



NYC[™]
Mayor's Office of
Recovery and Resiliency

NYC Climate Change Adaptation Task Force

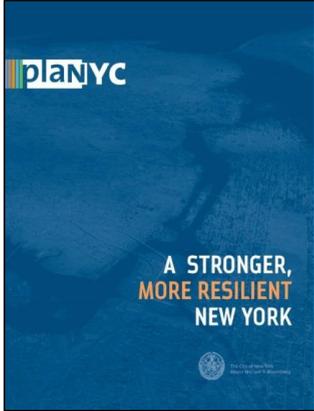
Adaptation Futures Conference: May 10, 2016
13:30-15:15

Climate Change Adaptation Task Force

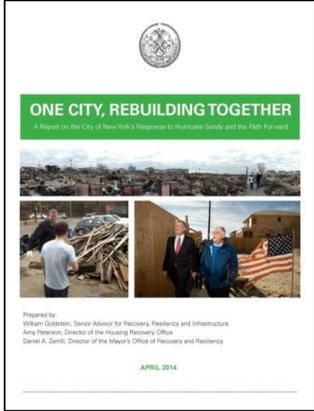
The CCATF was first established in 2008 and helped our Sandy recovery



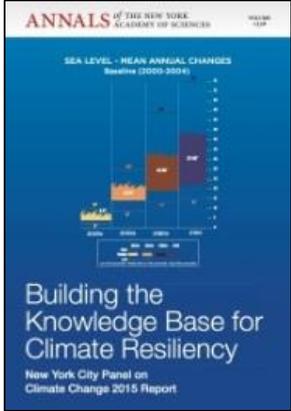
2007 & 2011



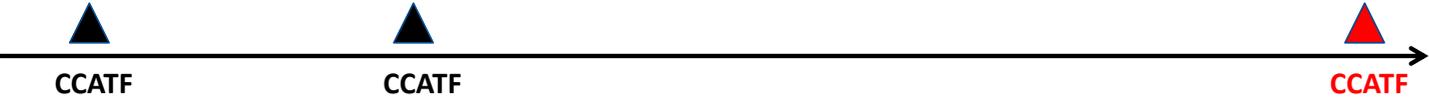
2013



2014

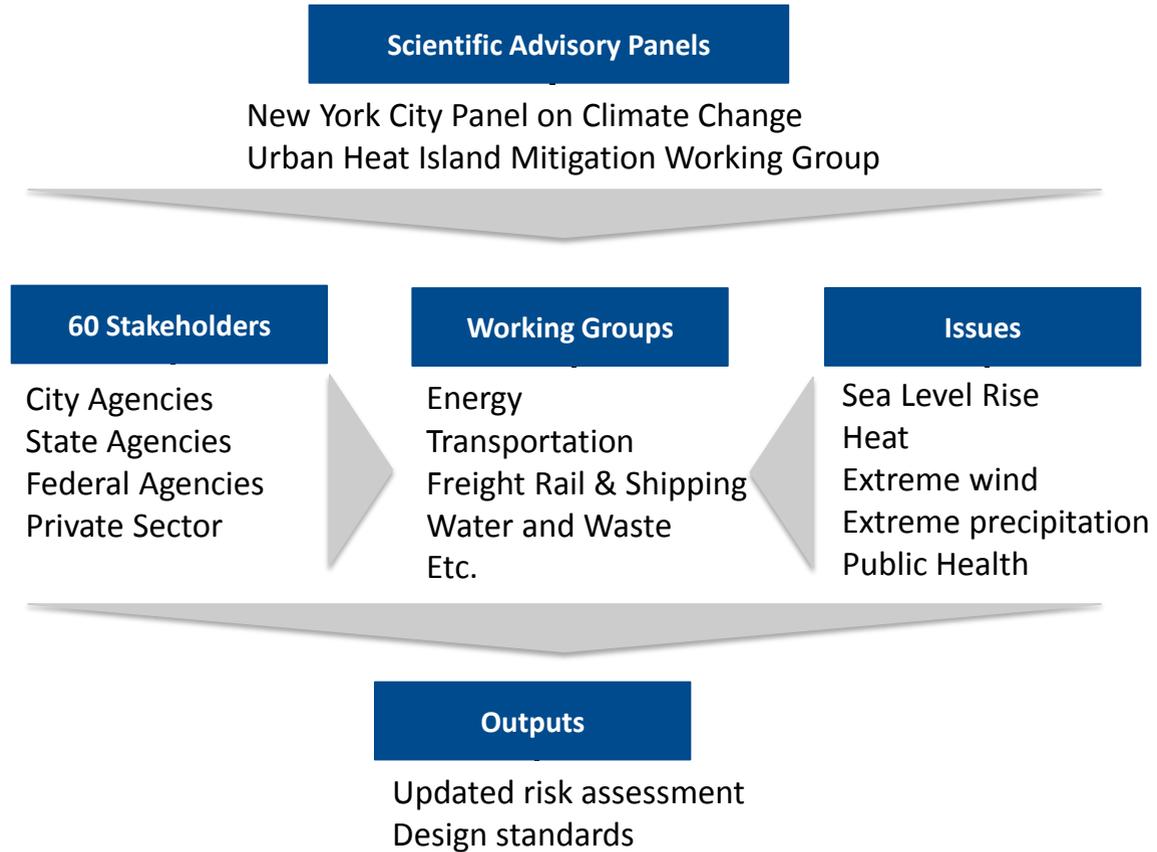


2015



CCATF Organizational Structure

Stakeholders work in working groups to assess climate risks across sectors



#ONENYC

CCATF Objectives

CCATF objectives are codified in Local Law 42, which passed in 2012.

