Rockaway West
Planning Committee Meeting #6

January 13, 2014
Agenda

1. Program update  7:00 – 7:15
2. Key project review  7:15 – 8:20
3. Next steps  8:20 – 8:30
Committee Meeting 6: Project refinement

Objectives:
• Confirm Public Meeting #3 approach
• Review and refine scope of key projects

Identify Assets, Risks, Needs, Opportunities
Define Community Goals & Vision
Identify, evaluate, and Prioritize Projects and Actions
Identify Funding Sources, Develop Implementation Plan
Create Final Community Reconstruction Plan
# NY Rising Community Reconstruction Program Schedule

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Preliminary Project Reporting</td>
<td></td>
<td></td>
<td>Dec.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confirm Priority Projects</td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td>Jan.</td>
</tr>
<tr>
<td>Project Analysis &amp; Final Priority Project Selection</td>
<td></td>
<td></td>
<td>7</td>
<td>3</td>
<td>8</td>
<td>Mid-March</td>
</tr>
<tr>
<td>Final Community Reconstruction Plan</td>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td></td>
<td>Mar.</td>
</tr>
<tr>
<td>Final Conference &amp; Public Meeting</td>
<td></td>
<td></td>
<td></td>
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<td>4</td>
<td>By May</td>
</tr>
</tbody>
</table>

- Planning Committee Meeting
- Public Meeting
- Deliverable Due Date

- Preliminary Project Reporting scheduled for Dec. 31
- Confirm Priority Projects due today
- Project Analysis & Final Priority Project Selection due on Mid-March
- Final Community Reconstruction Plan due on Mar. 31
- Final Conference & Public Meeting due by May 12
By end of January, finalize “Priority CDBG–DR Projects” and “Featured Projects” for Rockaway West

Total list of projects add up to more than $21 million
- In February consultants will analyze and cost projects, NYS DOS determines CDBG–DR eligibility of projects
- Committee will continue to coordinate mid–March which project(s) to submit for NY Rising funding

Initiatives not on the CDBG–DR Priority Project or Featured Project list can still be included in the Final Community Reconstruction Plan
- Additional projects, recommendations, or actions
- Suggested regulatory reforms
Public Meeting #3 Approach

Goal of Public Meeting #3:
- Solicit community feedback on proposed priority and featured projects

Potential Approach
- 2 hour meeting, similar format, weeknight or weekend
- Store-front charrette, open to the public, 2–3 days in a row, over a weekend
- Heated tent, open to the public, 1–3 days in a row
- Other?

Need to Confirm:
- Approach
- Location options
- Date options
Agenda

1. Program update      7:00 – 7:15
2. Key project review   7:15 – 8:20
3. Next steps          8:20 – 8:30
Key Project Review

Tonight we will focus on 3 key projects

- Ferry
- Coastal Protection
- Emergency Relief Center

We will table the following for a future committee meeting

- Other Infrastructure (transportation, power, water management)
- Health Services
- Other Emergency Readiness/Response
- Economic Development
- Natural/Recreation
- Housing Recommendations
Agenda

1. Program update 7:00 – 7:15
2. Key project review 7:15 – 8:20
   a) Ferry feasibility
   b) Coastal protection
   c) Emergency relief centers
3. Next steps 8:20 – 8:30
Current Ferry Service to the Rockaways

Temporary Weekday Service: Nov 2012–Jan 2014

Frequency:
• 5 morning
• 5 evening

Route:
• Beach 108th St./
• Brooklyn Army Terminal/
• Pier 11 (55 min)/
• E. 34th St

Total Cost
• $2 ticket fare one way
• $25–30 subsidy per ticket one way
• Free parking

Infrastructure
• 2 Seastreak vessels
• Temporary landing at 108th
• National Grid parking lot
Rockaway Ferry Model

There are a number of variables that impact ferry feasibility. We created a model to test different scenarios and options.

