverse inputs in a short amount of time to ready the team for Phase 2, which is described in Section 3 of this report. This first phase, culminating in the publication of this report, is designed to answer three questions:

1. What are the areas of resilience that are most important to BPCA?
2. What is BPCA doing with regards to these priority areas?
3. How do stakeholders perceive the work done by BPCA in these areas?



Figure 2. Resilience Action Plan timeline



## Tools

Drawing on its global experience in over 100 cities, 100RC designed a participatory process to complete the resilience assessment of BPC. 100RC chose to utilize three processes to assess BPC's resilience and address the questions described above – the Perceptions Assessment Tool, Actions Inventory Tool, and a shock and stress prioritization process.

**Perceptions Assessment Tool:** This assessment seeks to provide an understanding of how people in BPC experience its resilience strengths and weaknesses and then analyzes them against the City Resilience Framework (CRF). To collect, record, and analyze information about how people define and experience resilience in BPCA, 100RC used the Perceptions Assessment Tool. 100RC considers a “perception” any stakeholder comment regarding the physical space, programs, and policies, as well as other observations about the stakeholder's community. Perceptions were gathered through a baseline review of information provided by BPCA, open ended questions in an online questionnaire, group and individual interviews, and a public workshop.

The output from the tool is a consolidated and well-organized catalog of large numbers of stakeholder perceptions analyzed across the 12 drivers of the city resilience framework.

**Actions Inventory Tool:** The inventory is a repository of existing programs, projects or plans that can be leveraged or linked into the Resilience Action Plan. To create this inventory, 100RC has developed the Actions Inventory Tool, based on the City Resilience Framework, to help 100RC catalog existing actions that contribute to a city's overall resilience. An “action” can be:

- Any plan, strategy, program, project, practice, initiative, legislation or funding that is deliberately designed to contribute to the protection, function or advancement of the city
- Spatial or non-spatial, and can be driven by businesses or civic organizations, or local, municipal, regional or state government entities
- In planning, in execution, completed or on hold

The output from the tool is a comprehensive list of actions and a baseline of city activity across the 12 drivers of city resilience. The outputs from the tool were overlaid with the output from the Perceptions Assessment Tool to show where there are gaps between actions and perceptions.

**Shocks and stresses prioritization process:** This process is intended to help BPCA better understand its challenges and the interdependency of those challenges. Given the complexity of this activity, 100RC developed a basic process to first solicit rankings on a set list of shocks and stresses via an online questionnaire. Using the questionnaire results as a baseline, interviews were held with key stakeholders and a risk assessment module delivered in a workshop contributed to developing a nuanced understanding of the top-rated shocks and stresses. It is designed to expand the current thinking of stakeholders, better understand top-of-mind resilience challenges but also surface challenges that may not be at the top of BPCA's agenda but are still of concern to stakeholders.

The output of this process is a prioritized list of shocks and stresses that are important to address in order to improve BPC's resilience.

Battery Park City stakeholders, including residents, business owners, staff, and not-for-profit and City government representatives gather for a workshop on BPC resilience.



## Data collection

As detailed in table 2, 100RC used four data collection methods to gather inputs for the tools described above.

Table 2. Resilience assessment tool and collection method

Tool	Baseline review	Online questionnaire	Interviews	Workshop
Perceptions Assessment	●	●	●	●
Actions Inventory	●		●	
Shocks and stresses prioritization		●		●

### Method

**Baseline review:** To understand BPC’s baseline context and key opportunities for resilience building, 100RC worked with BPCA to identify, collect, and review enabling legislation, plans, policies, and other “listening and learning inputs” provided by BPCA. This included a review of BPCA’s Open Community Meetings, which are held quarterly to brief the community and the public on the status of major projects, solicit input from the public on those projects and any other items they so choose.

Information collected in the baseline review was used as inputs for the Perceptions Assessment Tool and Actions Inventory Tool.

**Online questionnaire:** 100RC designed, and BPCA issued, a 15-minute questionnaire to their network of stakeholders. In total, 139 respondents initiated the questionnaire and 124 respondents completed all the questions. The questionnaire was comprised of two demographic questions, 47-rapid response questions which allowed respondents to rate shocks and stresses, and two open-ended questions requesting perceptions.

Information collected from the questionnaire was used as an input for the Perceptions Assessment Tool, Actions Inventory Tool, and the shock and stress prioritization process.

**Interviews:** Reviewing documents and asking static questions in an online format is useful when collecting comprehensive sets of information, but to understand the nuances of that information 100RC, with organizational support from BPCA, hosted five group interviews and two individual interviews with a variety of BPC stakeholders. 100RC used the results from the questionnaire and the City Resilience Framework to guide the conversations.

Information collected from the interviews was used as inputs for the Perceptions Assessment Tool and to a lesser degree the Actions Inventory Tool.

**Workshop:** To close the data collection stage of the resilience assessment, 100RC and BPCA hosted a public workshop on June 19 with approximately 40 participants representing businesses, residents, Hudson River Park Trust, Allied Universal security, New York City Government (Mayor’s Office of Resilience and Recovery, Department of City Planning, Department of Environmental Protection, and Office of Deputy Mayor of Operations), BPCA staff, and facilitators from 100RC. The workshop consisted of three modules:

1. Introduction to Urban Resilience
2. Exercise 1: Shocks and stresses risk matrix
3. Exercise 2: Resilience diagnosis

Information collected from the workshop was used as inputs for the Perceptions Assessment Tool and the shock and stress prioritization process.

