

City of New York

Public Hearing
Proposed Action Plan Amendments 18 & 19
October 4, 2018

Tonight's Public Hearing

Presentation Overview

1. Introduction
2. Action Plan Amendment 18 – Hunts Point Resiliency:
 - Overview of changes to Hunts Point Resiliency program design
 - Update on Hunts Point Citizen Participation Plan
3. Action Plan Amendment 19 – Proposed Adjustments and Reallocations
 - Update on proposed funding reallocations
4. Conclusion, Public Comment, and Q&A

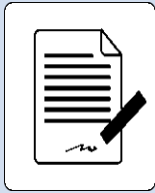
Interpretation services are available in Spanish.

Printed copies of the Amendment are available tonight in English, Spanish, Russian and Chinese.

How to Comment on the Action Plan

Means

Instructions



Comment Cards

Use the cards you received tonight and leave them in the box in the back of the room



Speak at Tonight's Hearing

Sign up. Commenters will have 3 minutes.



Website

Visit www.nyc.gov/cdbgdr to review the proposed Action Plan Amendments 18 and 19 and leave comments

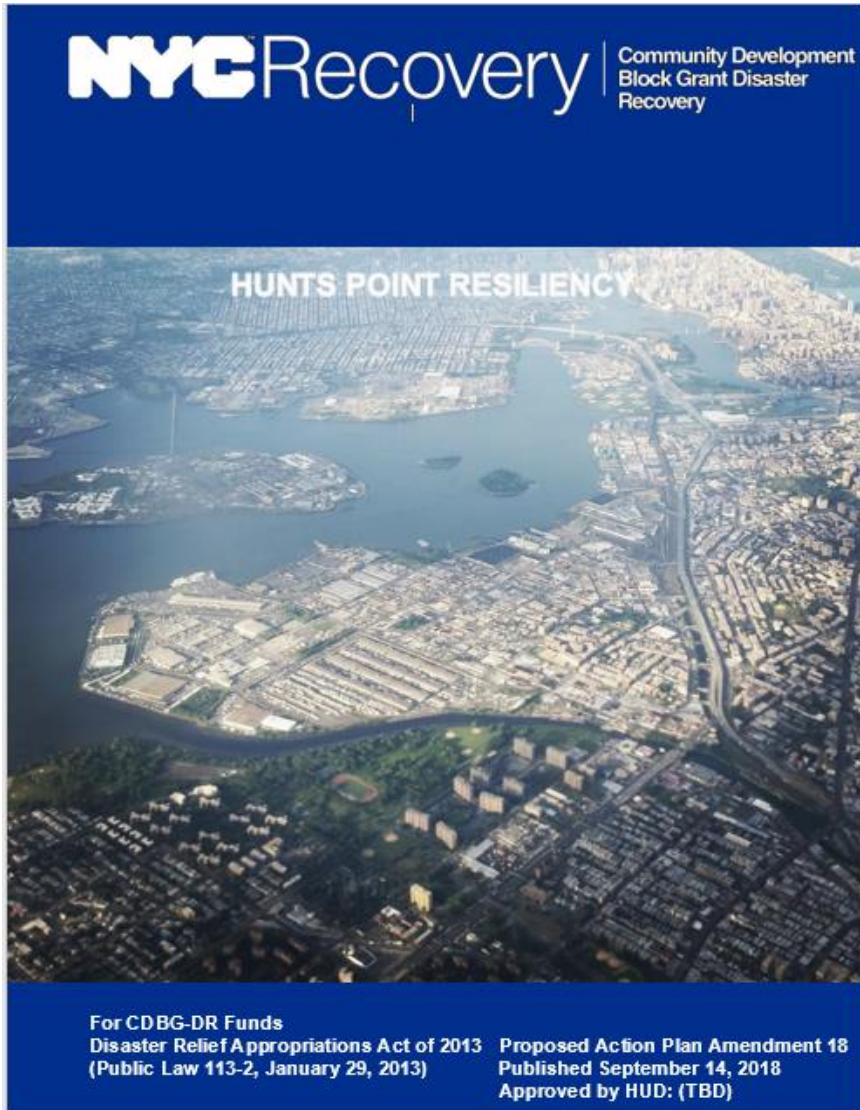


Mail

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

The comment period ends on Monday October 22, 2018

What is the CDBG-DR Action Plan?



The City received \$4.2 billion of CDBG-DR funding from HUD. This amount will not increase.

The City's Action Plan describes activities the City will undertake to recover from Sandy.

The City continually makes amendments to its Action Plan to reflect program updates and to remain responsive to ongoing needs.

This hearing is addressing changes made in proposed

Action Plan Amendment 18 –
Hunts Point Resiliency and

Action Plan Amendment 19 –
Adjustments and Reallocations

Hunts Point **RESILIENCY**



Overview of Hunts Point updates

- **Energy Resiliency Pilot Project Update**
 - Project Recap: What did we present last time?
 - What did we hear from the community?
 - How are we responding
 - Project Update
- **Community Engagement**
- **Benefit-Cost Analysis**
- **Implementation Timeline and Funding**

Hunts Point Resiliency Project Evolution



HUD launched the **Rebuild By Design (RBD)** Competition in response to Hurricane Sandy

Hunts Point Lifelines submitted to Rebuild By Design Competition

Hunts Point Lifelines awarded \$20M by HUD to further study and develop a pilot project