2012 Local Law 42:

- Identify critical infrastructure in New York City that could be at-risk from the effects of climate change
- Facilitate knowledge sharing and to develop coordinated adaptation strategies to secure these assets
- Develop a report with recommendations

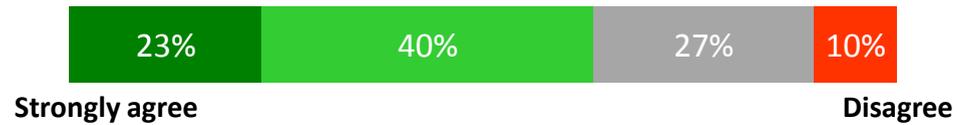
July 2015 update:

- Adds telecommunications as sector of interest

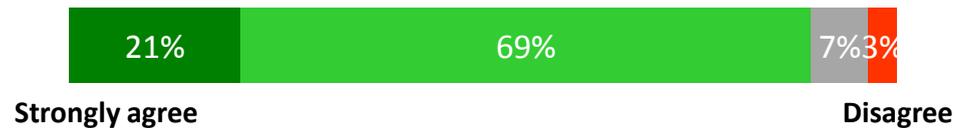
CCATF Reconvened in June 2015

Informal survey results point to planning and progress since Sandy...

Have a clear resiliency plan in place.



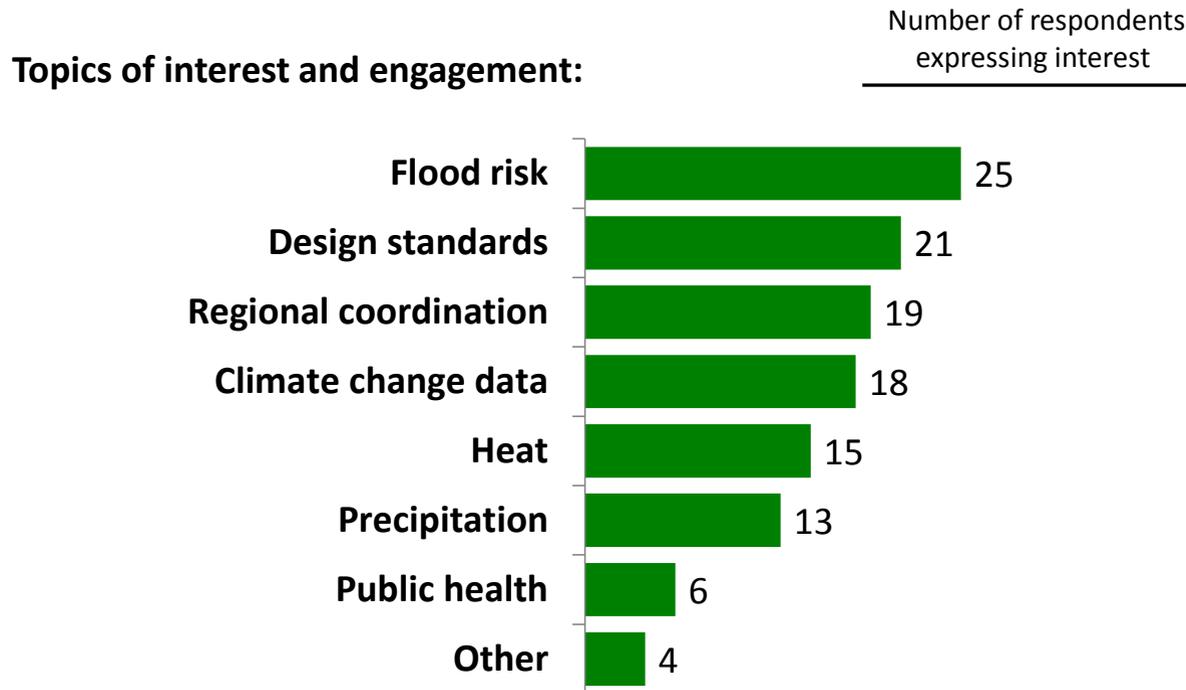
Made significant progress in resiliency/
climate adaptation since Sandy.



