

**#ONENYC**

**#NYCxSDG**

**Climate Change and Water Management**

**April 27, 2016**



# Global Context

2015 proved to be a pivotal year for climate action and resiliency, culminating in Friday's signing ceremony of the Paris Agreement...



Signing of the Paris Agreement (April 2016)

- **March 2015:**  
Sendai Framework on  
Disaster Risk  
Reduction
- **September 2015:**  
Adoption of the  
Sustainable  
Development Goals
- **December 2015:**  
COP21 and the  
negotiation of the  
Paris Agreement

# Local Implementation

...And complemented Mayor de Blasio's release, in April 2015, of *One New York: The Plan for a Strong and Just City (OneNYC)*.



**One New York:  
The Plan for a  
Strong and Just City**

OneNYC recognized a historical moment: in 2025, we will celebrate our 400<sup>th</sup> anniversary and **begin our fifth century.**

The plan **envisioned** how we want our City to look in ten years and beyond.

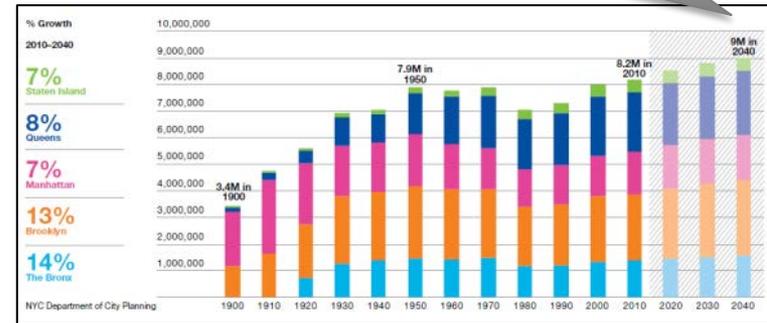
We committed to the **goals and initiatives** designed to achieve that long-term vision.

# Climate Change / 21<sup>st</sup> Century Threats

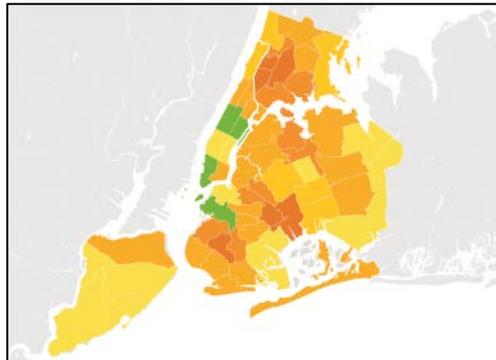
OneNYC first took stock of our current challenges...



Hurricane Sandy



A growing population



Increasing inequality

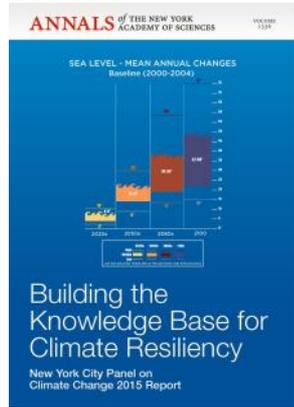


Aging infrastructure

# Climate Change / 21<sup>st</sup> Century Threats

...And grappled with the impacts of climate change on our city...

**The NYC Panel on Climate Change (NPCC) projects increased chronic climate hazards...**



*By the 2050s:*

- 4.1°F to 5.7°F increase in average temperature
- 4% to 11% increase in average annual precipitation
- Sea levels likely to rise 1-2 ft.; maybe 2½ ft.

*By 2100:*

- High-end projections may reach 6 ft.