NYC provides additional \$25M for Hunts Point

EDC & ORR form Hunts Point **Advisory Working Group (AWG)**

AWG recommends the City pursue a project focused on **Energy Resiliency & Flood Risk Reduction**

Hunts Point Resiliency project launches



Mayor de Blasio releases **OneNYC**, outlining a multilayered approach to resiliency



Resiliency Energy Project Objectives

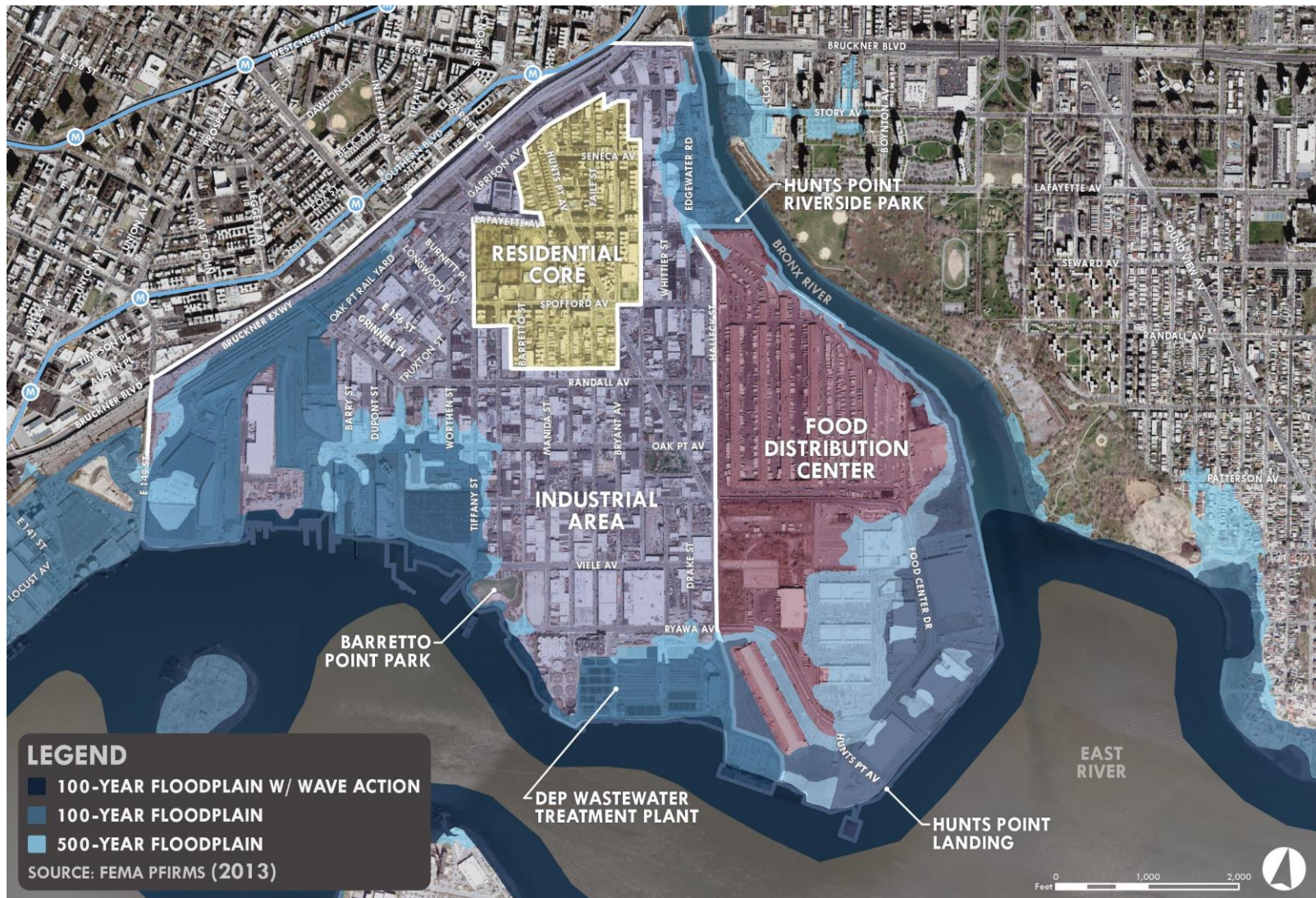
The Energy Resiliency pilot project in this Action Plan Amendment will reduce the vulnerability of the Hunts Point peninsula by providing reliable, resilient, and dispatchable power to critical local and citywide facilities during emergency events like a hurricane, power outages, and other threats.

The principal objectives of the 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