# 2. Results

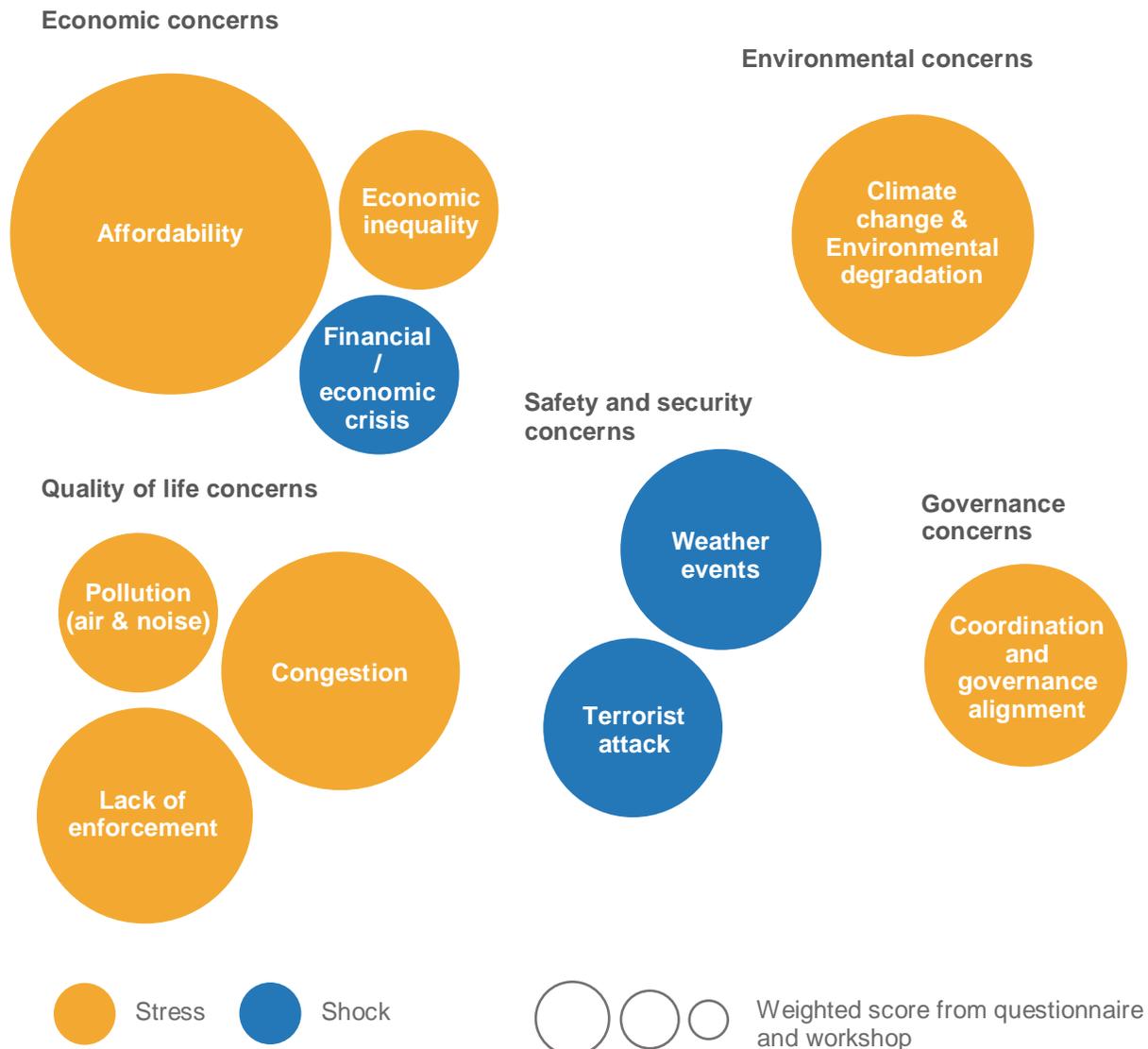
## 2.1 Prioritized list of shocks and stresses

Battery Park City is a dynamic community with a rich history and enormous potential. However, there are challenges that BPCA – in collaboration with state, city, academic, private, and non-profit partners – should address to improve its resilience and continue its governance as an example for other communities in New York City and beyond. It is important to recognize that the causes and effects of these shocks and stresses are not always the direct responsibility of BPCA. However, BPCA does have the power to influence the various responses to

these shocks and stresses, which makes them valuable considerations in this strategic planning process. For a full list of the shocks and stresses discussed in this process and the weighted scores of those concerns, please refer to the appendix.

The following are prioritized shocks and stresses that were of primary concern (top ten) to those involved in this assessment and a brief description of what, specifically, these shocks and stresses mean to stakeholders.

Figure 3. Prioritized shocks and weighted scores



## Economic concerns – Affordability, financial / economic crisis, and economic inequality

Affordability was the most reported concern that stakeholders participating in this assessment mentioned. This concern is highly interdependent with other shocks and stresses and extends beyond housing affordability to include:

- Commercial rents and the challenge in providing businesses that serve the community’s basic needs (groceries, health clinics, laundry, and other services)
- Housing
  - Challenges for residents to age-in-place
  - Lack of affordable housing options for people of all income levels—including all those who work in BPC (nannies, restaurant staff, security guards, BPCA staff, et al.)
  - How BPC contributes/impacts affordable housing in New York City as a whole
  - Loss of middle-class housing and influx of absentee tenants
  - Lack of diversity – 69% of residents identify as White, compared with 32% of New York City as a whole<sup>5</sup>
  - BPC has the highest turnover of tenants in rent-stabilized or, in BPC’s case, quasi-rent-stabilized, apartments of any community in New York City<sup>4</sup>
- Stability of ground leases and ability for building owners to plan maintenance or upgrades

The fear of another financial or economic crisis – such as the Great Recession in 2008 – scored high on the list of concerns identified in the questionnaire distributed for this assessment. Participants in interviews and the workshop highlighted the acute concern that as the economy shifts from regular-full time employment to a “gig economy” residents and visitors to BPC are more vulnerable to shifts in macroeconomic factors.

Stakeholders also indicated concerns about growing inequality within BPC and the prospect of being priced-out of their community. According to the Department of City Planning’s Population Factfinder, BPC is the neighborhood in New York City with the 5<sup>th</sup>-highest annual median household income —\$185,275 —more than threefold the annual median household income of New York City as a whole.<sup>6</sup> Stakeholders identified interdependencies in inequality, affordability, and lack of diversity in BPC as contributing factors to a perceived sense of “loss of community”, which can have significant implications to the resilience of BPC.

## Environmental concerns - Climate change & Environmental degradation

As a relatively small community compared to the whole of New York City, BPC stakeholders have expressed concern with their contributions to climate change, environmental degradation, and how those contributions affect flooding in their community.

While BPCA will not be able to eliminate climate change single-handedly, it can continue to demonstrate leadership this effort. To date, BPCA has pioneered sustainable development in North America with two notable residential projects: the Solaire, the first high-rise residential building in the U.S. to receive LEED Gold certification; and the Verdesian, New York City’s first condominium to receive LEED Platinum certification. However, as the ground lease landlord of over 17.2 million square feet of commercial and residential space, stakeholders participating in 100RC’s outreach efforts generally believe that BPCA is in a particularly influential position to serve as a leader in environmentally-friendly actions.

In addition, as coastal residents and workers with Superstorm Sandy fresh in their minds, stakeholders are especially concerned about sea level rise, an increased frequency of severe storms, and flooding.

## Quality of life concerns – Congestion, pollution, and lack of enforcement

With engaging programming, interesting and beautiful open space, and world class dining, shopping, and museums BPC has become a premier destination for visitors. However, with more than a half-million people visiting the parks of BPC each year, and nearly half of those visitors originating outside of BPC (people who are not residents of BPC), there is some contention among local stakeholders between the neighborhood’s role as a premier destination for visitors, and the notion that “this ‘park’ is also our backyard”. In the stakeholder interviews, the online questionnaire, and the workshop, stakeholders consistently voiced concern about increasing crowds and the many events that are hosted and permitted, such as large-scale events on the Waterfront Plaza and fundraiser runs throughout the neighborhood.

Concerns about traffic congestion extended beyond the influx of non-resident visitors to issues related to the daily flow of local pedestrian, bicycle, and vehicular traffic. Chief among these concerns is the number of delivery vehicles that illegally double-park, which further exacerbates congestion. Many stakeholders believe the issues tied to congestion are caused by a lack of enforcement of park rules, traffic laws, rampant illegal placard parking and pedestrian/bicycle traffic flows on the BPC Esplanade. They also suggested a lack of balance in events that take place in the parks, in terms of the value some types of events add to the community (for example, permitted walks) in relation to the operational impact of the crowds those events draw.

According to stakeholders, increasing numbers of visitors to BPC also seem to be causing concern around air and noise pollution. Specifically, stakeholders complained of idling cars, tour buses, and delivery vehicles; circulating app-based vehicles; and loud boats and ferries as contributors to air and noise pollution. Generally, participants pointed out that, similar to the issue of congestion, better enforcement of rules and laws would help mitigate air and noise pollution.