Based on 30 and 29 respondents, respectively.

CCATF Reconvened in June 2015

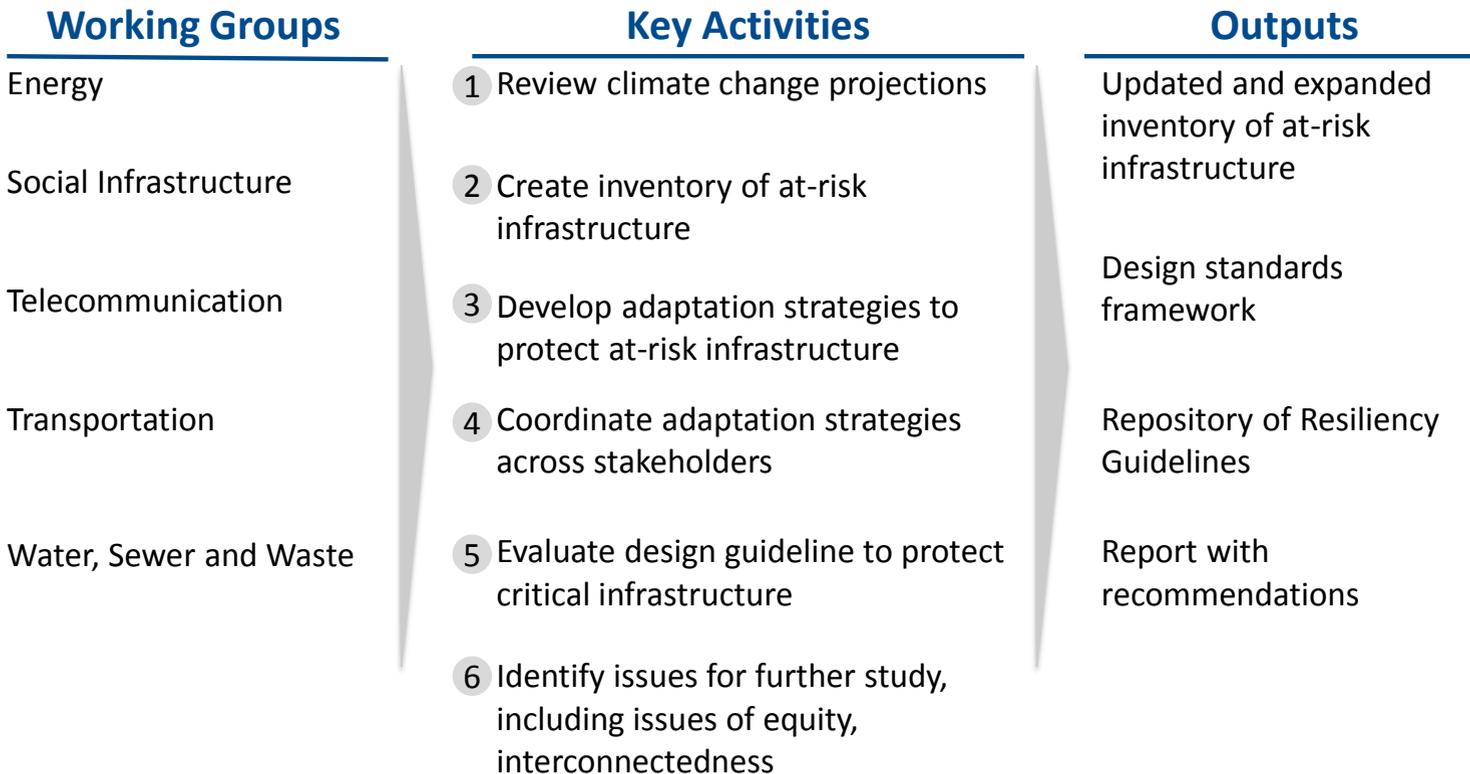
... and a desire to engage on a number of topics.



