FUNDING

- The City has $45 million in CDBG-DR funds allocated for Hunts Point Resiliency:
  - $20 million in CDBG-DR from HUD through Rebuild by Design Competition
  - Additional $25 million in CDBG-DR allocated from the City

- The funding will go towards continued study, analysis, planning and community engagement, building on the Hunts Point Lifelines Rebuild by Design proposal, and the design, construction and engineering of a pilot project.

RULES FOR USING FUNDING

- A pilot project must meet the following requirements:
  - “Independent Utility”— It must be a project that provides resiliency benefits itself without additional phase
  - Capital eligibility
  - All money spent by September 2019
    - Money allocated by 2017

ONGOING RELATED INITIATIVES

- Hunts Point Vision Plan
  - Ongoing implementation of Hunts Point Vision Plan recommendations
  - Biannual Task Force Update meetings

- South Bronx Community Resiliency Agenda
  - Project Partners: The Point and NYC Environmental Justice Alliance
  - Study Area: South Bronx Significant Maritime & Industrial Area (SMIA)

- NYSERDA Prize Microgrid Feasibility Study for Hunts Point
  - Project Lead: LEVEL Infrastructure
  - Study of district energy/microgrid options for the Hunts Point Food Distribution Center (including Meat, Fish and Produce Markets), the HP Wastewater Treatment Facility, a community refuge facility and the adjacent food business area.

- Department of Environmental Protection
  - DEP has identified strategies to reduce damage and recovery time after a surge event for each at-risk location at the Hunts Point Wastewater Treatment Plant, which would minimize service disruptions, reduce sewage bypasses and protect public health. Implementation is targeted to occur between 2017 and 2019.

- Hunts Point Food Distribution Center Modernization
  - March 2015 announcement of City commitment of $150M for the modernization of the Food Distribution Center

- Regional Resiliency Assessment Program (application pending)
  - NYC Office of Emergency Management (NYCEM) submitted application to Department of Homeland Security (DHS) for citywide assessment. If chosen, DHS will assist NYCEM in identifying the resiliency and capacity of critical commodity supply chain infrastructure in order to better prepare for the movement of emergency supplies and equipment before, during and after an emergency event.

- Department of City Planning’s Resilient Industry Study
  - FEMA-funded study conducted in partnership with the New York City Office of Emergency Management to address the economic, environmental and public safety risks related to businesses in industrial areas citywide that are vulnerable to flooding.

- Bronx River Plans
  - Ongoing implementation of greenway, restoration/management and parks plans
Hunts Point Resiliency Implementation Process Map

**Hunts Point Advisory Working Group (AWG) formed by ORR & EDC**
- Discuss: Goals, Priorities, Values
- Prioritize: Understand our options in a resource-constrained environment
- June – September 2015

- HUD Awards HP Lifelines $20M in CDBG-DR / City adds $25M in CDBG-DR
  - June – November 2014

- **Advisory Working Group Recommendations submitted to City**
  - September 2015

- **City to develop plan for moving forward:**
  1. Pilot Project
  2. Additional Studies
  - Fall 2015

- **Project Development**
  1. Develop Feasibility Studies’ RFPs
  2. Issue RFPs and Select Consultants
  3. Conduct Feasibility Studies

- **Implementation:**
  1. Pilot Project Environmental Review, Design and Construction
  2. Additional Studies: Identify and Evaluate Available Resources for Implementation

- **ONGOING ENGAGEMENT**
  - City Report Back on Plan
  - Ongoing Engagement

**TODAY (8/18/15)**
- Written Recommendation Review (AWG)
  - Revisions to recommendations as needed (IISC)
  - Final recommendations circulated to AWG

**AWG Meeting 1**
- Public Meeting 1

**AWG Meeting 2**
- AWG Meeting 3

**AWG Meeting 4**
- Public Meeting 2

**Recommendation Drafting (IISC)**
- Advisory Working Group In-Person Review of Recommendations (AWG Mtg 5)
Resiliency Priorities

**PRIORITY: POWER/ENERGY**

**SHORT TERM**
- Back-up Generators (Flood-Protected)
- Elevation/Protection of mechanicals (i.e. heating, ventilation and air conditioning systems)

**LONG TERM**
- Micro-Grid (Flood-Protected)
  - Independent district-wide energy generation
- Nano-Grid (Flood-Protected)
  - Independent building scale energy generation

**ENERGY PRODUCTION**: Co-generation (Combined Heat and Power); Tri-generation (Combined Cooling, Heat and Power); and Solar

**PRIORITY: COASTAL PROTECTION**

**SHORELINE/EDGE PROTECTION**:
- Seawalls
- Levees (or Dikes)
- Constructed Wetlands
- Multi-purpose Levees
- Deployable Flood Wall

**BUILDING PROTECTION**:
- Wet Floodproofing
- Elevate on Fill or Mound
- Site Protection

**OTHER PROJECT CONCEPTS THAT WERE DISCUSSED**

**Leadership Development** *(AWG suggestion to include as implementation principle)*
- Resiliency Institute
- Materials testing
- Job training/workforce development
- Risk assessments

**Sustainability** *(AWG suggestion to include as implementation principle)*
- Energy load reduction (green/white roofing, tree planting, solar)

**OTHER POWER/ENERGY PROJECTS:**

**OTHER COASTAL PROTECTION PROJECTS:**
Risks: Climate Threats Types & Vulnerabilities

RISK = THREAT x VULNERABILITY

INCREASED RAIN PRECIPITATION

- THREAT:
  - Smaller, more frequent events
  - Mean annual precipitation is projected to increase
  - Downpours are projected to increase

- VULNERABILITY:
  - Streets/campus parking lots
  - Infrastructure system
  - Contamination of waterways through combined sewer overflows (CSOs)

INCREASED TEMPERATURES

- THREAT:
  - Smaller, more frequent events
  - Mean annual temperatures are projected to increase
  - Frequency of heat waves is projected to triple by the 2080s

- VULNERABILITY:
  - Overload/shutdown of energy systems
  - Residential core and industrial area
  - Public Health
  - Continuity of operations for markets
  - Protection of food inventory held in cold storage

COASTAL FLOODING

- THREAT:
  - Larger, less frequent events
  - Sea level will further contribute to flooding threat

- VULNERABILITY:
  - Concentration on markets, adjacent industrial areas and DEP Wastewater Treatment Plant
  - Spreading of industrial contamination/debris through flood waters
  - Continuity of food access and jobs

100-Year Floodplain with Wave Action: Area where there is 1% chance of flooding in any given year and where the area is subject to high velocity wave action (a breaking wave 3 feet high or larger).

100-year Floodplain: Area where there is 1% chance of flooding in any given year.

500-Year Floodplain: The area of moderate flood risk with 0.2% chance of flooding in any given year.