







HUNTS POINT RESILIENCY PROJECT

Proposed Action Plan Amendment 14 Public HearingApril 27, 2017

PROPOSED ACTION PLAN AMENDMENT 14 HEARING

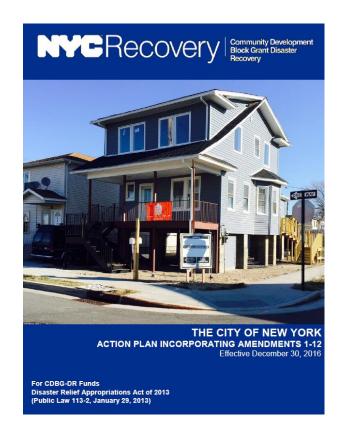
April 27, 2017

1. Action Plan Overview

- 2. Hunts Point Resiliency Project Description
- 3. Public Outreach
- 4. Implementation and Project Funding
- 5. Benefit Cost Analysis (BCA)
- 6. Comment Period

What is an Action Plan?

- New York City received \$4.2 billion for Hurricane Sandy disaster recovery
- \$45 million was allocated for the Hunts Point Resiliency Project
- The Action Plan Describes the City's plan for these funds



Why Are We Here Tonight?

- Rebuild By Design (RBD) was an international resiliency competition; NYC was one of the recipients of the award
- Community engagement is a critical component of that process
- Per HUD requirements, an Action Plan Amendment (APA) for the RBD
 Hunts Point Resiliency Project is being completed to identify project updates
- The Hunts Point Resiliency Project has evolved since Substantial Action
 Amendment 8A (February 13, 2015) and 8B (April 13, 2015)
- Proposed Action Plan Amendment 14 describes these updates
- Action Plan Amendments are subject to public review prior to HUD approval

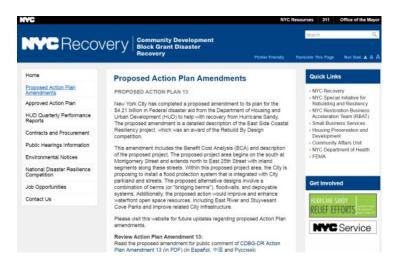
The Comment Process: At Tonight's Hearing

- Oral and written comments may be given at the public hearing today
- Please limit your comments to <u>3 MINUTES</u>
- If you wish to make an oral statement on the record, please fill out a speaker card
- Speakers will be called in the order submitted, starting with elected officials
- Written comment cards are also available

The Comment Process: Online & By Mail

- Comments are accepted through MAY, 14, 2017 at 11:59PM
- Proposed CDBG-DR Action Amendment 14 and public commenting forms are available at http://www.nyc.gov/cdbg
- Written comments may also be direct by mail to:

Calvin Johnson
Assistant Director, CDBG-DR
NYC Office of Management and Budget
255 Greenwich Street, 8th Floor
New York, NY 10007

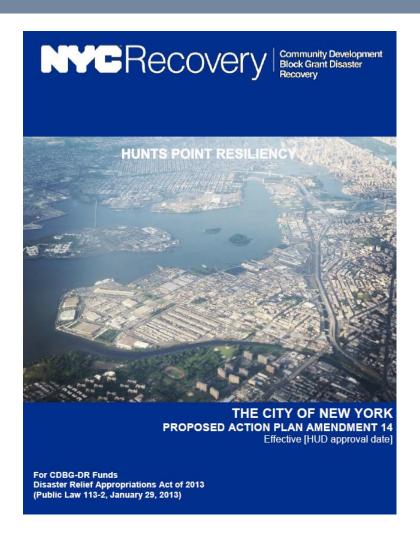


What Happens to Our Comments?

- All comments shall be reviewed and a City response will be incorporated into the 'City's Responses to Public Comments' document
- A summary of the comments and responses will be submitted to HUD for approval along with the revised Action Plan Amendment 14
- The revised Action Plan Amendment 14 will be posted at http://www.nyc.gov/cdbg

What Does the Proposed Action Plan Amendment Contain?

- Project Description
- Implementation Partnerships
- Outreach Plan
- Project Timeline
- Benefit Cost Analysis (BCA)



Where Can I Find the Proposed Action Plan Amendment?