<sup>5</sup> (NYC Department of City Planning, n.d.) <sup>4</sup> (Fenton, 2017)

<sup>6</sup> (NYC Department of City Planning, n.d.)

It is important to recognize that stakeholders typically oscillated between excitement of being part of a desirable community and protective feelings of “this is our backyard”. Many stakeholders stressed balancing the desire to attract visitors and controlling crowds – congestion – with residential quality of life as a priority that BPCA should consider.

### Safety and security concerns – Terrorist attack and weather events

Several stakeholders taking part in interviews suggested that BPC residents can be broken into two categories – those who lived in the neighborhood during the attacks of 9/11 and those who moved to the neighborhood after reconstruction. However, regardless of which group stakeholders may fall into, the fear of experiencing another devastating terrorist attack is engrained in the culture of BPC. This was only exacerbated following the truck attack in 2017.

Almost without variance, stakeholders voiced their concern with experiencing another damaging and disruptive weather event like Hurricane Sandy. However, this concern was diminished slightly in the eyes of stakeholders given they have confidence in the planning BPCA and the City are conducting now on this issue, although some stakeholders discussed their anxiety in the ability of the City to execute flooding measures in a timely manner – “Is the City capable of acting quickly enough before we have another event?”.

### Governance concerns – coordination and governance alignment

Governance is a complicated and potentially sensitive topic that was expressed by most stakeholders, albeit with variations in their specific concern or the jurisdiction identified. This topic is also cross-cutting, meaning that concerns in governance impact all shocks and stresses described above. Stakeholders largely agreed that BPCA’s current administration has made great strides improving transparency and public participation, maintaining the grounds, providing engaging programming, and is getting better at planning for the future. However, stakeholders identified four topics of concern relative to governance: lack of integration; lack of coordination with the City of New York; political instability, changes in administration, legacy corruption, and board/staff makeup; and confusion over responsibilities.

All stakeholder groups (residents, businesses, institutions, academics, and BPCA staff) discussed issues related to insufficient integration, sharing, coordination, and cooperation amongst the varied stakeholders in BPC. BPCA staff discussed breakdowns in communication across staff in different departments within the organization. For example, some staff expressed concern about being unaware of activity in BPC, including large events, construction, or changes in the physical environment. Staff also expressed concern about the need to better integrate emergency planning for BPCA and its

ground lease tenants. BPCA staff, businesses, and residences all expressed concern over collaboration and integrated planning with BPC’s neighbors and other lower Manhattan neighborhoods. The business representatives that participated in interviews also expressed concern about integrated planning within their sector. The organizations interviewed discussed the measures they are taking individually to protect their assets and pointed out that they don’t coordinate on those efforts and aren’t aware if those investments will have negative effects on other properties or systems.

Given the coordination needed between BPCA and City government in the execution of its capital plan, as one prominent interview expressed, “BPCA is at the whim of the City of New York!” Several stakeholders professed their confidence in the ability of BPCA to plan but were concerned with the City’s authority to obstruct work and their tendency to take longer to act given their size. According to some stakeholders, “people” think that BPCA can do whatever they want as a State authority, but in fact the City of New York has approval rights over BPCA’s capital budget and some aspects of its infrastructure and built environment.

As described in section 2.2 of this report, stakeholders are quite happy with BPCA’s transparency and engagement with the community. However, many stakeholders – particularly the residents of BPC – are concerned that this transparency and public engagement will fluctuate with the administration of BPCA. Many participants worry that the administration of BPCA is too dependent on the disposition and openness of the President and CEO and worry that policies and practices will drastically change if the Governor decides to appoint a new administration. BPCA was designed to avoid political intervention and volatility, but this has not been successful in the eyes of the stakeholders. Corruption scored within the top-ten of concerns according to the questionnaire distributed by 100RC. This “surprised but does not shock” stakeholders and is primarily attributed to previous administrations and resident discontent that more BPCA staff and Board members are not neighborhood residents. Although recent state legislation requires that two of the seven BPC board members reside in BPC, resident interviewees expressed that they were unsatisfied with efforts to better “democratize” BPCA’s Board.

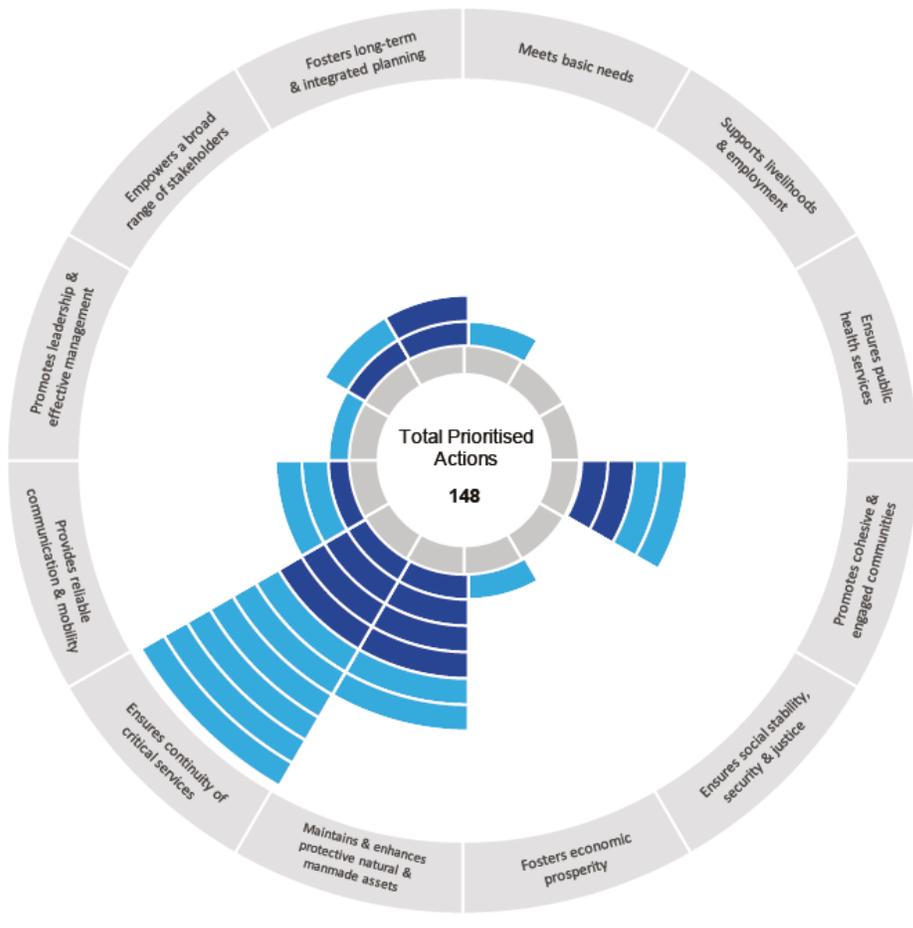
Finally, to a lesser degree than the issues described above, stakeholders expressed concern regarding the overall lack of understanding of what BPCA is responsible for, what they can influence, and what is completely outside their jurisdiction. This perception was not lost on BPCA staff, who appear to be aware that their structure confuses the public and the public often convolutes government entities. This stress may contribute to dissatisfaction with government in situations when the public can’t identify the correct entity to help them with problems or to navigate bureaucracy, further contributing to a disconnected and unengaged community. BPCA has recently been working to educate the public on its structure to help clarify this.