Note: Results based on 27 respondents.

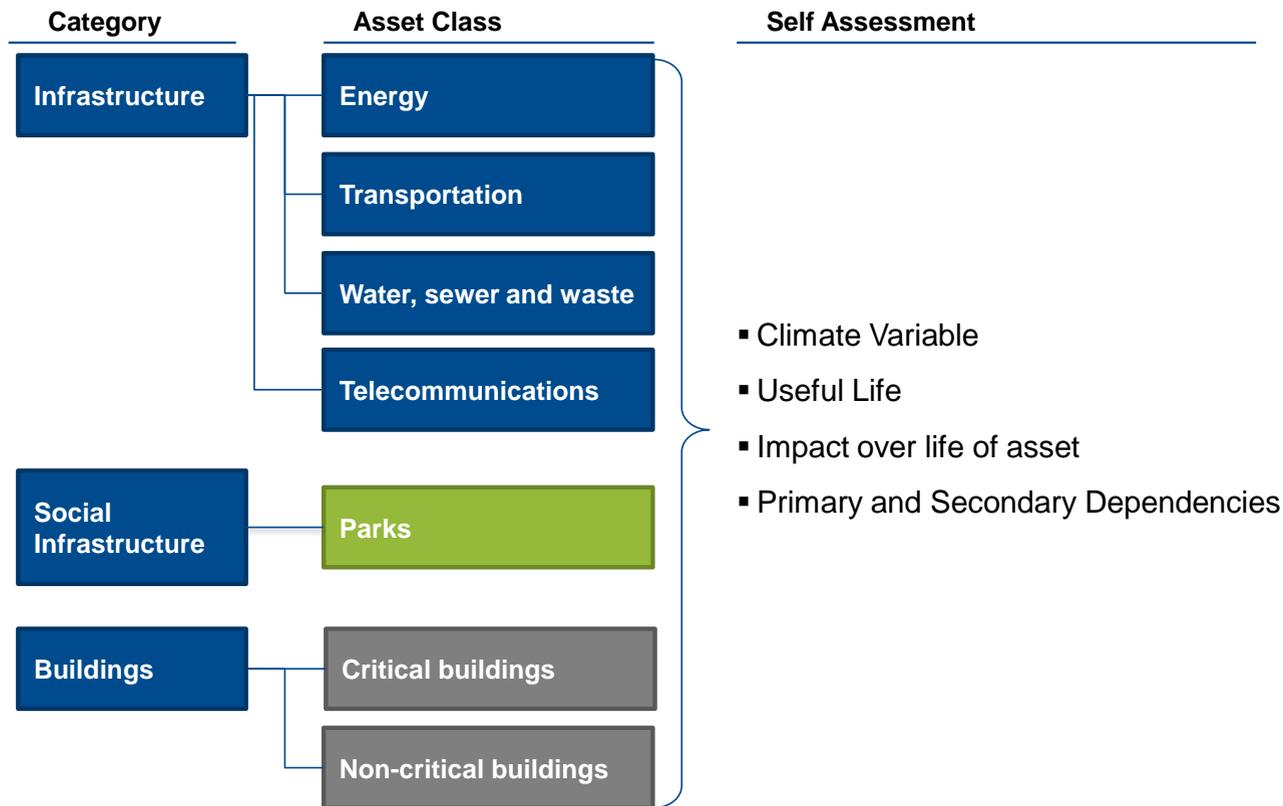
CCATF Key Activities and Outputs

Five working groups will develop an updated inventory of at-risk infrastructure, a design standards framework and a repository of resilience guidelines.



CCATF: Phase I

We are reviewing and update existing infrastructure inventory and qualitative data.



CCATF: Lessons Learned

On Process

- Trust and collaboration is essential from the beginning
- Limits to types and quality of information shared on a voluntary basis
- City has control over certain services, but transportation, telecom and energy, for example, we don't have a direct control

CCATF: Lessons Learned

On Structure of Risk Assessment and Analysis

- In general, private sector participants identified lower urgency than public stakeholders
- Work with sector experts to structure risk assessment so asset types and sub-components are standardized
- Clarify definitions and what you are capturing, e.g. is it the vulnerability to asset, system, stakeholder, City?
- Strike the right balance between asset-based and a systems-based assessment

CCATF: Challenges

- Asset-level vs. network/system-wide
- Qualitative vs. quantitative for specific infrastructure
- Motivating private sector providers of critical services (e.g., fuel, telecom)
- Public-private partnerships for infrastructure financing
 - Making a successful business case for climate change resiliency