- Hard copies are available today
- Proposed Action Plan Amendment 14 and public commenting forms are available at http://www.nyc.gov/cdbg
- Hard copies for your reference can be picked up at:

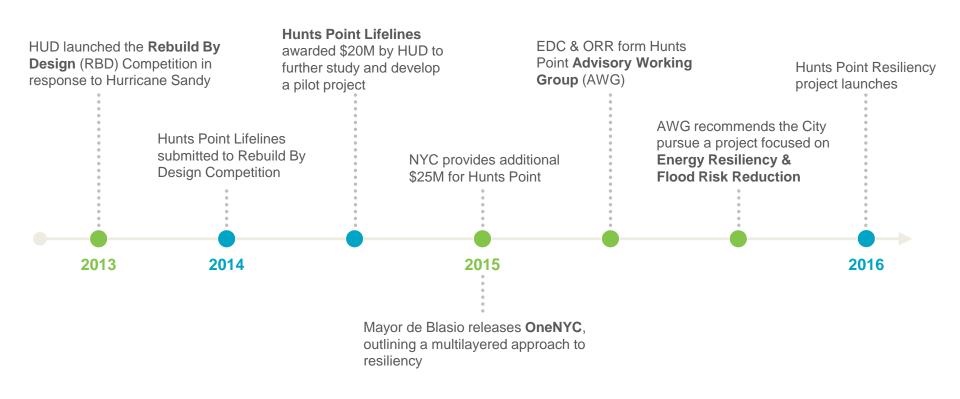
New York City Office of Management and Budget 255 Greenwich Street, 8th Floor New York, NY 10007

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Hunts Point Resiliency: How We Got Here

Awarded RBD funding → Aligned with the community's vision → Commenced Project



Project Study Area



Study Area

0 250500 1,000 1,500 2,000 1:12,000

Project Study Area

- Hunts Point is home to an active and engaged community of 12,300 residents – many of whom are vulnerable residents.
- Hunts Point is an environmental justice community, meaning residents face disproportionate environmental burdens and negative impacts.
- The Hunts Point Food Distribution Center is an important source of food for NYC and the region, distributing 4.5B lbs. of food annually
- Hunts Point is home to many jobs related to wholesale food distribution, light manufacturing, and one of the City's larger wastewater treatment plants

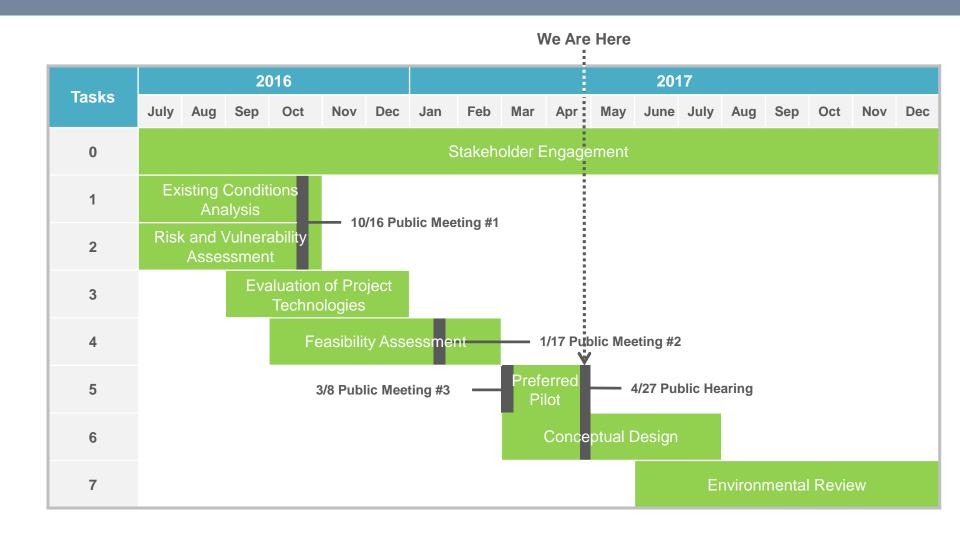
Project Objectives

- The principal objectives of Hunts Point Resiliency Project are to:
 - Address critical vulnerabilities for both community and industry,
 - Protect important citywide infrastructure,
 - Protect existing and future industrial businesses and jobs,
 - Support the community's social, economic, and environmental assets,
 - Use sustainable, ecologically sensitive infrastructure.

Pilot Project Overview

The Energy Resiliency pilot project in this Action Plan Amendment will reduce the vulnerability of the Hunts Point peninsula by providing at least three days of reliable, resilient, and dispatchable power to critical local and citywide facilities during emergency events like a hurricane, power outages, and other threats.

Pilot Project Timeline



Project Overview

- What is not in this Action Plan Amendment:
 - Flood Resiliency Study As part of the Hunts Point Resiliency Project we are also studying the flood threats to Hunts Point and potential flood risk reduction measures. This portion of the study is ongoing and we will engage the community on this later in the Spring through Fall of 2017. Implementation of any flood risk reduction measures are not funded by the HUD funding. By the end of 2017 The City will make recommendation/s for the most appropriate flood risk reduction measure/s and commit to seek additional funding.
 - Community Solar Program As part of the analysis of this project, the potential of solar energy was explored and it was determined there is potential to create a Community Solar Program. The Community Solar Program has not been included in this Action Plan Amendment. The City and NYCEDC are committed to exploring this option beyond the scope of this Action Plan Amendment and HUD funded grant.