## 2.2 Resilience diagnosis

The resilience diagnosis uses the CRF to assess BPCA’s performance in the context of the twelve action-areas, or drivers promoted by the framework. The observations and results below reflect the information gathered by 100RC through the processes described in section 1.4 – *Overview of activities and methodology*. BPCA does not have complete control over each driver, but BPCA does have the power to influence each driver. As such, 100RC has attempted to describe which elements of each driver BPCA has control over and which it simply influences.

## Actions inventory

The bulk of the actions analyzed with the Actions Inventory Tool are classified under one dimension – *Infrastructure & Environment*. This is not surprising given the prominence of maintenance and provision of open space in BPCA’s mission. These asset management activities range from site specific interventions such as repairing leaks and pile remediation to the routine maintenance activities performed by BPCA staff. Similarly, the analysis demonstrates BPCA’s efforts to *promote cohesive & engaged communities*, which was a common topic raised by stakeholders and reflects BPCA’s mission. BPCA currently has very few actions in the dimension *Leadership & Strategy* but it is important to recognize that this Resilience Action Plan is not included in the analysis and the resulting medium-term strategic plan will likely fill this gap.



**How to read this graph**

This “tool output” is designed to visualize what actions are currently being undertaken, around what resilience drivers they concentrate and to see if there are any resilience areas that do not appear to be fully addressed. Each action was assigned a “primary” and “secondary” driver and classified according to the resilience driver they relate to. The distribution in the graph reflects this classification, and each segment corresponds to 10 actions.

**Legend**  
■ Primary  
■ Secondary

Figure 4. Actions Inventory Tool output

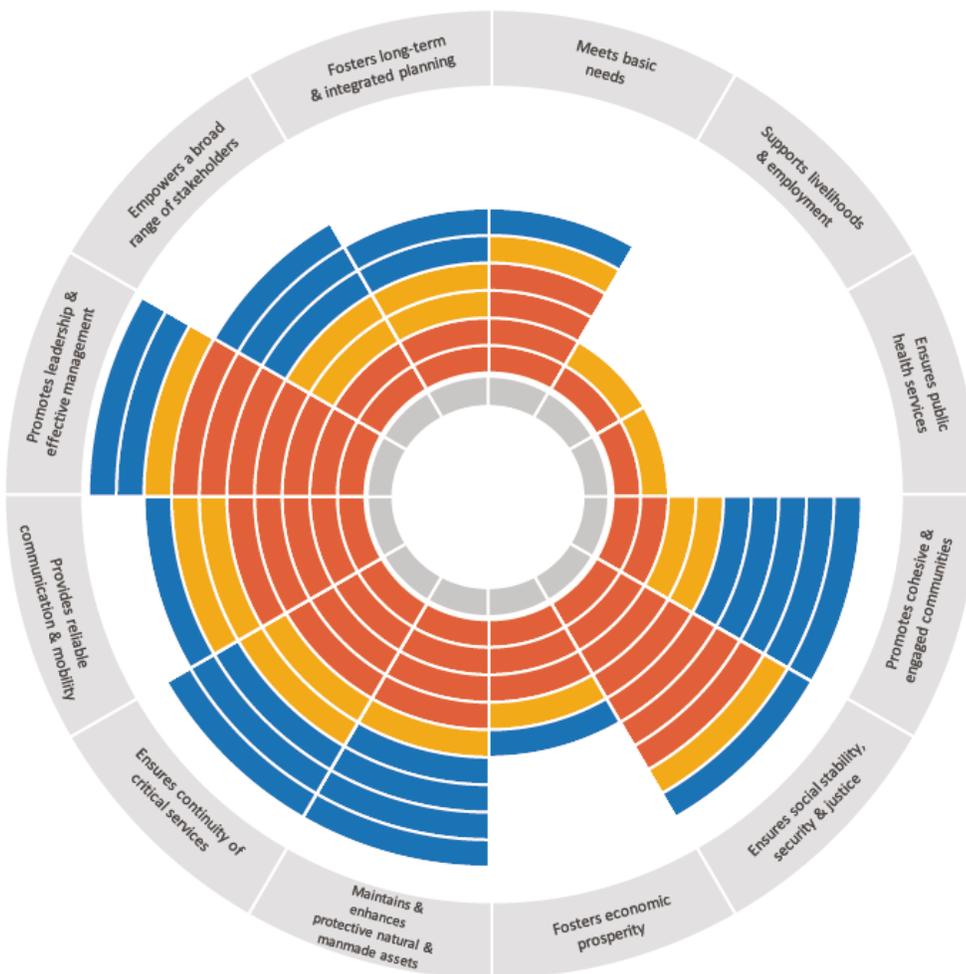
## Perceptions

Overall, BPCA has a positive reputation among the stakeholders participating in this assessment. Several times throughout the process, stakeholders expressed their satisfaction with BPCA prior to acknowledging a need for improvement. One stakeholder stated, “Let’s be clear, this is not a place that needs fixing. Improving? Yes.” It is therefore important to recognize that although stakeholders did point to many areas of strength, they tended to focus on drivers that could be improved. This is not unusual in this type of analysis, where the focus is primarily on gaps rather than opportunities. Generally, stakeholders’ perceptions concentrated on the CRF drivers that BPCA has some control over and expressed less observations on drivers that are not seen to be under the purview of BPCA (*supports livelihoods & employment and ensures public health services*).

Figure 5 shows the Perceptions Tool output filtered for each of the collection methods described in Section 1.4 – *Overview of activities and methodology*. Each collection

method produced slightly different results, but those differences are a product of the voices each collection method used and the questions or exercises they went through. There is no single collection method that is considered optimal; they all represent a snapshot in time and therefore reflect the “top-of-mind” perceptions of the participants. However, when the collection methods are combined in the Perceptions Assessment Tool, the differences in the collection method are less prominent and the picture is more representative of overall perceptions. The filtered outputs can then be used to add nuance to the analysis. Below is a short summary of each collection method’s output.

The baseline review analyzed perceptions expressed at seven video recorded or transcribed public meetings since 2017. The results are somewhat reflective of the pre-determined topics on the agendas for those meetings and largely represent the opinions of residents who typically attend those meetings. During these meetings, there are several opportunities for attendees to ask questions or give comments. Typically, most attendees are residents, and



**How to read this graph**

This tool output is designed to visualize what are the key factors mentioned by stakeholders as contributing to the city’s resilience, what stakeholders perceive to be the city’s resilience strengths and weaknesses and if there is consensus around the issues that are likely to influence the direction of the city’s resilience strategy. Each factor was color-coded to reflect the classification “need to do better”, “doing well but can improve” and “area of strength. These factors are grouped in the colored segments, and each one represents 8.9 factors. The factors are also classified according to the resilience driver they relate to and are placed in the corresponding segment of the City Resilience Framework.

- LEGEND**
- Need to do better
  - Doing well, but can improve
  - Area of strength

Figure 5. Perceptions Tool output

the positive comments are concentrated in topics that applaud the parks maintenance efforts, community programming and acknowledging BPCA’s thoughtfulness to interact with the community. Concerns were consistently expressed over lack of enforcement of rules including parking, bicycle safety, areas where dogs are permitted, controlling bored youth and visiting crowds. Other concerns were related to managing local congestion and street accessibility.