**Inputs**
- Number/Combination of Stops
- Headway (# Trips in Peak Period)
- Fares (Ferry, Parking)
- Vessel Type
- Capital Costs (Terminals & Vessels)
- Development Opportunities

**Outputs**
- Number Vessels Needed
- Travel Time
- Ridership
- Revenue
- Profit/Loss
Ferry Landing Options & Number of Stops & Trips
2013 Ferry Analysis

NYC Citywide Ferry Study
- Evaluating
  - 4 Rockaways Stops
  - 3 add’l Jamaica Bay Stops
Comparative Transit Costs, Fares, and Subsidies

Figure 3.1: Transit Fares and Subsidy per Passenger Trip*

Note: The 2011 Citywide ferry study included the previous Rockaway Ferry (that ended in June 2010) from Lower Manhattan to Riis Landing (and stopped at the Brooklyn Army Terminal) - it had a $6 fare and a $21.12 subsidy level

*Citywide Ferry Study 2013
Rockaway Ferry Scenarios

We ran 5 scenarios in our model to start the discussion – we can change the variables and run additional scenarios over the next 4–6 weeks to refine the scope of a project or recommendation.

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Current</td>
<td>Current Service+$2 Fare+2 Seastreak Vessels</td>
</tr>
<tr>
<td>2</td>
<td>Additional Stop</td>
<td>Riis Landing+$2 Fare+3 Seastreak Vessels</td>
</tr>
<tr>
<td>3</td>
<td>Higher Fare</td>
<td>Riis Landing+$6 Fare+3 Seastreak Vessels</td>
</tr>
<tr>
<td>4</td>
<td>Better Vessel</td>
<td>Riis Landing+$6 Fare+3 Otter Class Vessels</td>
</tr>
<tr>
<td>5</td>
<td>New Development</td>
<td>Riis Landing+$6 Fare+3 Otter Class Vessels+100 added riders from new development</td>
</tr>
</tbody>
</table>
## Scenario Analysis – Daily Riders

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Daily Riders</th>
<th>Change from Previous Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Current</td>
<td>347</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Additional Stop</td>
<td>385</td>
<td>+38 (+11%)</td>
</tr>
<tr>
<td>3</td>
<td>Higher Fare</td>
<td>238</td>
<td>-147 (-38%)</td>
</tr>
<tr>
<td>4</td>
<td>Better Vessel</td>
<td>265</td>
<td>+27 (+11%)</td>
</tr>
<tr>
<td>5</td>
<td>New Development</td>
<td>365</td>
<td>+100 (+38%)</td>
</tr>
</tbody>
</table>

*Note: DRAFT model results are representative figures*
## Scenario Analysis – Annual Subsidy

<table>
<thead>
<tr>
<th>#</th>
<th>Name</th>
<th>Subsidy ($million)</th>
<th>Change from Previous Scenario ($million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Current</td>
<td>$4.0</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Additional Stop</td>
<td>$6.3</td>
<td>+$2.3 (+58%)</td>
</tr>
<tr>
<td>3</td>
<td>Higher Fare</td>
<td>$6.0</td>
<td>-$0.3 (-5%)</td>
</tr>
<tr>
<td>4</td>
<td>Better Vessel</td>
<td>$2.4</td>
<td>-$3.6 (-60%)</td>
</tr>
<tr>
<td>5</td>
<td>New Development</td>
<td>$2.0</td>
<td>-$0.4 (-20%)</td>
</tr>
</tbody>
</table>

*Note: DRAFT model results are representative figures*
# Ferry Service Funding Sources

<table>
<thead>
<tr>
<th>Existing Funding Sources</th>
<th>Potential Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>$15M Rockaway Federal Allocation</td>
<td>Capital Investments</td>
</tr>
<tr>
<td>• Set aside 2005</td>
<td>• Originally intended to purchase ferries</td>
</tr>
<tr>
<td>$15 NYC Match</td>
<td>Capital Investments</td>
</tr>
<tr>
<td>• Set aside last year</td>
<td>• Geared toward ferry landings and upland improvements</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>POTENTIAL Funding Sources</th>
<th>Potential Uses</th>
</tr>
</thead>
<tbody>
<tr>
<td>$?? NY Rising Allocation</td>
<td>Capital Investments; Operating Costs if bundled with</td>
</tr>
<tr>
<td></td>
<td>sustainability plan</td>
</tr>
<tr>
<td>$3 Billing Federal Transportation NOFA</td>
<td>To be confirmed</td>
</tr>
<tr>
<td>• For Sandy-impacted areas</td>
<td></td>
</tr>
<tr>
<td>• Due this quarter</td>
<td></td>
</tr>
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</table>
## NY Rising Funding Ideas

