Jersey City, New Jersey, USA

Post-Hurricane Sandy Planning

Part 1:
Resiliency Master Plan

Part 2:
Encouraging Participation by the Private Real Estate Development Sector

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Global Risks
Impacted 24 states across the Mid-Atlantic and Northeast

$65.7 billion in damages and economic loss - second costliest storm in U.S. history

Emergency & Major Disaster Declarations made in 13 states

650,000 homes damaged or destroyed
Layered Risk Assessment

MARSH  RIVER  ISLAND  CREEK  COAST

GEOPHYSICAL TYPOLOGIES

WETLANDS EVOLUTION

85% OF THE REGIONAL HISTORIC WETLANDS HAS BEEN DEVELOPED OR LOST

2.5 MILLION INHABITANTS IN THE NEW YORK & NEW JERSEY METROPOLITAN AREA LIVE IN THE FLOOD ZONE

66% OF THE MOST VULNERABLE COMMUNITIES LIVE WITHIN A 1/2 MILE OF THE FLOOD ZONE

80% OF THE REGIONAL FUEL STORAGE IS IN THE FLOOD ZONE

75% OF THE NET ANNUAL POWER GENERATION IS IN THE 100 YEAR FLOOD ZONE
BERM ALIGNMENT

OPTION 1

OPTION 2
ENCOURAGING PARTICIPATION by the PRIVATE REAL ESTATE DEVELOPMENT Sector

Image: From Hamilton Park Neighborhood Association: hpnanj.org
REDEVELOPMENT

“A process to rebuild or restore an area in a measurable state of decline, disinvestment, or abandonment.”

Redevelopment can be undertaken by the Public sector, Private sector, or in Public/Private Partnership.
JERSEY CITY REDEVELOPMENT ACTIVITY

As of March 2017:
37,000+ units planned;
9,000+ units under construction.
This talk will focus on

The Private Real Estate Development sector, which plays a critically important role in Jersey City’s ongoing desirability and economic vitality.
• All Public Buildings in Jersey City must be LEED Silver Certified.

• This requirement does not extend to the Private Sector.
• Requiring Real Estate Developers to fully adhere to sustainable practices is not politically possible at this time.
Completion of the Adaptation Master Plan preceded our work. It states:

“The implementation strategy shall identify creative funding solutions, such as the ability to require the implementation of resiliency-building strategies as part of real estate development negotiations between developers and the City.”
By understanding what motivates Developers, we recommended changes that encourage sustainable land-planning and building practices. Underlying our thinking….

- Developer’s are profit-driven.
- Time is money; approval processes can be time-consuming and with unpredictable results.
Six examples follow of changes Jersey City adopted this past year to their **CODE OF ORDINANCES**

Or incorporated into a new **REDEVELOPMENT PLAN SUPPLEMENT**.
Before: Roof Decks were permitted to cover 30% of a roof.

Now: if a green roof is used, increase Roof Deck coverage to 50%
SUSTAINABLE PARKING STRATEGY

Zoning Requirements include required parking ratios (ie 1 car/unit for residential, or 1 car/500sq.ft of commercial space).

Parking deck parking spaces can cost ($50,000US) to construct. This substantial expense causes Developers to seek reductions to the number of spaces required.
A 20% reduction in required parking spaces is now permitted if:

• Spaces are reserved exclusively for electric vehicles and with charging stations.

• Spaces are set aside for and actively occupied by, car sharing services.
Surface parking lots with more than 10 spaces shall be graded to allow stormwater runoff to drain into bioswales, instead of the City’s stormwater infrastructure.
ENCOURAGING LEED CONSTRUCTION

• Expedited, Priority review of Building Permit Applications for projects that will meet LEED Certification standards.

• Up to 25% refund of Building Permit fees within 1 year of receiving LEED Certification.
SOLAR PANELS:

• Are permitted within every zone **without the need for variance.**

• Do not require Planning Board Review when located in yards.

• Are exempt from Impervious Coverage Calculations except for their base foundations.
Jersey City’s urban fabric includes many public and private buildings on the Historic Register, and 5 Historic Districts, most of them flood-prone.

All are protected by Codes and Standards established by the US Secretary of the Interior.
To help incentivize ongoing investment in these desirable Historic buildings and Districts, Jersey City now:

- **Allows modifications** to Historic Buildings **for wet or dry flood-proofing** if architect-designed and approved by the Historic Commission.

- **Grants permission to construct a rooftop addition to replace ground level space lost to flood risk**, if such addition is not visible from the street.
LESSONS LEARNED

• Adoption of suggestions into ordinances is slow and piecemeal.

• Get stakeholders together from the Start. The State grant that funded the 6 parts of this project resulted in a comprehensive set of planning documents addressing project at every scale. Funds are not available to implement city-scale resiliency plans. A grant that called for specific recommendations at a smaller scale would have been helpful in order to ultimately get project funds.

• Recognize the limits to what can be achieved in the short term. Work to assure that its recommendations are referenced when future opportunities arise.

• Structure the project so everyone can see the big picture. Phases were completed in consecutive order and consultants were involved only in those phases that their expertise demanded at the time. As a result, it was difficult to understand one’s work in light of the complete picture and some things fell through the cracks.
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Questions and Answers

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