Interviews for this assessment were conducted with “grass-tops” individuals (people who are thought to represent the opinions of larger groups), as opposed to grassroots individuals (constituents representing their own opinions). These individuals typically had more awareness of BPCA’s *Leadership & Strategy* dimension, which is reflected in their relative concentration in the *promotes leadership & effective management* driver. As representatives of their community who prioritize public engagement, they were also quite interested in discussing the driver, *promotes cohesive & engaged communities*. The interviews also allowed 100RC to collect narratives and develop a more in-depth understanding of the perceptions expressed by interviewees. This information helped to inform the Resilience Assessment analysis.

The perceptions gathered in the anonymous questionnaire were the result of two open ended questions. Over 80% of respondents were BPC residents, and their focus on the *Infrastructure & Environment* driver is not surprising given that many residents are either aware of or involved in the current “resiliency” planning efforts that BPCA has been intensely engaged in over the past few months. It is possible that respondents to the questionnaire assumed this work was part of those projects.

The workshop consisted of a more balanced group of attendees; participating stakeholders represented New York City government, residents, businesses, BPCA staff, and local cultural institutions. In addition, unlike the other collection methods the workshop encouraged participants to discuss areas of strength and improvement equally. The result is a relatively balanced output. Like the perceptions collected through interviews, 100RC was able to gather additional perceptions for each of the drivers. During the workshop, each group of participants chose a person from their group to summarize the takeaways of their discussions, and much of that feedback helped to inform a narrative for the analysis below.



Figure 6. Perceptions Tool output for various collection methods

## 2.2.1 Health and wellbeing



Figure 7. Actions and Perceptions Overlay – Health and wellbeing dimension

- Most of the perceptions categorized as *meets basic needs* refer to stakeholders' perception that BPCA can do more to address housing affordability issues. Specifically, stakeholders identified the lack of low- and middle-income housing, uncertainty caused by pending negotiations on ground leases, rental buildings' potential conversions to condominiums, and the resulting replacement of tenants by absentee owners as principal areas that need to be improved. Stakeholders discussed the expiration of BPCA's master lease in 2069 and the uncertainty that brings both to homeowners and renters.
- Stakeholders also identified the lack of adequate or affordable grocery stores as another issue that needs improvement. High commercial rents have hindered the development of a local small business community, which is in line with concerns expressed by stakeholders regarding the lack of affordable stores catering to household needs and the proliferation of high-end stores. This has also contributed to concerns about the proliferation of vacant storefronts in BPC.
- Stakeholders consistently praised BPCA's role in increasing responsible use of water and energy.

This praise is reflected in the actions BPCA has taken in this area, which are primarily intended to address environmental policy but have secondary effects in providing adequate water and energy. For example, BPCA has taken action to conserve water and reduce the amount of water discharged into the sewer system by installing waterless urinals.

- Resident stakeholders expressed some general concerns about reliable energy provision because of the possibility of experiencing a blackout and suggested increasing renewable energy sources in the local energy portfolio of Lower Manhattan.
- There seemed to be a common consensus among senior citizen stakeholders that BPC should have better access to clinics and hospitals, and expressed concern with their ability to receive immediate care in the event of a medical emergency. During the workshop, stakeholders shared examples of challenges 911 dispatchers had in locating residents' correct addresses within BPC. The seniors also remarked on how this lack of access to healthcare challenges their ability to age-in-place.

## 2.2.2 Economy and society

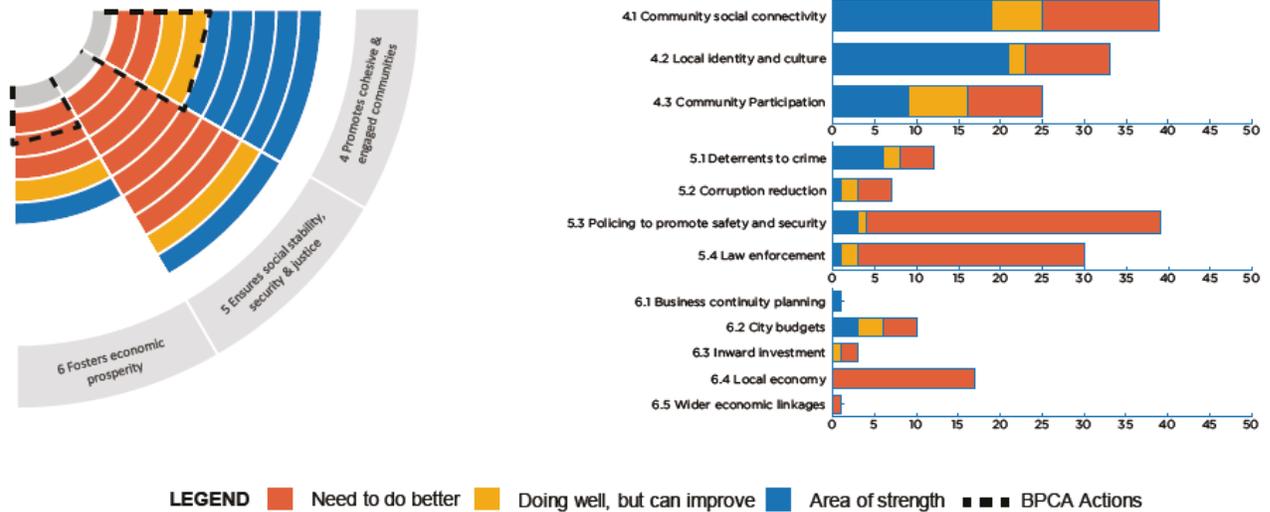


Figure 8. Actions and Perceptions Overlay – Economy and society dimension

- Stakeholders generally agreed that BPCA, and other organizations within BPC such as Brookfield Place and the Museum of Jewish Heritage, provide interesting and engaging programming that serves to promote BPC’s culture and instill a sense of community. However, as reflected in section 2.1 *Prioritized Shocks and Stresses*, some stakeholders had conflicting perceptions about the effects of these programs and believe BPCA needs to do more to balance programming with overcrowding.
- Stakeholders reported being unsatisfied in BPCA’s approach to providing a secure environment free of quality of life concerns, including illegal parking, dog owners that do not respect restrictions, disruptive or dangerous activity in park areas or along the Esplanade, and small disruptions caused by bored youth. Most stakeholders who raised these issues pointed to the transition from the NYC Parks Department’s Parks Enforcement and Patrol Unit officers that used to patrol the parks to private security without enforcement capabilities as the primary cause of this unfavorable perception. BPCA has historically undertaken fewer actions addressing this issue, however, they are undertaking a pilot project to provide BPCA’s security team the ability to issue summonses for certain violations and are in the process of conducting a new procurement for comprehensive security services, which may lead to some of these issues being addressed more fully.
- Perceptions on BPC’s role in *fostering economic prosperity* varies depending on the type of stakeholder. BPCA staff and the businesses 100RC interviewed were confident in BPCA’s financial position and ability to manage their budgets. However, resident stakeholders were confused about what BPCA spends the revenue on and how that revenue could be used to invest within BPC, for example to increase diversity and affordability in the area. Stakeholders also pointed to their apprehension regarding the renegotiation of land-leases, which is an issue that consistently appeared in the *meets basic needs* driver.