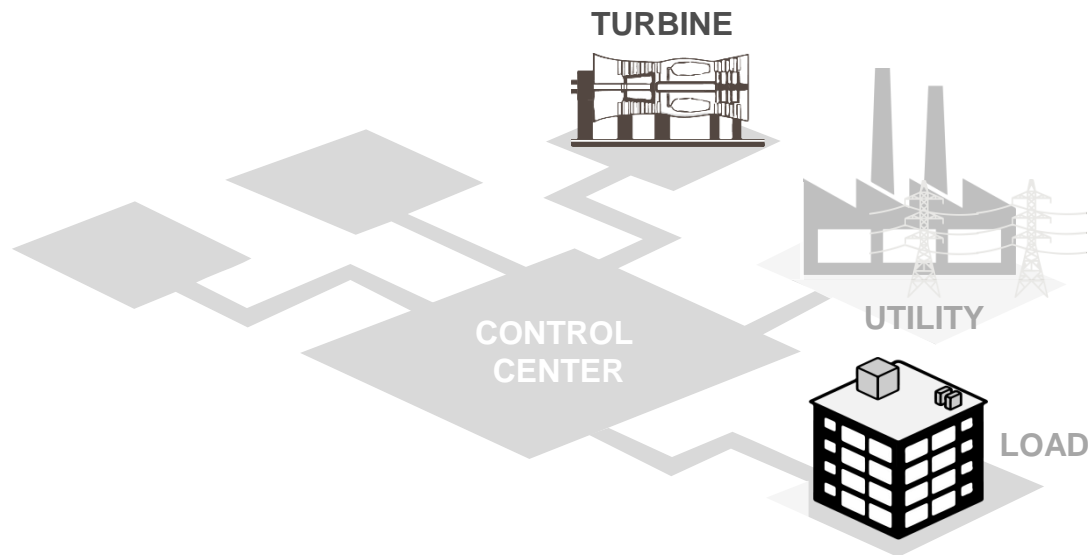
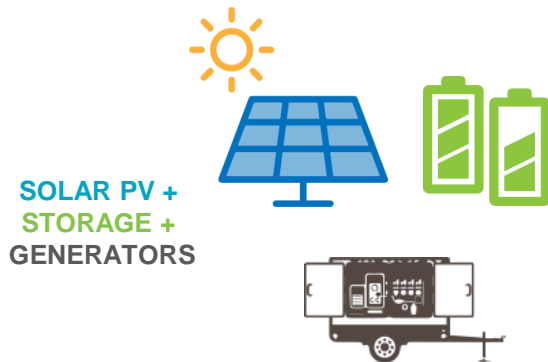


Project Study Area



Recap: What did we propose last time?

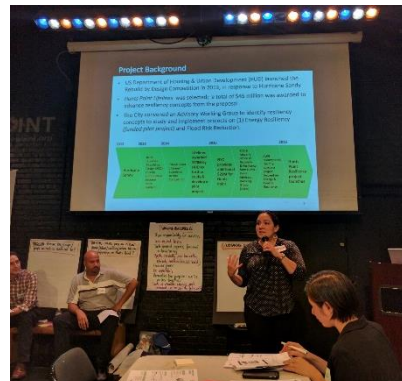
Emergency Power + Solar + Storage



Building	Energy Solution
PS 48, MS 424	Rooftop Solar PV w/ Energy Storage Emergency Power (Mobile Generators)
Fish Market	Energy Storage Emergency Power (Natural Gas Generator)
Produce Market	Emergency Power (7.5 MW Simple Cycle Combustion Turbine)
Flexible	Emergency Power (Mobile Generators)

What did we hear from the community?

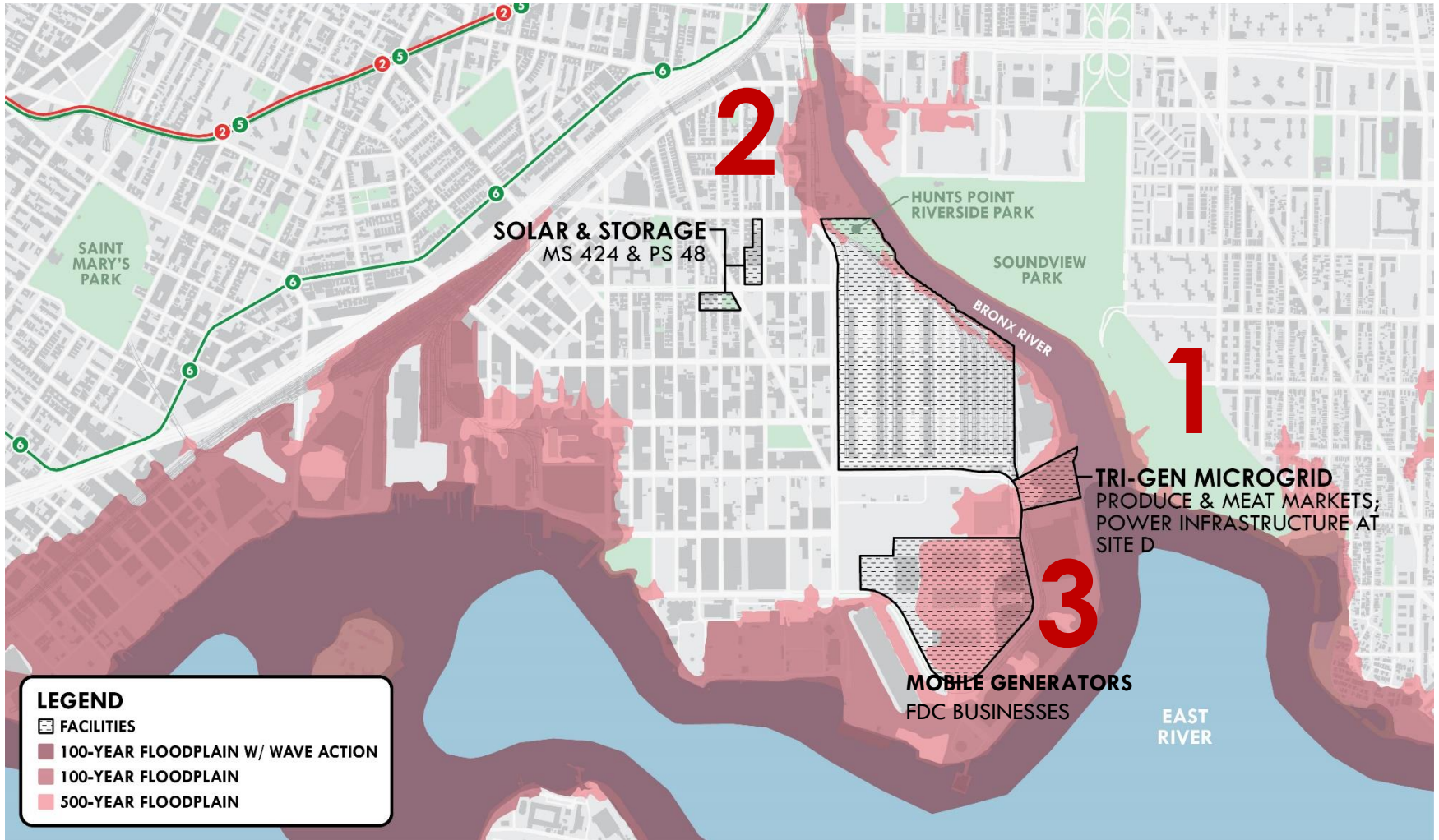
- Support of the solar + storage solutions at the schools
- Support of the engagement process
- Concern over emergency power solution at markets, including simple-cycle turbine at Produce Market and generator at Fish Market due to potential negative impacts on air quality that would burden health and well-being of residents
- Short term exposure to air pollution can have serious health effects, even if operating hours are limited to emergency use