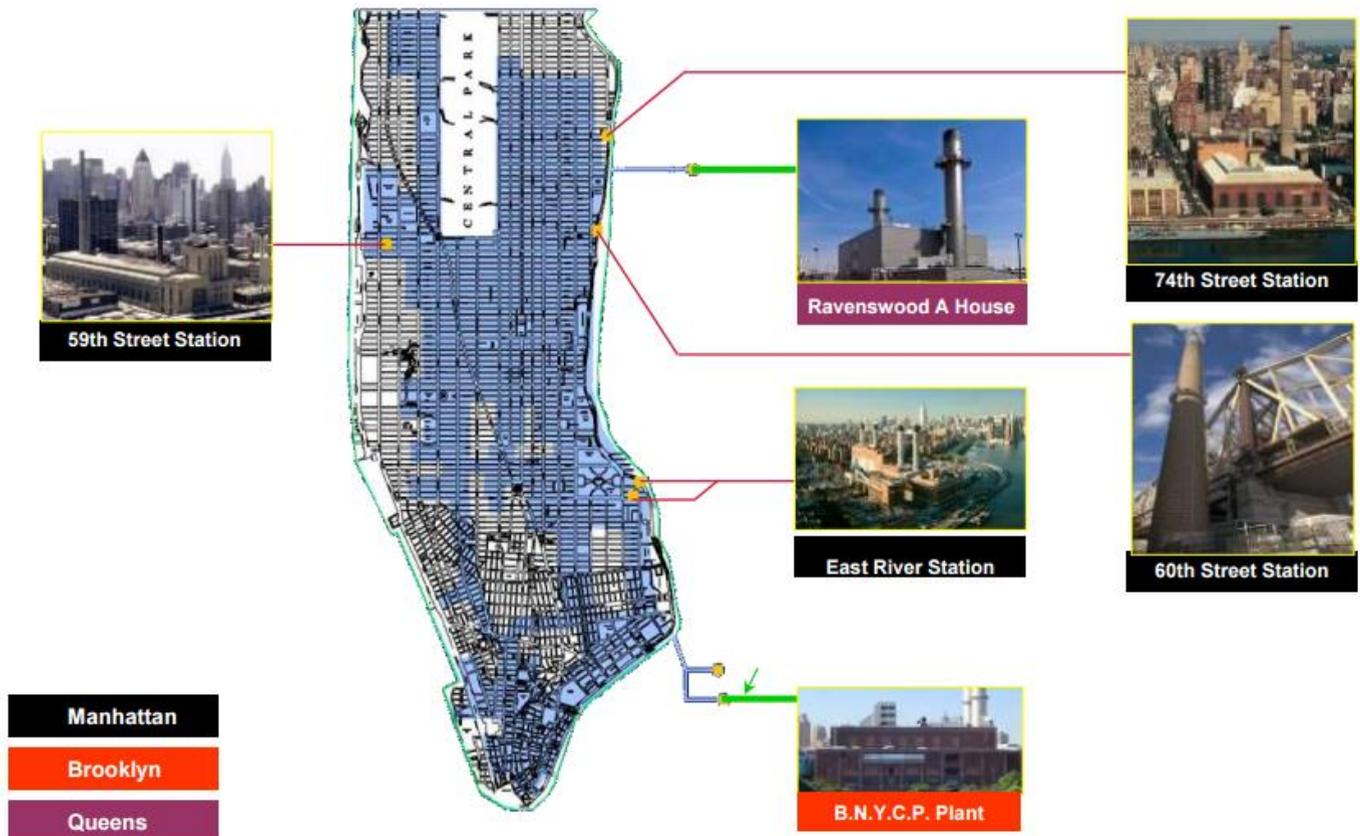


Con Edison Overview

- Con Edison provides
 - Electricity: southern 2/3 of Westchester and all of NYC except the Rockaway Peninsula
 - Natural Gas: Bronx, Manhattan, and portions of Queens as well as the majority of Westchester
 - Steam: from the southern tip of Manhattan to 96th St on the west side and 89th St on the east side



Con Edison Steam System



Major Storms in last 5 years

- Hurricane Irene (2011)



- Hurricane Sandy (2012)



Storm Hardening - Overview

- Mitigate major water entry into stations
- Minimize equipment damage from salt water
- Maintain continuous operation during a coastal storm event
- Allow for rapid recovery
- Employ defense in depth measures
- Allow for future climate change





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