### 2.2.3 Infrastructure and environment

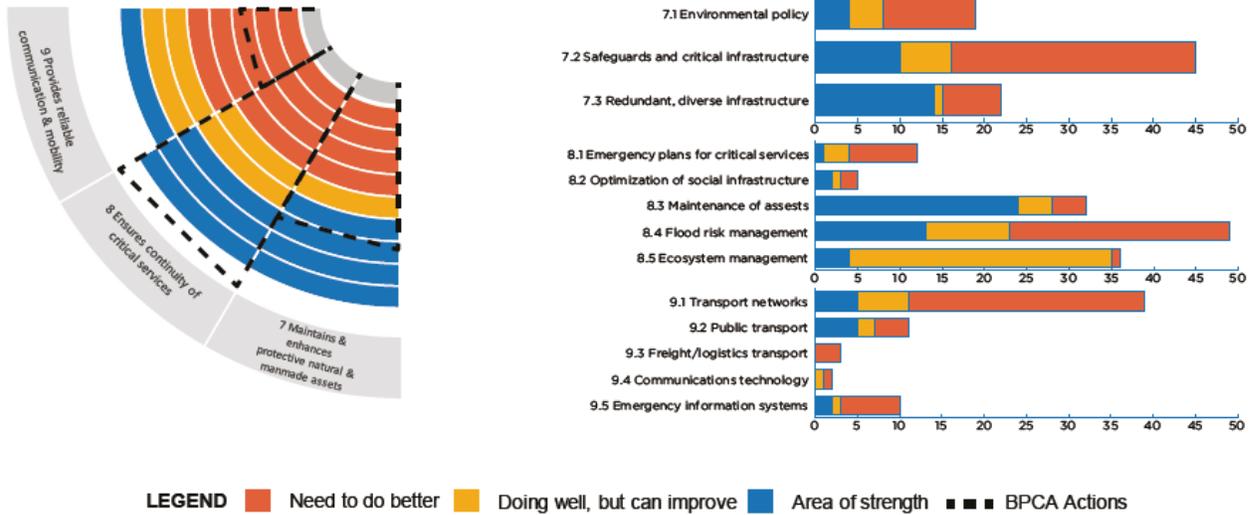


Figure 9. Actions and Perceptions Overlay – Infrastructure and environment dimension

- The relative balance of perceptions in *maintains & enhances protective natural & manmade assets* is reflective of stakeholders' recognition that BPCA is actively working to provide world class public space and to protect the assets in Lower Manhattan. This activity is reflected in BPCA's actions that promote environmental policy and seek to protect critical infrastructure. However, many stakeholders are impatient with the pace at which infrastructure improvements are progressing. This perception is also reflected in the driver *promotes leadership & effective management*, where stakeholder participants complained of the lack of alignment among stakeholders (BPCA, the City of New York, and other Lower-Manhattan stakeholders) and low capacity and coordination to get projects done before another event causes damage.
- According to the Actions Inventory Tool, BPCA has prioritized its work to *ensure continuity of critical services*. Participating stakeholders are overwhelmingly satisfied with BPCA's capacity to

maintain BPC and often praise BPCA's beautification and maintenance efforts in the parks. Stakeholders were less confident in BPCA's plans to respond to emergencies. Like the previous point, stakeholders have seen very little physical interventions as yet in managing flood risk, although there are now four interrelated plans that are in the works.

- While stakeholders are happy with BPC's connectivity to the rest of New York City and the greater region, they were largely dissatisfied with infrastructure related to parking, residential deliveries, and non-motorized transportation. Stakeholders expressed a need for BPCA to better communicate emergency information and implement better wayfinding within the neighborhood (BPCA is in the process of updating its wayfinding across the 92-acre site, and it is possible that some stakeholders are unaware of these planned improvements).

## 2.2.4 Leadership and strategy

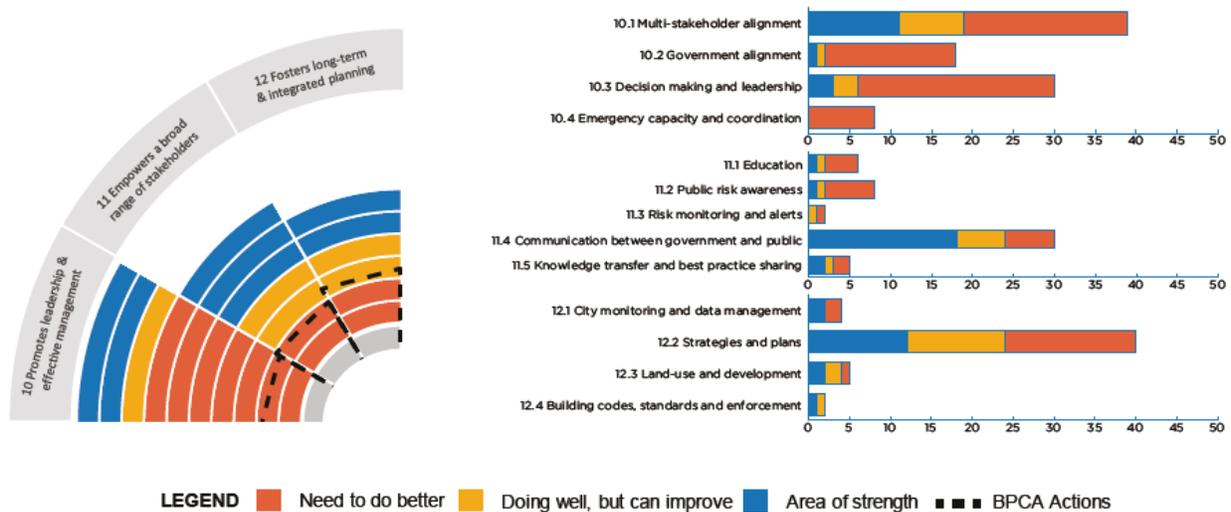


Figure 10. Actions and Perceptions Overlay – Leadership and strategy dimension

- As compared with previous administrations and administration of other jurisdictions, stakeholders reported that BPCA leadership is doing very well. Stakeholders are worried about what happens when the administration changes and believe that BPCA should do a better job at instilling some of the values they currently exhibit in the institution, rather than rely on the approach of the current leader.
- Some stakeholders interviewed for this assessment generally believe that BPCA should improve coordination efforts within BPCA, within BPC, and with its neighbors. Some activity has already been undertaken in this area by BPCA, but that has either not been communicated to the stakeholders or is insufficient in their opinion. For example, businesses within BPC do not coordinate on infrastructure safeguards (for example, temporary storm surge barriers) with BPCA or each other. Another example is the lack of communication regarding upcoming events and how to react in response to an emergency at those events.
- Several themes emerged around this topic which include a perceived lack of urgency in BPCA projects (especially those related to resilience), siloing of departments within BPCA, and a lack of representation in BPCA from residents of BPC.
- Throughout this process, stakeholders consistently expressed gratitude for BPCA's willingness to engage with the public, educate them on activities, and listen to their concerns. Related to the first point, some stakeholders were worried that this culture will not persist past this administration and are seeking methods to institutionalize transparency and engagement. Stakeholders believe BPCA could improve communication and creating awareness about the risk BPC is exposed to, which is reflective of perceptions regarding a lack of urgency in fortifying BPC against future weather events.
- Stakeholders believe BPCA is doing well in terms of shifting from being reactive to being proactive and forward planning. Stakeholders were also receptive to this Resilience Action Plan effort and complimented BPCA for taking a comprehensive and participatory approach to planning. Many of the perceptions expressing discontent about the efforts of BPCA revolve around the lack of a medium-term strategic plan (which this project is seeking to remedy) and the perception that these efforts aren't taking place, which is interdependent with perceptions around a lack of urgency in planning and execution.

