The NY Rising Community Reconstruction Program is helping communities impacted by Hurricane Irene, Tropical Storm Lee, and Superstorm Sandy to rebuild and become more resilient through community-driven plans that consider current damage, future threats to community assets, and the community’s economic future. Residents are here today to participate in a public meeting to learn more about the program and share their input on assets, needs, opportunities, and community vision to help shape the planning process.
### STRATEGY #1

**Improve Coastal Protection**

#### Priority and Featured Projects

**Targeted Coastal Protection project at:**

- **A. Bulkhead Raising (Arverne)**
- **B. Somerville Basin (Arverne)**
- **C. Little Bay (Edgemere)**
- **D. Mott Basin**
- **E. Thursby Basin Park (Arverne)**

#### Other Projects and Policy Recommendations

- Raise coastal edge elevation along bay to create raised greenway in Edgemere
- Raise coastal edge elevation on Western coastline of bay of Dubos Point
- Raise coastal edge elevation on Western coastline of bay in Brandt Point
- Protect against frequent localized flooding in Bayswater
- Complete USACE reformulation strategy and dune protection with expedited implementation
- Design and implement comprehensive coastal protection for all at-risk communities, via large scale solutions including a surge barrier in Jamaica Bay
Coastal Protection Considerations

In the timeframe it will take to build comprehensive protection from a 100-year storm event, Rockaway East is likely to experience many other storms that are less severe than Sandy, or the 100-year storm, but still pose a threat to the Peninsula. Risk levels vary in the Rockaway East planning area. Many low-lying areas on the bayside, including Arverne North, Edgemere, Bayswater, and Motts Basin, experience ongoing flooding from tidal and stormwater events on a regular basis.

The Rockaway East committee recommends a regional comprehensive coastal protection strategy to protect against the 100-year storm. This long-term strategy would require coordination with city, state and USACE, in the interim, a series of potential projects that aim to address areas at risk from more frequent flooding have been identified. (see next board)
Project Description:

In four locations along the Bay in Rockaway East (Somerville Basin, Little Bay, Mott Basin, and Thursby Park) there is an opportunity to incorporate coastal protection measures with the City’s Parks Department’s future recreational plans and US Army Corps’ proposed restoration sites. The following strategies alone will not protect against a 100-year storm event, however, they may help protect local areas from flooding due to sea level rise, moon tides, and more frequent storm events. Additionally, these strategies can be coupled with existing programs, such as the NYC EDC program for bulkhead repair or raising, to create a first step towards meaningful bayside coastal protection.

Rationale:

The bayside neighborhoods in Arverne, Edgemere, and Mott Basin are particularly at risk of coastal flooding from regular tidal and stormwater events. While comprehensive protection is a long-term and expensive endeavor, ongoing City and State projects provide an opportunity to incorporate resiliency into smaller restoration and recreation projects. The Rockaway Parks Conceptual Plan is a comprehensive guide for future development of Rockaway Parks, while the USACE Comprehensive Restoration Plan (CRP sites) is an overview for restoration throughout the Bay. Both programs offer an opportunity to incorporate coastal protection and drainage measures that can provide smaller, localized protection from more frequent flooding events, along with gaining momentum for longer-term resiliency interventions.

A. Bulkhead Raising
$15M-$38M
- Ecological Restoration
- Elevate NYCDPR proposed bayside trail to create berm

B. Somerville Basin
$5.5M-$9M
- Ecological Restoration
- Elevate NYCDPR proposed bayside trail to create berm

C. Little Bay
$5.5M
- Ecological Restoration
- Elevate NYCDPR proposed bayside trail to create berm

D. Mott Basin
$7.5M-$10M
- Ecological Restoration
- Elevate NYCDPR proposed bayside trail to create berm

E. Thursby Basin Pk
$30,000 per bioswale
- Construct bioswales to improve drainage issues

Considerations:
- Provides localized protection measures that do not protect against the 100-year storm
- NY Rising would only partially fund this initiative; additional funding would be required
- Coordination with NYCDPR and USACE required
- Permitting from multiple city agencies required

Rockaway East NY Rising Community Reconstruction Plan
STRATEGY #2
Expand Relief Centers & Emergency Preparedness

Priority and Featured Projects

F. Create Relief/Communication Hub

G. Create Relief Center Satellites

H. Strengthen Addabbo Health Center

I. Co-Fund Evacuation Route Study

Other Projects and Policy Recommendations

- Implement evacuation plans from Five Town evacuation study
- Support emergency service providers, especially volunteer ambulance
- Create school continuity plan
F. Create Relief/Communication Hub

**Project Description:**
Create a relief center to house the coordination of emergency services during a disaster, such as access to food, water, health and medical services. Relief center is not an evacuation center or shelter; rather, it provides a central location for information and community gathering and services during an emergency. Because emergencies are unpredictable and irregular events, relief centers should be housed within an existing building or organization that provides year-round community services.