How are we responding?

- Last June, after receiving HUD project approval, the City paused the project due to community concerns to conduct further analysis.
- Revisited the Lifelines proposal and Advisory Working Group implementation principles
- Secured an additional \$26 million in City Capital
- **We considered:**
 - Are there different technologies that could **more positively impact air quality**?
 - What innovative solutions exist to better achieve both **resiliency and sustainability goals**?
 - Can we do upfront analysis to identify air quality impacts earlier in the process?
- **We found solutions that:**
 - Use more sustainable technologies and reduce negative air quality impacts
 - Electrify a portion of diesel-powered refrigerated trucks
 - Replace the need for existing boilers

Hunts Point Resiliency Projects Summary



1. Tri-gen Microgrid

Tri-Gen (Combined Cooling, Heating, and Power) Microgrid System (5.2 MW) at the Produce & Meat Markets will provide:

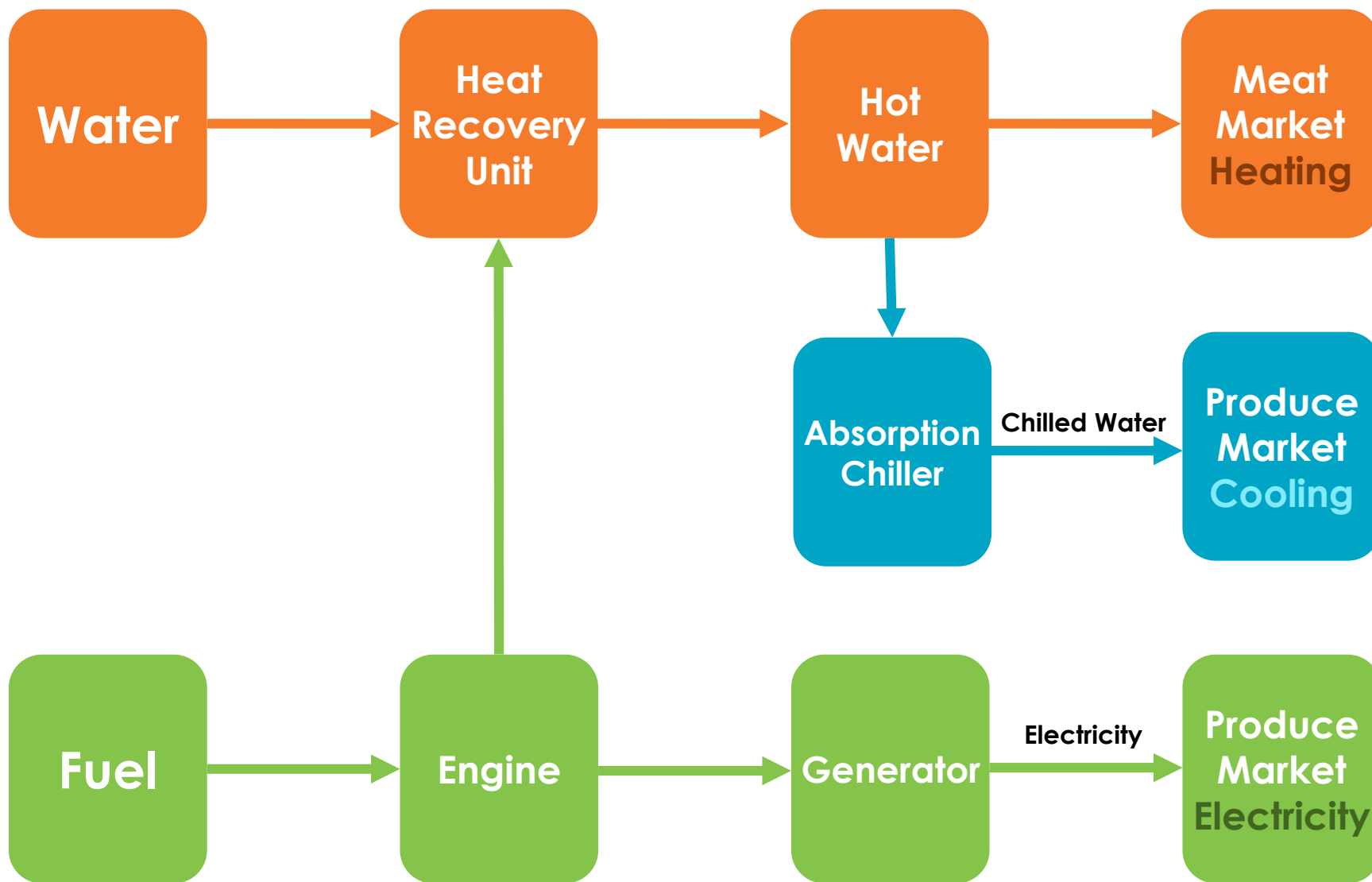
- Backup power during emergency outages
- Electricity & Central Cooling to Produce Market
- Hot water at Meat Market