### 2.3 Corollary

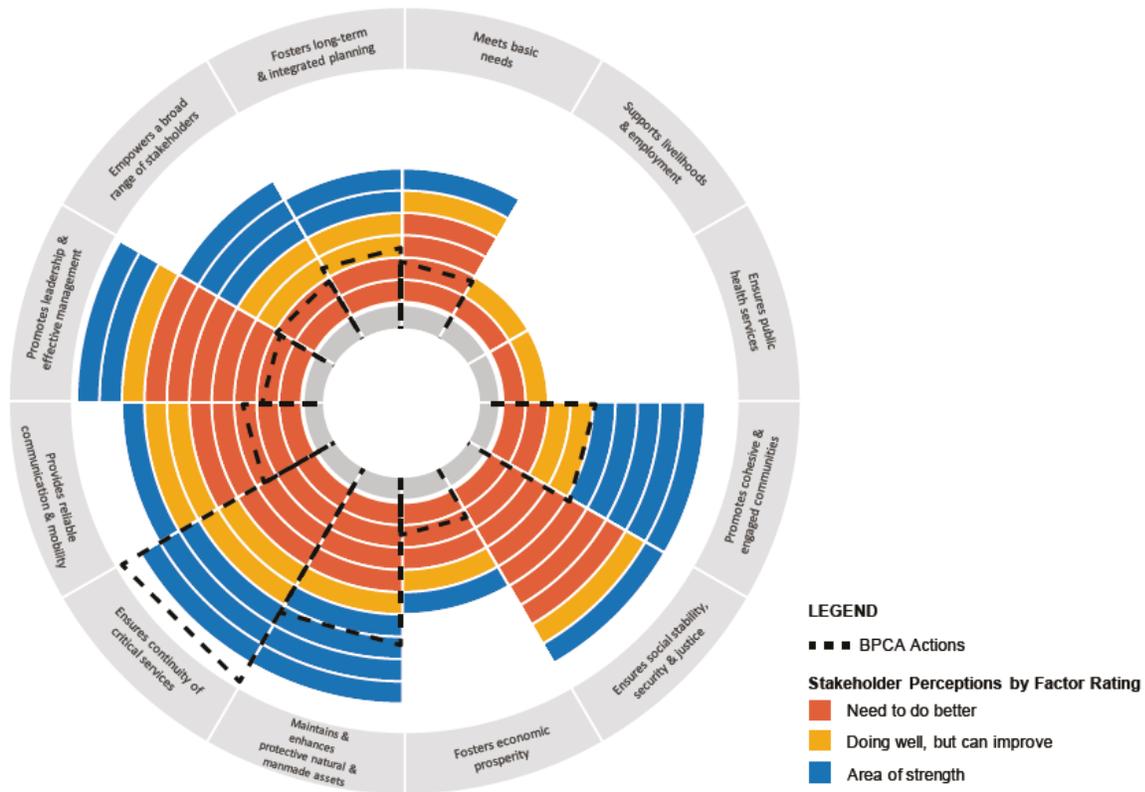


Figure 11. Actions and Perceptions Overlay

There are several priority areas that emerge from the perceptions assessment tool that highlight the interdependencies of urban systems and the importance of viewing these systems with a resilience lens. Principal among them is BPCA’s ability to protect its residents, users, businesses, and assets. According to perceptions, BPCA’s planning and maintenance infrastructure has been rather robust, but the speed to which those actions are executed is a principal concern to the stakeholders. BPCA has many actions to plan for these infrastructure improvements but may encounter challenges when attempting to implement those activities quickly in coordination with other jurisdictions.

BPCA was praised for having inclusive and interesting programming that promotes social cohesion which is complementary to the level of effort BPCA exhibits in this area. Some stakeholders expressed concerns about the community impacts of large permitted events, such as walk-a-thons and film shoots, and how it plans for and manages the crowds and other negative externalities that come with a destination community. There is a clear gap in BPCA’s activities to enforce rules and reduce nuisance crimes with the community’s desire to improve this area.

Stakeholders appear to prioritize affordability and local economic prosperity as priorities according to this assessment. Historically, however, this priority area has not been reflected in the actions BPCA has taken in these areas; in years past BPCA has done very little to address affordability within BPC. As BPCA has begun to undertake these efforts over the past year, it needs to think carefully about what their affordability agenda should be – as a mechanism for creating affordability elsewhere in New York City, improving affordability within BPC, or both.

A cross-functional area that is part and parcel to each of the gaps uncovered in this assessment is the governance structure under which BPCA operates. Stakeholders were relatively happy with improvements made in recent years, but there is still a need for activities to improve public awareness of these changes and perhaps incorporate even more representation from the community in BPCA’s governance structures.

## 3. Resilience action areas

In order to build on its recent success, BPCA must answer or reaffirm decisions regarding how it is governing its residents, businesses, and park users, how BPC is contributing to the resilience of New York City, and what BPC stakeholders need from the City of New York. Phase 1 can be synthesized into the following three areas of intervention and will shape the work of Phase 2. BPCA needs to explore how it can 1) foster a more inclusive, mixed-income residential and commercial community, 2) plan and act more quickly to address shocks to the neighborhood, and 3) institutionalize shared values.

### An inclusive community

BPCA has the opportunity to identify and implement new approaches to promoting affordability for its residents that the area is most at risk for leaving the neighborhood. This includes taking steps to retain and create affordable housing, but it also includes actions that encourage businesses to provide affordable services for residents' needs. BPCA also has the opportunity to better represent its constituents by bringing them into the governance structure of the organization in a way that better reflects constituent's values and engagement with residents. It can also investigate methods to better control crowds in its parks and roadways, and otherwise manage the externalities of having created a world class community that attracts visitors from all over New York City and the world – creating a community that is enriched by its many visitors. These opportunities are important in order to retain a vibrant, diverse community that remains a destination for residents and visitors alike. Some key questions to explore during the next phase of this work are the following:

- How can BPCA retain affordability (housing, commercial rent, businesses that cater to households, etc.) within its jurisdiction?
- How can BPCA become a community to age-in-place well and stop involuntary displacement of residents who want to remain in BPC?
- How can BPCA take community concerns into consideration without reducing its appeal to visitors or compromising its mission? How can BPCA work to reduce nuisance crimes or disruptions to quality of life?

### A safe and climate-resilient place

BPCA has the opportunity be a model for protective and sustainable infrastructure and climate proofing. BPCA has done terrific work building a world class community and now needs to take the appropriate steps to protect that

community and do so in a timely manner. BPCA also has the opportunity to create innovative processes to develop this protective infrastructure and the emergency response agendas it will need through engagement that is the model for others. Protection of the assets that make BPC the success it has become is key to its continued success and that includes protecting not only physical assets, but also the people who live, work, and enjoy its spaces.