**Rationale:**
The Office of Emergency Management (OEM) functions best during disasters when it executes plans and priorities that have been agreed to prior to a disaster. While relationships between OEM and local community organizations already exist, there are areas where organizations could be leveraged to lend greater support to their communities, particularly if they are able to partner prior to an event and clearly establish roles and responsibilities for a specific operation. Relief centers can provide important emergency functions such as: bring together a range of local social services, formalize efforts to reach out to vulnerable populations, help OEM evaluate community needs and efficiently distribute resources.

**Relief Center Criteria**

**LOCATION**
- Outside of extreme flood-risk zone
- Ease of access and approachability from street
- Proximity to:
  - Commercial centers, corridors, for access to food, water, and other essential goods and services
  - Vulnerable populations
  - Evacuation route or near road with quick, reliable access to route
  - A large outdoor space to accommodate possible building expansion and outdoor space

**ORGANIZATION**
- Has a long history of community engagement and demonstrated community service during emergencies
- Provides regular programming and has capacity to provide emergency programming
- Conducts outreach to vulnerable populations
- Has capacity to provide social and health services
- Has a long-term occupancy agreement
- Has a business continuity plan
- Is financially stable

**Potential Sites** (Actual siting subject to evaluation and selection process)

- **Queens Public Library**
- **Arverne Charter School** (To be built)

**Timeline**
1-2 years to implement and ramp-up

**Cost**
$3.4 million per hub over two years

Costs include:
- Programming costs - $100,000 a year x 2 years x 2 organizations for staff to manage resilience, plan emergency preparation and response, mobilize and train community, connect vulnerable populations
- Building hardening - including flood proofing, physical improvements, ensure space and communication equipment, and back-up power

**Considerations**
The Queens Public Library is a center of communication and information, a role it played in the aftermath of Sandy. The committee desires to leverage this role it plays in the community, as well as the shifting mission of the library towards community education, training, and information sharing, goals that perfectly complement the idea of a relief center hub. Arverne Charter School is part of a community that has already been elevated, hub of activity on the other end of Rockaway East, and building plans as currently designed can be altered to accommodate this change in program.

Committee considered a number of sites in this process, which led to the identification of these sites as Relief Hubs. If you have any other ideas for possible siting locations, please leave a note.

Rockaway East
NY Rising Community Reconstruction Plan
G. Create Relief Center Satellites

Project Description:
Create a system of hardened satellite relief centers to serve as distribution centers for supplies and information. A relief center is not an evacuation center or shelter; rather, it provides a safe and local center for information and supplies during an emergency. Because emergencies are unpredictable and irregular events, relief centers should be housed within an existing building or organization that is well connected to the community and has demonstrated community service and support during past emergencies.

Rationale:
During Sandy, while large agencies and organizations such as Office of Emergency Management (OEM), FEMA, and the Red Cross provided substantial support, community-based organizations (CBOs) also provided critical local and immediate response and recovery services, such as distributing food, water, and supplies and going door-to-door to check on vulnerable populations. Across the City, groups coordinated their activities through informal relief centers—physical spaces manned by volunteers that served as central hubs for the distribution of information and resources. This program formalizes this process, by identifying and bolstering key hubs in central locations across Rockaway East and allowing the community to bounce back more quickly following a storm or event.