Sustainability and Air Quality Co-Benefits to meet AWG Implementation Principles:

- Reduced overall size of generation needed
- Selected more efficient and sustainable technology
- Updated power system allows for electrifying a portion of refrigerated trucks to reduce idling diesel engines
- Take older boilers at Meat Market offline

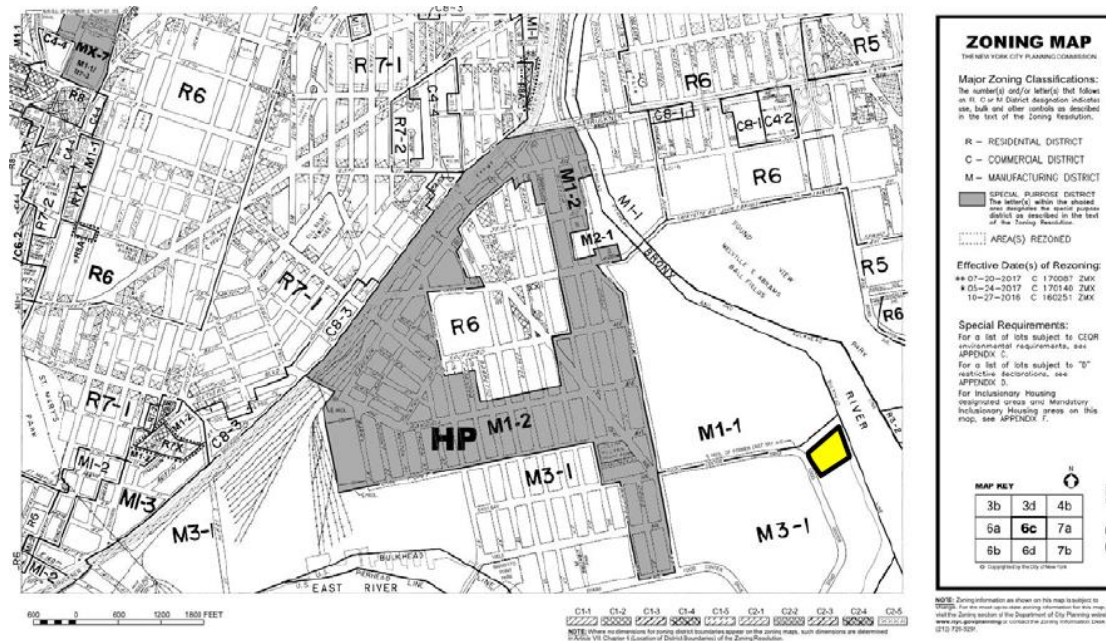


How Tri-Generation Works



Additional Tri-gen Microgrid Details

- Microgrid can isolate loads from larger ConEd grid in the event of a larger power outage
- All infrastructure will be elevated out of floodplain or otherwise flood-proofed if needed
- Located at Site D, which is undergoing remediation
- Tri-generation system will be fueled by natural gas, but will be significantly more efficient than the simple cycle turbine since it provides 3 forms of power with the same amount of fuel



2. Solar + Storage at Neighborhood Schools

Resilient Energy at the Schools

- Install solar panels + battery storage (600 kW) at PS 48 and MS 424
- Enable both schools to serve as community gathering places during emergency events

Why solar + storage?

- Provide year-round renewable energy at two neighborhoods schools
- Reduce the schools' overall energy use from the grid

How does solar + storage work?

- Solar + storage is a type of nanogrid
- Solar panels are connected to a battery system, which stores energy to provide resilient backup power
- Battery will have 8-hour discharge time



3. Mobile Generators

Resilient Backup Power for Businesses

- Four mobile diesel generators to provide resilient backup power to businesses
- 275 kW each
- Will only be used in emergency conditions

Why mobile generators?

- Low-cost and flexible solution to other important citywide food distributors and employers in the FDC

How do mobile generators work?