<table>
<thead>
<tr>
<th>Potential Uses</th>
<th>Potential Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Operating Costs</td>
<td>Could go directly as subsidy to offload the cost and overall rider fare</td>
</tr>
<tr>
<td>2. Other Capital Costs, such as new, more efficient ferries</td>
<td>Could help reduce the overall operating cost, therefore reducing total cost, subsidy need, and ideally fare</td>
</tr>
<tr>
<td>3. Other Capital Costs, such as a new parking garage</td>
<td>Could explore building parking garage and using revenues to offset ferry costs</td>
</tr>
<tr>
<td>4. Other?</td>
<td>Could explore development opportunities where developer could offset ferry costs (e.g. Ikea model)</td>
</tr>
<tr>
<td></td>
<td>Other?</td>
</tr>
</tbody>
</table>
Agenda

1. Program update  7:00 – 7:15
2. Key project review:  7:15 – 8:20
   a) Ferry feasibility
   b) Coastal protection
   c) Emergency relief centers
3. Next steps  8:20 – 8:30
Existing Conditions: Elevation

- Low elevation, especially along bay side
Existing Conditions: FEMA Base Flood Elevations
Existing Conditions: Depth of Flooding in 100-year Storm Event
Existing Protection

- **Ocean Side**
  - Beach protects against wave action
  - Protective dune being built to protect against wave runup and surge
  - Groins protect against beach erosion by capturing sediment

- **Bayside**
  - Baywall along shoreline, deteriorating in places, protects against wave action, erosion and tidal event
  - Riprap along shoreline protects against small wave action and erosion
  - Bulkheads protect against sea level rise, erosion
Challenges to Developing 100–year Coastal Protection Strategies

- Limited space along bayside shoreline limits how much you can build on land
  - Homes along shore
  - Roadway along shore
  - Can’t build wide levees, dunes, etc.
  - Property ownership along shoreline means a cooperative approach is needed

- Deep channel limits what you can build in the water

- Seawall and dunes would have to surround entire planning area to provide comprehensive protection against the 100–year storm

- Height of seawall would dramatically impact access to water and views
Recommendations

- Make groins
- Repair and raise baywall along bay edge
- Recommend NPS construct berms or mini-dune system along park boundary at 149th that ties into the existing baywall to the north and oceanside dune to the south.
- Recommend USACE study rock groin placement every 1000' from Beach 66th St to Beach 149th St
What is the increased level of protection from these recommendations?

- Raise and Repair Baywall – to protect against lesser storm events, moontides, and Sea Level Rise
  - Protect against surge levels up to 7’
  - Protect against wave action up to 10’

- Groins – may protect beach erosion

- NPS Barrier –
What is the increased level of protection from these recommendations?

Protected up to 7" Surge (approx. 10 year storm)

Areas previously exposed to waves, now protected
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Creating a Rockaway West relief center

**Priority project**
*Create a relief center to provide emergency services during and after a disaster*

**What is a relief center?**
- Provides emergency services (access to health and social services, food, water, supplies)
- Information hub during an emergency
- Gathering place for evacuation
- *It is not a shelter or evacuation center*

**Considerations**
- How the center functions 365 days a year (stewardship, maintenance, programming)
- Location within community
- Overall ownership and governance – day-to-day and in an emergency

*Volunteers during Sandy.*
Location considerations – Hub and Satellites

HUB – Large Community Space where logistics, communications, and supplies can be managed and distributed
- Outside of extreme flood-risk zone
- Proximity to:
  - Evacuation route or near road with quick, reliable access to route
  - Essential Services
  - Commercial centers, corridors
  - Vulnerable populations
- Large space for residents to gather
- Ease of access and approachability from street

SATELLITE – Smaller locations through community that can serve as distribution center for supplies and information
Relief Center Screening Criteria

**LOCATION**
- Outside of extreme flood-risk zone
- Proximity to:
  - Evacuation route or near road with quick, reliable access to route
  - Vulnerable populations
  - Commercial centers, corridors
- Has a large outdoor space to accommodate possible building expansion and outdoor space
- Ease of access and approachability from street

**BUILDING**
- Flood-proof: building must be able to be hardened
  - Should not be an unreinforced masonry building or made of lightweight materials
- Reliable source of power and heat/cooling
- Potable water system
- Restrooms with showers
- Parking lot/car-accessible
- Large space on ground floor
- Must be capable of accommodating and providing services to