Timeline
1-3 years to implement and ramp-up

Cost
$6 million
$5 million capital, $1 million program/operations/RFP

This cost and timeline covers:
- Implement capital improvements
- Build emergency program for social resiliency

Relief center satellites will be chosen through a request for proposals process. This process will identify the two categories for each organization:

(1) Capital to harden existing building or facility, which includes flood proofing and installation of alternate power source

(2) Program and operations support to build host organization’s capacity to provide year-round emergency programming and to deploy resources during an emergency. Satellites will:
- Manage year-round programming and operations for emergency preparedness and response
- Have a long history of community engagement and strong community ties
- Conduct outreach to vulnerable populations

Disaster-related programming might include trainings and practice drills, “know your neighbor” events, and outreach to vulnerable populations. This capability may be supported initially with CDBG-DR funds for a full-time equivalent (FTE) to build capacity for two years. After two years, the organization would be responsible for supporting the FTE on an on-going basis.
H. Strengthen Addabbo Health Center

Project Description:
Making Joseph P. Addabbo Health Center more resilient through measures such as floodproofing, elevating mechanicals from basement, and installing back-up, non-grid reliant, power source. Helping build capacity to organize and provide health services to vulnerable populations during and after an emergency.

Rationale:
After Sandy, the Addabbo Health Center was an important health resource for local residents, despite being impacted by the storm. Strengthening the Center will allow to immediately provide services in the wake of a storm or event. Hardening the center will also help ensure it remains a critical health service provider to the community on a day-to-day basis.

Timeline
1-2 years

Cost
$1.5 - $2 million

This cost and timeline covers:
- Implement capital improvements
- Build off of existing emergency program for social resiliency

(1) Capital to harden existing building or facility, which includes flood proofing and installation of alternate power source.

(2) Program and operations support to complement and build upon host organization’s capacity to provide year-round emergency programming and to deploy resources during an emergency.

Rockaway East
NY Rising Community Reconstruction Plan
Project Description:
This project would co-fund a study with neighboring Long Island towns to study road improvements to 878, the shared evacuation route for the eastern end of the Peninsula.

Rationale:
878 is an evacuation route shared by both New York City and Long Island, covering multiple jurisdictions of roadway without much coordination. The road experiences capacity issues under everyday situations and is subject to flooding. This study would examine improvements that could ensure an evacuation route that is not blocked or severely distressed during an emergency.

I. Study Improvements to Evacuation Route on 878

Evacuation Routes for Eastern End of Rockaway Peninsula

Evacuation Routes for Western Nassau County

Timeline
1 year

Cost
< $500,000

Rockaway East
NY Rising Community Reconstruction Plan
### Priority and Featured Projects

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### Other Projects and Policy Recommendations

- Work with MTA to improve Far Rockaway multimodal transport hub
- Work with MTA to make A-line stations on Peninsula ADA-compliant
- Create proposal to expand health and medical services and jobs in Rockaway East
- Expand recreational and commercial amenities to complement the City's plan for the beach/boardwalk
- Expand recreational opportunities on the bay, such as boating or kayaking
- Create promenade along bayfront and remove barriers to accessing bay
- Increase amenities and services for recreational uses (bathrooms, lifeguards)
- Support the creation of a technical assistance and auditing program for resiliency
- Create business-to-business program to bolster commercial activity across the Peninsula
- Expand grant or low-cost loan programs to make businesses more resilient and encourage high-ground, transit-oriented development in Rockaway East
- Support redevelopment of Peninsula hospital site
J. Workforce Development

**Project Description:**
Develop building resiliency training program through an existing workforce development organization to train and connect Rockaway East residents to employment opportunities related to resiliency such as building repair and retrofits, electrician certification, and health/EMT training. This program could function as an add-on to an existing program and allow participants to learn resiliency skills in parallel to the pursuit of other licenses and training.

**Rationale:**
The need to enhance economic opportunities for residents in Rockaway East has been identified as a primary concern of the Rockaway East community. With approximately 11% of the population unemployed and a median income considerably lower than the rest of the Peninsula, the need to provide new and better training and employment placement is clear. Currently many programs are funding repairs and resiliency upgrades of homes and businesses across the city. As impacts from storms disproportionately affect economically vulnerable populations, connecting Rockaway East to employment opportunities in this sector would directly and indirectly increase the resiliency of the community.