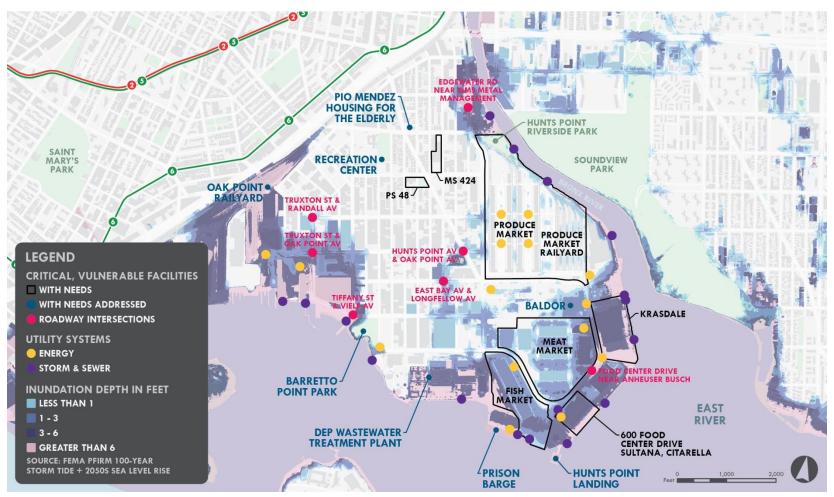
Vulnerability Findings

- Hunts Point is vulnerable to the following Climate Change threats:
 - Sea Level Rise
 - Storm Surge
 - **Extreme Precipitation Events**
 - **Extreme Heat Events**
 - System-wide Infrastructure outages
 - Building or Sub-area level Infrastructure Outages

PROJECT DESCRIPTION PUBLIC OUTREACH **IMPLEMENTATION** BENEFIT COST ANALYSIS COMMENT PERIOD

Vulnerability Findings

CRITICAL VULNERABLE FACILITIES



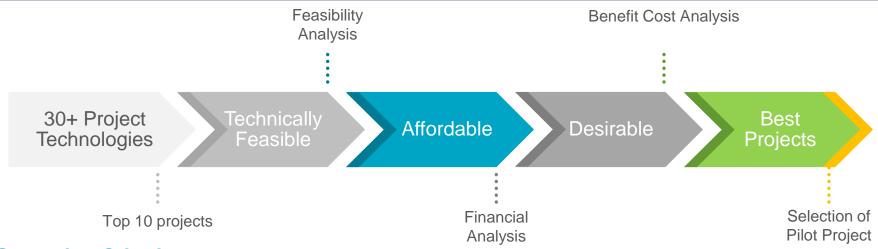
Vulnerability Findings

Key Vulnerability Findings:

- Building-level power outages are a significant and shared threat to residents and businesses in Hunts Point.
- Due to considerable elevation change, the low-lying areas face significant threats from coastal flooding while the upland residential area does not.
- Extreme rain/snow storms are not a major threat in Hunts Point due to the sloping topography in Hunts Point.
- The number of community organizations and history of organizing in Hunts Point can lay the foundation for strong social resiliency.

The City and NYCEDC have recommended a pilot project reduces the vulnerability of Hunts Point to impacts of storm surge, heat waves, and power outages through the lens of resilient energy provisions to critical facilities in the peninsula.

Assessment & Analysis



Screening Criteria

- Resiliency: applicability to critical facilities, dispatchable, reliable for minimum of 3 days, independent utility
- Sustainability: emissions, efficiency, fuel source
- Community benefits: workforce opportunity, scalability
- Constructability: suitable space, required infrastructure, permitting
- Implementability: Schedule, cost to construct, cost/MWh, potential to leverage other funds

Recommended Energy Resiliency Pilot Project



Pilot Microgrid and Solar + Storage: 11.8 MW

	Energy Solution	Building	Capacity
	Rooftop Solar PV and Battery Storage	PS 48	0.1 MW
		MS 424	0.5 MW
	Battery Storage and Natural Gas Fired Reciprocating Generator	Fish Market	2.4 MW
	Simple Cycle Combustion Turbine	Produce Market	7.5 MW
	Mobile Generators (4)	Flexible	1.1

PROJECT DESCRIPTION PUBLIC OUTREACH ACTION PLAN OVERVIEW **IMPLEMENTATION** BENEFIT COST ANALYSIS COMMENT PERIOD

Recommended Energy Resiliency Pilot Project

- Addresses vulnerabilities to building-level energy outages in Hunts Point and protects critical infrastructure for community, businesses, and NYC
- Incorporates flood protection measures into all costs and designs
- Provides real resiliency benefits, while balancing the goals of sustainability and resiliency
- Enables opportunity to tie in new renewable energy sources to the microgrid
 in the future