**ORGANIZATION**
- Manages programming and operations
- Has a long history of community engagement
- 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
- Is open 6 days a week
- Has a business continuity plan
- Is financially stable
Siting a Rockaway West Relief Center

Rockaway West

Planning Area

Assets
- Community, Cultural, or Religious Establishments
- Health
- Education
- Emergency Response
- Other

FDNY Eng 268th, Lad 137th

Queens Borough Public Library

Beach Channel High School
PS 323 Scholars Academy

Rockaway Beach Firehouse
NYPD 100th Precinct

Doctors of the World Clinic
Waterside School for Leadership
Martin De Porres High School
Saint Frances De Sales School
PS/MS 114 Belle Harbor
Relief center campus: Health and social services, food, water, supplies, first responders, information
Discussion

What are the key services you would like to see in a relief center?

What locations would you like to consider for Rockaway West?
  • Hub?
    • Existing sites
    • New Development Opportunities
  • Satellite?

What organizations may be able to support a relief center?
Agenda

1. Program update  7:00 – 7:15
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3. Next steps  8:20 – 8:30
Key Next Steps

Follow-up on actions/questions:
  • Ferry
  • Coastal Protection
  • Emergency Relief Center

Schedule time to discuss:
  • Remaining projects/recommendations
  • Project evaluation and risk assessment

Confirm Public Meeting #3:
  • Location
  • Dates
  • Staffing

Other?
DOS evaluation criteria for NY Rising project prioritization

<table>
<thead>
<tr>
<th>Term</th>
<th>Feasibility</th>
<th>Cost</th>
<th>Risk Reduction</th>
<th>Co-Benefits</th>
<th>Potential CDBG-DR Eligibility</th>
<th>Other Criteria?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short (1-2yrs), Mid (2-5yrs), Long (5+yrs)</td>
<td>High, Medium, Low</td>
<td>High, Medium, Low</td>
<td>High, Medium, Low</td>
<td>Resiliency Co-Benefits, Non-Resiliency Co-Benefits</td>
<td>High, Medium, Low</td>
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Rockaway West Planning Committee Meeting | 38
# DOS criteria defined

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Feasibility</th>
<th>Cost*</th>
<th>Risk Reduction</th>
<th>Co-Benefits</th>
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<tbody>
<tr>
<td><strong>High</strong></td>
<td>Little to no physical, regulatory, or political impediments to implementation. Could initiate program/construction, the funding, within a</td>
<td>$1-3M</td>
<td>Eliminates threat or protects</td>
<td>Co-Benefits include both resiliency and non-related benefits.</td>
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<tr>
<td></td>
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<td></td>
<td>Resiliency Co-Benefit example: Lays groundwork for risk reduction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Non-resiliency Co-Benefit examples: Job growth, social services, preservation of neighborhood character</td>
</tr>
<tr>
<td><strong>Medium</strong></td>
<td>Some physical, or political hurdles to implementation but still be implemented funding) within 5 years</td>
<td>$500K – $1M</td>
<td>Significantly enhances resiliency or provides some protection from flooding</td>
<td></td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>Many and difficult and regulatory hurdles to implementation. Once approved / funded would likely take more than 5 years to implement</td>
<td>&lt;$500K</td>
<td>Provides little to no from flooding and does little enhance resiliency</td>
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* Very High Cost = >$3M

Future criteria: Public Support, Funding Availability
### CDBG–DR eligibility – preliminary interpretation

<table>
<thead>
<tr>
<th>Likelihood of funding</th>
<th>Types of Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong></td>
<td>• Capital resiliency–focused projects (including coastal protection measures, physical resiliency improvements to homes &amp; businesses, community center resiliency improvements, “immovable” equipment for buildings)</td>
</tr>
</tbody>
</table>
| **Medium**            | • Planning studies for specific resiliency capital projects (e.g., planning and design of flood gate)  
                         • CBO capacity building (emergency plans and training, operating expenses)  
                         • Technical support for residential & business |
| **Low**               | • Capital & social resiliency projects with a limited resiliency argument  
                         • Broad planning studies not focused on a specific capital project  
                         • CBO mobile equipment purchases (e.g. emergency generators) |