- Generators connect to electrical systems of facilities during emergency periods
- Stored offsite during blue sky days



Hunts Point Resiliency Project Summary

Project Location	Generation Type	Capacity (MW)
Site D (to serve Produce & Meat Markets)	Tri-generation system with natural gas engine generators	5.2
MS 424	Rooftop Solar PV	0.45
	Battery Storage	0.09
PS 48	Rooftop Solar PV	0.04
	Battery Storage	0.06
Businesses	Mobile Generators	1.1

Public Engagement

Engagement for the Project includes a layered approach to:

- Incorporate public input directly into technical design, which resulted in revising the project proposal
- Make information accessible through AWG and public workshops
- Coordinate with other community-based resiliency efforts, leadership training, and workforce/economic development opportunities
 - Artist In Residence Program
 - Neighborhood Outreach Team
 - Collaboration Lab
- Action Plan Amendment 18 updates the Citizen Participation Plan associated with the Hunts Point Resiliency project
 - Public notices and environmental reviews published in Bronx Times Reporter (new)
 - Notices still published in New York Post, Daily News, and El Diario
 - Public engagement on this project tailored to this community



Benefit Cost Analysis Summary

- Action Plan Amendment 18 updates the Benefit Cost Analysis for the Hunts Point Resiliency project
- 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
 - 1.29 Benefit-Cost Ratio (needs to be above 1)
 - Internal Rate of Return 13.7% (needs to be above 7%)
 - \$27.2M net present value
 - Creation of 55 construction jobs and 10 permanent jobs

Quantifying Benefits & Costs

Sustainable Return on Investment

- Produce comprehensive and site-specific cost and benefit analysis
- Incorporate stakeholder input in priorities



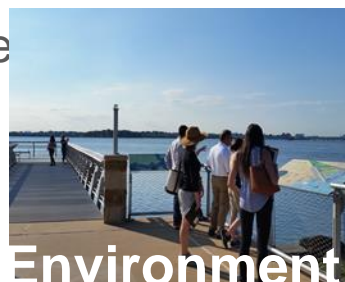
Costs

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



Resiliency

- Power Outage Reduction
- Property Damage Reduction
- Displacement Reduction



Environment

- Greenhouse Gas Emissions
- Chemical Discharges
- Noise



Social

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

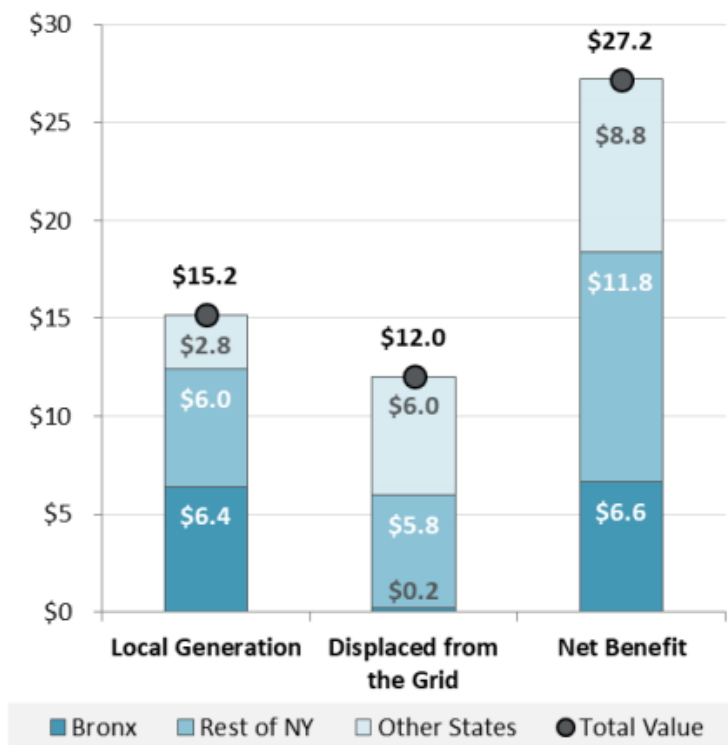


Economic

- Employment
- Training & Development Opportunity
- Competitive Advantage

Air Quality Benefits

Net Present Value of Health Benefits from CAC Emissions (millions 2016\$)



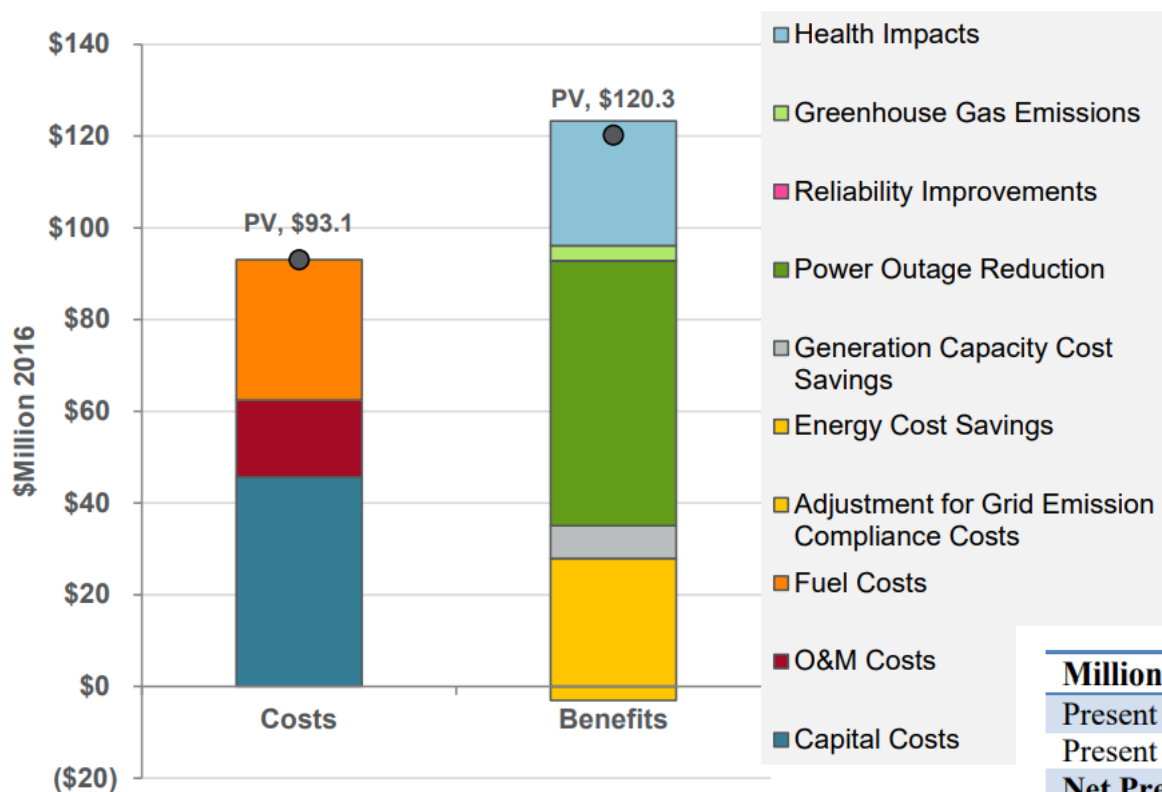
- Project results in \$27.2M of net benefits for health impacts from local air quality improvements
- Preliminary air quality screening indicates that the project will not negatively impact air quality in Hunts Point
- Project reduces greenhouse gas emissions by 7.626 tons per year, resulting in a total benefit of \$3.29M