**Scope of workforce partner will include:**
- Define resiliency job tool kit
- Establish and deliver courses and certification programs
- Connect skilled workers with OEM, relief center networks, fire departments, and other related employers

**Considerations**
- Job placement in apprenticeships and other employment opportunities
- Program administrators would explore mechanisms to incentivize program graduates to work and use skills in Rockaway East

**Timeline**
1-2 years

**Cost**
$500,000

**Rationale:**
- By expanding local expertise in building resiliency and repair, information about building resiliency needs and implementation can be shared and recovery efforts can be launched quickly and locally.
- Improving employment rates in Rockaway East would result in a variety of economic co-benefits.
- Expanding jobs and skills training increases equity and community capacity.

**Rockaway East NY Rising Community Reconstruction Plan**
K. Create a Rockaway Bike Share

Project Description:
Instituting a bike share system on the Rockaways will improve intra-Peninsula connectivity, bringing more visitors into Rockaway East and increasing the mobility of residents to more easily access amenities such as the beach, bay, and mass transit stations without reliance on a car.

Rationale:
As of now, most visitors to the beaches of the Rockaways who do not arrive by car do not venture far from the transit stop and beach. A Bike Share system allows for exploration of the full Peninsula, letting visitors stay longer and spend more. These stations are able to be solar-powered and could be used in events when power is down. A bike share network additionally creates more users for the Jamaica Bay Greenway, and would encourage the expansion of safe bike routes.

Timeline
1-2 years

Cost
$900,000
per planning area, total cost of $1.8 million

Considerations
- Instituting a bike share network is fairly low-cost, as this would likely be an extension of the popular NYC Bike Share system (CitiBike) that exists in Manhattan and Brooklyn, and would only entail the purchasing of new bikes and stations, along with the incremental costs associated with expansion.
- This would allow visitors to best be able to take advantage of the service, as any CitiBike user would automatically be able to get off the ferry or train and immediately be able to take out a bike without needing to sign into a new system.
- An important obstacle is the distance between this potential CitiBike node and other established stations, which is viewed as key to generating sustainable ridership levels for the service, however it is believed that the extension would be permitted by NYC Bike Share. Siting of stations includes the use of NYC DOT to work with the communities to find locations that make sense.
- Creating a new system that is independent of NYC Bike Share would require the identification of a managing entity and involve more cost and effort upfront to choose and install the desired system.
L. Improve Mott Avenue Streetscaping

Project Description:
The project would fund streetscape improvements on primary retail corridors that improve resiliency and begin to create a more inviting atmosphere for both residents and businesses. Potential projects include façade improvements, resilient streetscape elements, such as solar powered street lights, and green infrastructure.

Rationale:
The retail area around Mott Avenue may have excess demand for certain types of retail offerings, has high-quality transit options, and is the largest area on the Peninsula that is above the floodplain. This creates an opportunity to create a safe central hub in an emergency. To do this, the area requires power and other key services. For example, the lack of power to the Rockaways inhibited the ability for businesses to come back online, and forced the City to focus efforts on short-term fixes, such as setting up generator-powered street lights. Having resilient, non-grid light sources would shorten the time for recovery efforts to begin focusing on people and less on restoring light. Further, a better quality of street experience will help to fill in the gaps of retail, and improve the quality of retail that is attracted to the area.

Timeline: 2-3 years
Cost: $2-5 million

Considerations
The scope and cost of this project could vary. Improvements as presented maximize the resiliency of the street.

Costing is dependent on program elements, but could include:
- New sidewalks (pervious)
- Bike Lane (pervious)
- Bioswales and street trees
- Pedestrian lighting (solar)
- Street lighting (solar)
- Two travel lanes each direction
- Benches
- Bike Racks

Additionally a reserve fund for maintenance would have to be established.

Rockaway East
NY Rising Community Reconstruction Plan
Project Description:
This project pilots a circulator bus that would operate across the Peninsula, from Far Rockaway to Rockaway Beach, running between the Mott Avenue A Train Station/LIRR, the Beach 108th Street temporary Ferry Landing, and the Rockaway Beach Boardwalk at Beach 19th Street.

Rationale:
The primary objectives of the Rockaway Ferry/Beach circulator are: 1) to see if it can impact ridership and help to create a more sustainable service for the ferry, 2) to enhance the Rockaway East economy by improving the connection between transit hubs, the beach, and the rest of the Peninsula.