- How can BPCA align stakeholders to quickly implement plans to protect infrastructure and create unified emergency response plans?
- How can BPCA continue to robustly plan for climate change, but do so in a manner that acknowledges the urgency of the situation?

### A leadership for the future

BPCA has the opportunity to become an example of governance that is transferable to other jurisdictions within New York City and beyond. Through processes that go beyond consultation and truly engage stakeholders in a back and forth, co-development of plans and programs, BPCA can create an integrated and inclusive governance structure. BPCA also has the opportunity to embed these advances in leadership in the fabric of BPCA's standard operating procedures to ensure that changes in administration are not disruptive to the vision of the organization. These actions could retain and improve communication with residents and users for the future. BPCA also has the opportunity to establish long-term and effective relationships and co-dependencies with its neighbors and the City of New York. These opportunities are important in order to ensure that BPCA is acting on the best available information that is sourced from a wide range of stakeholders. It is also important to improve operational efficiency and reduce obstructionism and instances of dissatisfied constituents. Some key questions to explore during the next phase of this work are the following:

- How can BPCA institutionalize the values expressed by stakeholders in its standard operating procedures so changes in administration have less impact?
- How can BPCA better communicate its vision, goals, objectives, responsibilities, activities, and constraints to the wider public?
- How can BPCA better coordinate and integrate with neighbors, the City of New York, and its staff?

## 4. Next steps

In order to transition the areas of intervention listed in section 3 into a Resilience Action Plan for BPC, 100RC suggests a three-pronged approach; visioning, ideation, and refinement.

### 4.1 Visioning

100RC suggests that Phase 2 begin with a collaborative visioning exercise (vision, goals, objectives) that begins with gathering feedback from constituents and is refined with BPCA staff. This exercise, which will build on the success of the Resilience Assessment Workshop hosted by BPCA and 100RC in Phase 1, consists of two modules. The first module will be a presentation by 100RC and BPCA, repeating back the findings from Phase 1. The second module will be a visioning exercise facilitated by 100RC staff which will begin with collecting what values are most important to the community and identifying what role BPCA should take in instilling those values into its operations. It is not realistic to expect one public meeting to result in a fully fleshed out vision, complete with goals and objectives, so the goal of this workshop will be to collect the language that is important to community members. The team will then package that information and refine it with a smaller group of BPCA staff, leadership, and Board Members to create a *Draft Vision Report* that can be directly linked to the participation of the public.

### 4.2 Ideation

The second activity will be to create a long list of actions that will be further refined in step three. First, 100RC will generate a starter list of actions by taking inspiration from ideas collected in Phase 1, soliciting new ideas from staff and key stakeholders, and consulting 100RC's Global Initiatives Database, which is a collection of over 3500 actionable initiatives put forth by 100RC member cities. The draft vision from step one and the areas of intervention from Phase 1 should be used as a filter to prioritize, exclude, and narrow these ideas.

### 4.3 Refinement

The final step of this process will be an Action Planning Bootcamp facilitated by 100RC staff. During this bootcamp, senior staff members from BPCA will refine and operationalize the long list of actions into a realistic set of actions that will be included in the Resilience Action Plan. The Action Planning Bootcamp will use an analog version of 100RC's Opportunity Assessment Tool (OAT) and the draft vision as the primary framework for this 6-8 hour exercise. The results of this workshop will inform the final content for the Resilience Action Plan, which will be compiled, drafted, and designed by 100RC.

## Appendix: Prioritized list of shocks and stresses with weighted scores

Shock	Rank
Flooding	3.669
Terrorist attack	3.417
Financial / economic crisis	2.676
Power outage	2.568
Cyber attack	2.460

Stress	Rank
Climate change	3.315
Traffic congestion	3.145
Environmental degradation	2.815
Corruption	2.766
Lack of affordable housing	2.694

# Appendix: Baseline review inputs

Source name	BPCA Context	Actions Inventory	Perceptions Inventory
Battery Park City Authority website: sustainability and resiliency sections <sup>7</sup>		●	
BPC Draft Summary Report And 1979 Masterplan <sup>8</sup>	●		
Public Authorities Law, Article 8. Miscellaneous Authorities, Title 12. Battery Park City Authority (NY CLS Pub A § 1971, NY CLS Pub A § 1972, NY CLS Pub A § 1973) (Enabling legislation for BPCA) <sup>9</sup>	●	●	
Battery Park City Authority Risk Assessment Results and Proposed Internal Audit Plan <sup>10</sup>		●	
Battery Park City Authority Annual Report 2018		●	
Battery Park City Authority Annual Report 2017		●	
Lower Manhattan Climate Resiliency Study, 2018 <sup>11</sup>	●	●	
Battery Park City Authority Parks User Count and Study, 2017-2018 <sup>11</sup>	●	●	●
Battery Park City Authority Website: Sustainability and Resilience sections		●	
BPCA PMO Projects list 2019 <sup>12</sup>		●	
BPCA Resiliency Community Update, March 2019, presentation and video recording (Battery Park City Authority, 2019)		●	
BPCA Reports to CB1, March 6 2019 <sup>13</sup>		●	

<sup>7</sup> (Battery Park City Authority, 2019)

<sup>8</sup> (Alexander Cooper Associates, 1979)

<sup>9</sup> (Public Authorities Law, Article 8. Miscellaneous Authorities, Title 12. Battery Park City Authority)

<sup>10</sup> (Crowe Horwath LLP, 2018) <sup>11</sup> Invalid source specified.

<sup>11</sup> (Ronda & Isserles, 2018)

<sup>12</sup> Internal BPCA document provided by Eric Munson

<sup>13</sup> (Battery Park City Authority, 2019) <sup>15</sup> (Battery Park City Authority, 2019)

BPCA Open Community Meeting, February 13 <sup>th</sup> 2019 (Battery Park City Authority, 2019)		●	●
BPCA Report to CB1, February 6 <sup>th</sup> , 2019 <sup>15</sup>		●	
BPCA Report to CB1, September 5 <sup>th</sup> , 2018 <sup>14</sup>			

Source name	BPCA Context	Actions Inventory	Perceptions Inventory
BPCA Open Community Meeting, June 6 <sup>th</sup> , 2018 <sup>15</sup>		●	●
BPCA Open Community Meeting, March 5 <sup>th</sup> , 2018 <sup>18</sup>			●
BPCA Open Community Meeting, November 14 <sup>th</sup> , 2017 <sup>16</sup>			●
BPCA Open Community Meeting, July 2017 <sup>17</sup>		●	●
BPCA Open Community Meeting, March 2017 <sup>18</sup>			●
BPCA Board Comment Session Requests <sup>19</sup>			●
RFP for Physical Site Security Consulting Services		●	

<sup>14</sup> (Battery Park City Authority, 2019)

<sup>15</sup> (Battery Park City Authority, 2018) <sup>18</sup> (Battery Park City Authority, 2018)

<sup>16</sup> (Battery Park City Authority, 2017)

<sup>17</sup> (Battery Park City Authority, 2017)

<sup>18</sup> (Battery Park City Authority, 2017)

<sup>19</sup> Internal BPCA document provided by Eric Munson

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