**...and increased impact from extreme weather events.**



*By the 2050s:*

- Number of days in NYC above 90° could triple

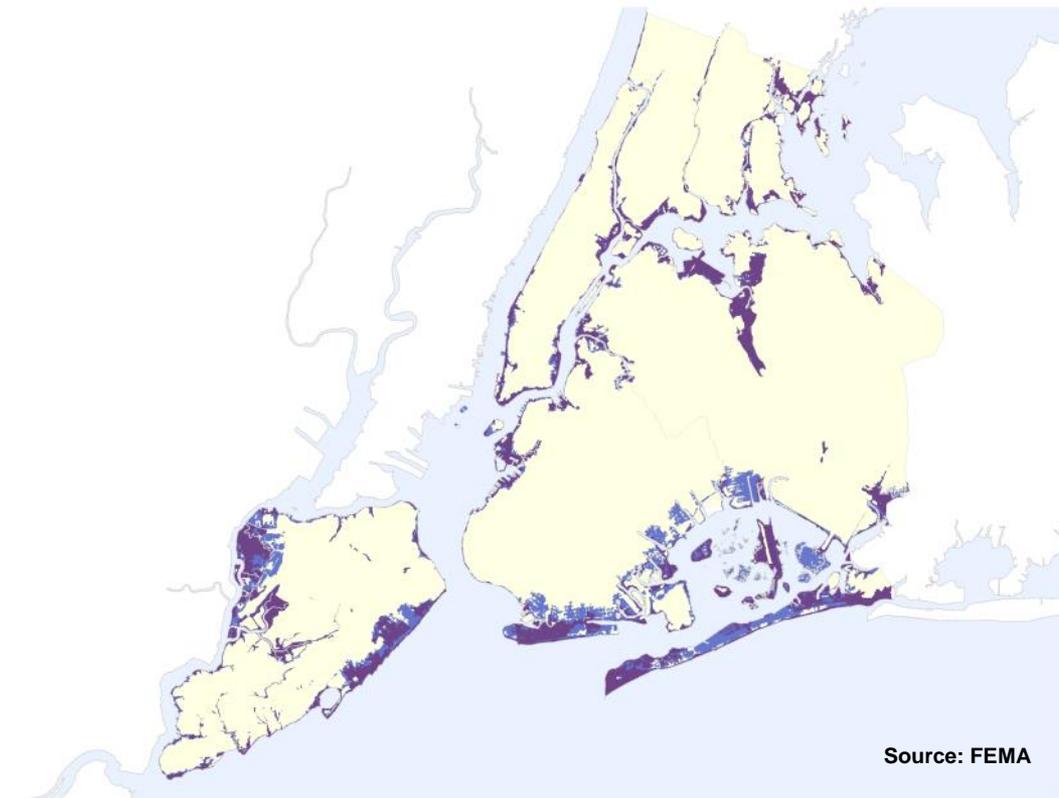
*Even today:*

- 100-year floodplain expanded by 17 square miles (51%) citywide; 2.3 ft. average increase in 100-year flood elevations; will increase with further sea level rise; now encompasses 71,500 structures

# Climate Change / 21<sup>st</sup> Century Threats

...Including, after Hurricane Sandy, a reassessment of the city's vulnerability to coastal flooding now...

## FEMA 2007 FIRMs vs. Preliminary FIRMs



 FEMA 2007 FIRMs 100-year Floodplain  
 FEMA 2013 Preliminary FIRMs 100-year Floodplain