Timeline
1-2 years

Cost
$850,000
per planning area, total cost of $1.7 million

The cost of this service includes hiring an operator to run a bus service:
- 365 days a year
- 10 hours a day (e.g. 8 AM - 6 PM)
- Making an E-W run that terminates at the ferry terminal once an hour
- Making a N-S run that terminates at the beach once every twenty minutes

Additionally, this cost includes capital money for stops, which covers:
- Three “enhanced” stations, which include signage and rest area
- Ten sign-only stations

Considerations
This project only supports a short-term pilot shuttle. Permanent circulator service would require a long-term commitment by a public agency or private operator to support ongoing operating expenses. Additionally, the service simplifies and spreads out the economic impact of the ferry, allowing visitors to circulate throughout a larger area of the Peninsula. Service and route could be reduced to decrease cost.
Project Description:
Grow seasonal business and create attraction for locals and tourists along beach. This project would fund a container flea/food market with quality local businesses, showcasing the best of Rockaway East, as well as potentially providing residents with access to fresh food by including a green market. Siting of the market could align with other NYC Department of Parks and Recreation plans on the beach.

Rationale:
Creating such a market gives the communities of Rockaway East an attraction for visitors and an amenity for residents, improving the local economy and drawing attention to the range of businesses that might be scattered throughout the area. Coupled with a strategy such as the bike share or bus circulator would improve the ability of people to reach this area.
Project Description:
This project is to fund an item identified in the City Parks Conceptual plan, which may include recreational facilities, beach-side overlook, or bay-side trail, and incorporate features that bolster the resiliency of both the parks and the communities surrounding them.

O. Support Development of New Recreational Amenities

Rationale:
For an area that is so strongly rooted in its connection to nature and recreation, Rockaway East has much untapped potential. The NYC Department of Parks of Recreation has been working with the community to create a Conceptual Plan for the Peninsula. This project provides an opportunity for the committee to add in elements that improve the resiliency of the park areas. The most concrete of these plans in the Rockaway East planning area follow.

Are there any projects that NY Rising should invest in and make more resilient?

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Cost: $1.3M
B 26th-27th

Cost: $2.7M
B 20th Overlook

Cost: $2.6M
B 9th Seating/Play Area
STRATEGY #4
Improve Housing Resilience

Priority and Featured Projects

P. Provide Homeowner Education/Counseling

Other Projects and Policy Recommendations

- Fill gaps in scope of housing resiliency and recovery programs
- Provide financing tool to building owners to offset retrofit and increased insurance costs
- Establish requirements for multi-family building owners to create and communicate emergency plans and ensure safety of residents
P. Provide Homeowner Education/Counseling

Project Description:
The proposed program entails two components – (1) Education and (2) Counseling and technical assistance – offered to homeowners, property owners, building managers and renters with the goal of helping people fully understand the physical and financial risks of their homes and to help them make more informed decisions about improving their resiliency.

Rationale:
Education and technical assistance will provide direct benefits to the community by: providing accurate and useful information around flood protection and insurance; improving residents’ financial, insurance and recovery literacy; and assessing retrofits to help properties reduce risk. By providing both community-wide education and individualized counseling, this program will efficiently disseminate important information for homeowners to make better informed decisions and help them understand what they can do to better protect their homes.

Components:

Education
General educational information includes:
- Identifying common insurance pitfalls and loopholes
- Avoiding potential rebuilding, insurance or financial scams
- How to obtain and understand flood insurance
- How to obtain a loan for repairs
- How to remediate mold
- Understanding resiliency retrofits, including elevating/floodproofing building mechanicals, installing backflow prevention device, etc.
- Identifying products, providers and reasonable costs

General information could be delivered through:
- Online courses
- Introductory, in-person courses
- Monthly speaker series covering different resiliency topics
- Print or online resiliency design guideline outlining general costs and benefits of retrofits

Timeline
2 years

Cost
$1.2 million

Individual Counseling
Individual Counseling includes:
- Flood, homeowners/building and property insurance, financial management, and rebuilding, resiliency and recovery issues for home/property owners
- Management of rebuilding, resiliency and recovery issues for building managers
- Flood and property insurance, financial management, and recovery issues for renters
- Providing legal support and represents individuals when necessary

Technical Assistance
Technical assistance includes:
- Accurately assessing storm damage on single-family homes and multi-family properties
- Identifying potential retrofits to mitigate against future storm damage
- Pairing with low cost options to improve resiliency and emergency preparedness, including backflow prevention device, elevation certificates, etc.