Community Benefits

- Direct provision of resilient energy for community facilities for residents to access shelter and refuge in emergencies
 - Estimated short-term shelter capacity of 2900+ people and long-term shelter capacity of 1180 people
- Workforce and training opportunities
 - Analyzing workforce opportunities that can be integrated during implementation and continued operations of pilot project
- Potential for scalability
 - Can tie in additional energy sources, such as solar or fuel cells, to expand microgrid
 in the future
- Potential to leverage other funds
 - Community solar and other projects that were screened in this study can be funded through other innovative mechanisms

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Public Outreach

Engagement for the Project includes a layered approach to:

- Incorporate input directly into technical analyses
- Disseminate information
- Coordinate with other communitybased resiliency efforts, leadership training, and workforce/economic development opportunities



Public Outreach

- Multiple layers of engagement to reach more people
 - 1. Advisory Working Group
 - 2. Engagement Strategy Team
 - 3. Neighborhood Outreach Team
 - 4. Public Meetings

Since the Summer of 2015, this project has held 20 total engagement meetings.



Additional Engagement Components

- Tabling at public events
- Interactive educational activities
- Upcoming Collaboration Lab and Artist in Residence program
- Project website and Connection Stories: <u>huntspointresiliency.nyc</u>



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Project Funding

- A total investment of \$45 million in CDBG-DR funds
 - \$20 million via the Rebuild by Design program and \$25 million contribution from New York City's CDBG-DR allocation) is dedicated to the "continued robust planning and study related to the future of the food market and a small pilot/demonstration project (to be selected by the City)."
- Funds will be used for planning, design, and construction of the preferred pilot project

Implementation

- NYCEDC and ORR will partner to implement the pilot project
- Funds will be used for planning, design, and construction of the preferred pilot project



- Conceptual design: summer 2017
- Environmental review: complete by spring 2018
- Final design: complete by summer 2019
- Groundbreaking: 2020
- Construction: complete by mid-2022





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Benefit Cost Analysis: Overview

- A Benefit Cost Analysis demonstrates how the Hunts Point Resiliency Pilot Project achieves resiliency, social, economic, and environmental project benefits.
- The Benefit Cost Analysis considers losses avoided and value added
- A Benefit Cost Ratio greater than one indicates a cost effective project meaning the benefits must be greater than the costs.
- The Hunts Point Resiliency Pilot Project Benefit Cost Ratio is greater than one at 2.22 with a 7% Discount Rate.

Sustainable Return on Investment

Quantifying Benefits & Costs

- Produce comprehensive and site-specific cost and benefit analysis
- Incorporate stakeholder input in priorities
- Inform identification of the preferred pilot project



- Capital, Operations, & Maintenance
- Generation and Distribution Capacity
- Fuel



- Power Outage Reduction
- Property Damage Reduction
- Displacement Reduction



- Greenhouse Gas Emissions
- Chemical Discharges
- Noise



- Respiratory Health
- Health and Safety
- Injury & Casualty Reduction

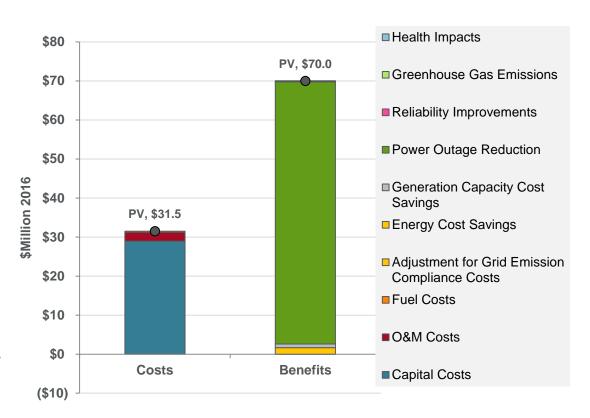


- Employment
- Training & Development Opportunity
- Competitive Advantage

Benefit Cost Analysis: Key Findings

- Benefit-Cost Ratio: 2.22
- Total benefits: \$69.98M
 - Energy and generation capacity cost savings, power outage reduction benefits, greenhouse gas emissions, health impacts
- Total costs: \$31.5M
 - Capital, operations/ maintenance, fuel
- Solar + battery systems reduce overall GHGs and other air contaminants
- Avoided wage losses: \$1.34M

Present Value of Total Costs & Benefits



Public Comment Period

THE PUBLIC COMMENT PERIOD IS NOW OPEN