Benefit-Cost Summary

All Monetized Impacts (Millions 2016\$)	Undiscounted	NPV (7%)
Energy Cost Savings	\$76.02	\$27.93
Generation Capacity Cost Savings	\$18.96	\$7.16
Power Outage Reduction Benefits - Markets and Businesses	\$151.48	\$57.21
Power Outage Reduction Benefits - Community Facilities	\$1.22	\$0.46
Reliability Improvements	\$0.17	\$0.07
GHG Emissions	\$9.05	\$3.29
Health Impacts	\$72.05	\$27.21
Adjustment for Grid Emission Compliance Costs	(\$8.13)	(\$3.06)
Total Benefits	\$320.80	\$120.26
Capital Costs	(\$62.97)	(\$45.68)
O&M Costs	(\$44.53)	(\$16.78)
Fuel Costs	(\$83.03)	(\$30.62)
Total Costs	(\$190.52)	(\$93.08)
Net Impact	\$130.28	\$27.18

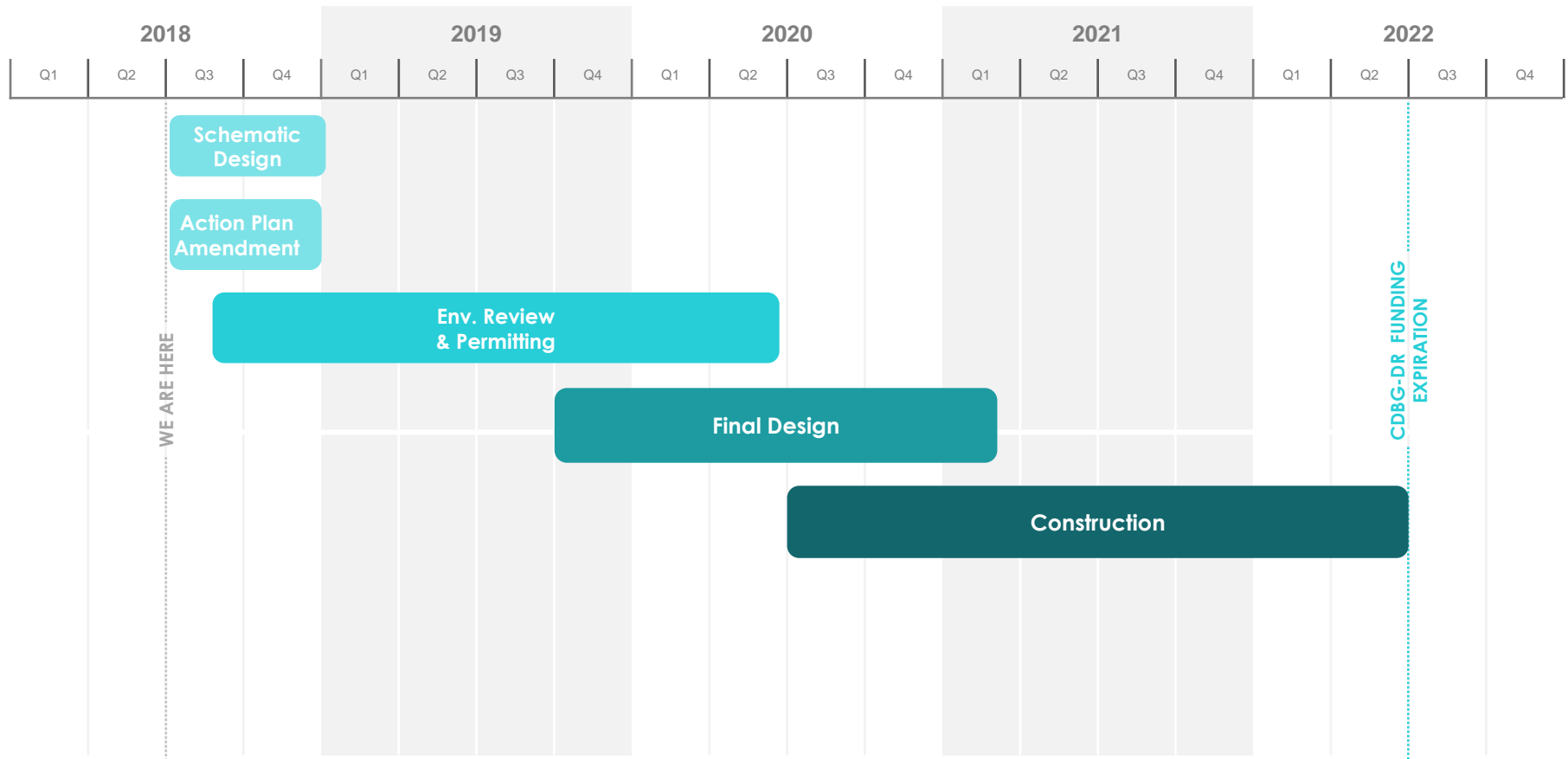
Benefit-Cost Summary

Present Value of Total Costs & Benefits



Millions 2016\$ - Discounted at 7%	
Present Value of Benefits	\$120.26
Present Value of Costs	(\$93.08)
Net Present Value (NPV)	\$27.18
Benefit-Cost Ratio (BCR)	1.29
Internal Rate of Return (IRR)	13.6%
Discounted Pay-back Period (years)	10.23

Project Implementation Timeline



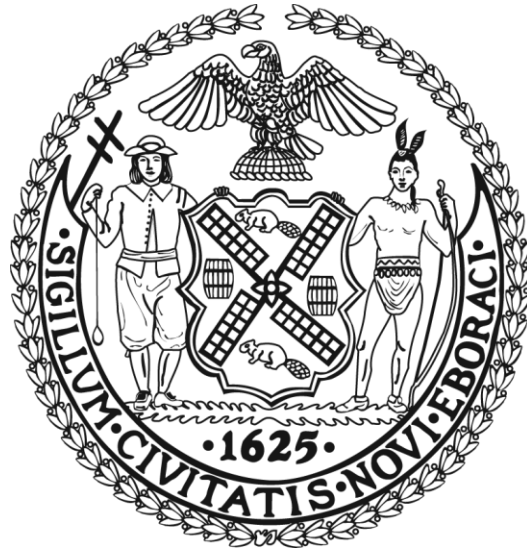
Funding & Implementation

- Total Investment: \$71M
 - \$20M CDBG-DR Rebuild by Design
 - \$25M CDBG-DR
 - \$26M City Capital
- Funding will be used for planning, design, and construction of the project
- NYCEDC will be the implementing agency
 - Ongoing coordination with ORR and DOE

Current & Upcoming Key Milestones

- **Current: Concept Design Drawings and Report Development**
 - Design criteria to meet project goals, and guide final design
 - Applicable codes/standards such as building and electrical codes
 - Detailed project schedule and costs
 - Drawings for project arrangements at each site
- **Current: Environmental Assessment (Federal, City Funding/ Actions)**
 - Purpose and need to be satisfied by project
 - Project alternatives
 - Operational, construction, and cumulative (combined) impacts in affected area
 - Design, construction or operational strategies to avoid or minimize impacts
- **Upcoming**
 - Air Permitting with NYSDEC
 - Complete conceptual design (Q4 2018)
 - Complete environmental review (Q3 2019)
 - Release final design RFP (Q1 2019)





City of New York