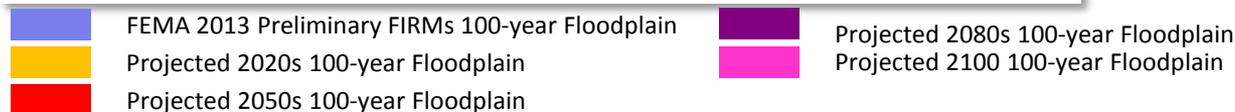
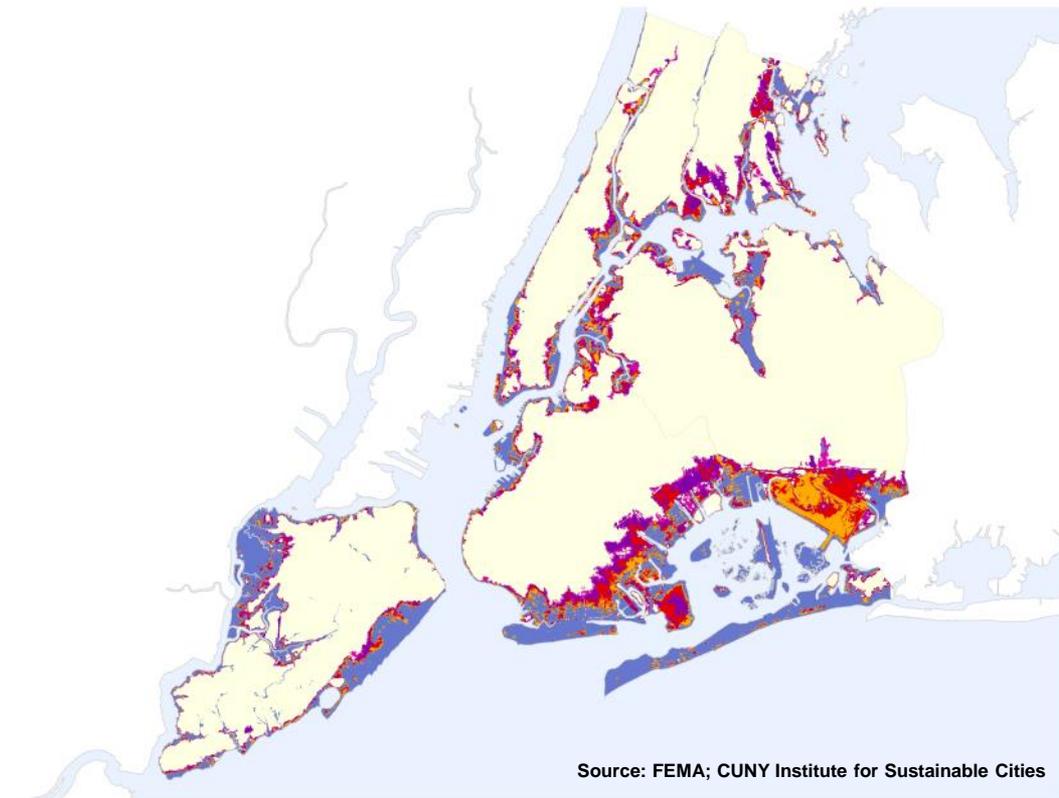
	100-year Floodplain*		
	2007 FIRMs	2013 PFIRMs	Change (%)
Residents	218,000	400,000	83%
Jobs	214,000	290,800	35%
Buildings	36,000	71,500	99%
1-4 Family	26,000	57,400	120%
Floor Area (Sq Ft.)	377M	532M	42%

\* Numbers are rounded for clarity

# Climate Change / 21<sup>st</sup> Century Threats

...And well into the future.

## Projected floodplain for the 2020s, 2050s, 2080s, and 2100



	100-year Floodplain*		
	2013 PFIRMs	2050s Projected	Change (%)
Residents	400,000	808,900	102%
Jobs	290,800	555,700	91%
Buildings	71,500	118,000	65%
1-4 Family	57,400	89,000	55%
Floor Area (Sq Ft.)	534M	855M	42%

\* Numbers are rounded for clarity



# OneNYC: Our Four Visions

Given these threats, OneNYC proposed initiatives to build a strong and just city, organized across four strategic visions...



**Our Growing,  
Thriving City**



**Our Just and  
Equitable  
City**



**Our Sustainable  
City**



**Our Resilient  
City**

# OneNYC: Progress

...And just this past Friday, the City was thrilled to announce the progress we've made in our first year.



## Progress since April 2015:

- Reached a record high of nearly 4.3 million jobs
- Financed over 40,000 affordable apartments, which can accommodate 100,000 New Yorkers, since 2014
- Fought successfully to increase the minimum wage for New York City workers to \$15 by 2019
- Tripled solar energy installations citywide since 2014
- Expanded curbside organics collection to over 700,000 New Yorkers
- Phased-out the dirtiest heating oil in city buildings
- Secured \$300 million for new coastal resiliency investments and reached major milestones on critical projects

# OneNYC: Our Resilient City

This includes major design and community engagement milestones across a portfolio of projects addressing flooding risks in the city's coastal communities.



**East Side Coastal Resiliency**

# OneNYC: Our Resilient City

This includes major design and community engagement milestones across a portfolio of projects addressing flooding risks in the city's coastal communities.



**Lower Manhattan Coastal Resiliency**

# OneNYC: Our Resilient City

This includes major design and community engagement milestones across a portfolio of projects addressing flooding risks in the city's coastal communities.



Red Hook Coastal Resiliency

# OneNYC: Global Partnerships

And we are committed to learn from and share with other cities across the globe as we advance our work.



- **NYC / Copenhagen Partnership:** Bilateral agreement to share best practices on cloudbursts and climate change
- **100 Resilient Cities:** Network of cities building resilience to shocks and stresses
- **C40 Climate Leadership Group:** Network of cities leading on climate action

#ONENYC



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