Proposed Action Plan Amendment 19 – Adjustments and Reallocations

Adjustments and Reallocations

Amendment 19 reclassifies \$875,000 of existing CDBG-DR funding for **NYCHA** Public Housing to continue the NYCHA Workforce Development program.

- To date NYCHA has trained nearly 100 NYCHA residents
- Additional funding will allow NYCHA to train a greater number of residents over the life of the NYCHA Sandy Recovery Program
- Allows additional time for recruitment and preparation for the Pre-Apprenticeship classes to ensure success of graduates and placement on Sandy Recovery jobs.
- To learn more, contact NYCHA's Office of Resident Economic Empowerment & Sustainability at (718) 289-8100 or www.opportunitynycha.org







Adjustments and Reallocations



- Amendment 19 proposes moving \$1.6 million of **Public Services** funds to Administration. These are surplus funds associated with completed programs.
- Amendment 19 proposes reallocating \$15.4 million of **Planning** funds to Administration to cover costs associated overseeing CDBG-DR activities until September 2022.
 - Planning funds currently expire in January 2019. Should the City get an extension on Planning funds, the City may adjust this proposed reallocation.
- Administration dollars are capped at 5% of the overall block grant, or \$210.7 million. These proposed adjustments bring the Admin budget to \$187.4 million, or 4.5%, well under this cap. Most disaster recovery grantees use the full 5%.

How to Comment on the Action Plan

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The comment period ends on Monday, October 22nd

Next Steps

Action	Time/Duration
Public Hearing	Tonight - Thursday, October 4, 2018, at 7:00PM The POINT CDC 940 Garrison Avenue Bronx, New York 10474
All public comments due	October 22, 2018
Deadline to submit Action Plan Amendment 18 (Hunts Point Resiliency) to HUD	October 31, 2018
Deadline to submit Action Plan Amendment 19 (Adjustments and Reallocations) to HUD	November 19, 2018
HUD Approval of Action Plan	60 days after submission

Additional Comments?



www.nyc.gov/cdbgdr

Need More Information?



www.nyc.gov/recovery

www.nyc.gov/resiliency