NYC's RISK LANDCAPE:

A GUIDE TO HAZARD MITIGATION

NOVEMBER 2014

NYC Hazard Mitigation

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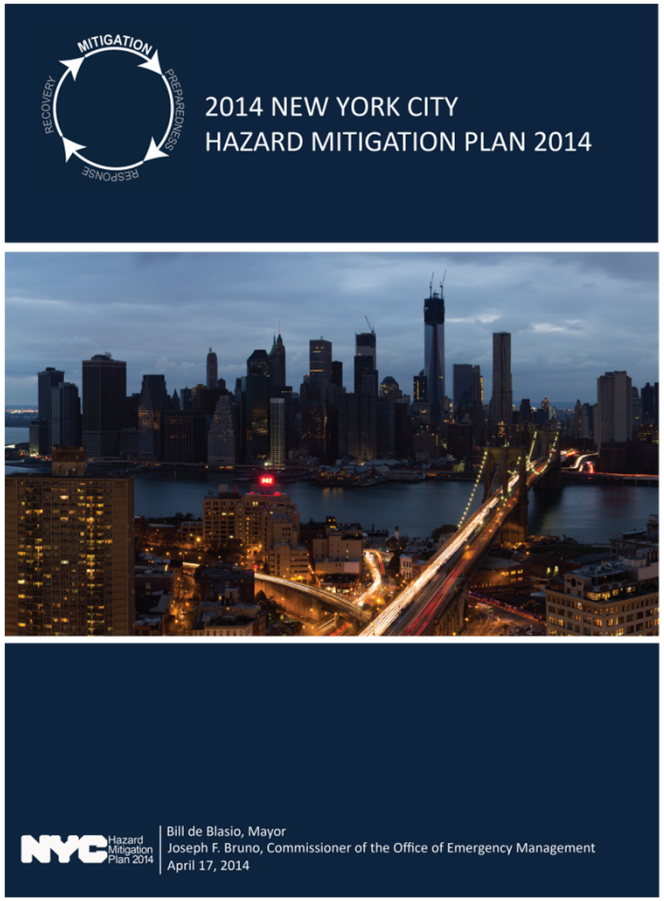
2014 HAZARD MITIGATION PLAN (HMP):

Local and State jurisdictions must have a FEMA-approved mitigation plan to receive FEMA Hazard Mitigation funds. The 2014 New York City Hazard Mitigation Plan was approved in Spring 2014 by FEMA and the NYS Department of Homeland Security and Emergency Services.



HOW THE GUIDE RELATES TO THE 2014 HMP:

- A focused list of hazards
- Includes hazard case studies and regulatory time line as it relates to hazards
- Provides details on expanded projects and vulnerabilities
- Describes the City's risk management roles, structure, and movement

OVERVIEW OF THE GUIDE:

WHAT THIS GUIDE OFFERS YOU:

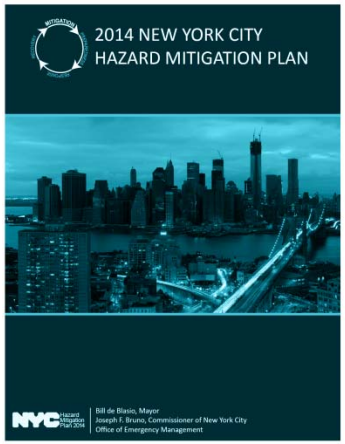
- A focused overview of NYC's risk landscape through an assessment of the hazards that pose a threat to New York City
- Identifies risk and vulnerabilities to these hazards, and strategies for managing our risk
- Profiles nine hazards: Coastal Erosion, Coastal Storms, Flooding, Water Shortage, Strong Windstorms, Winter Weather, Extreme Heat, Earthquakes, and Pandemic Influenza

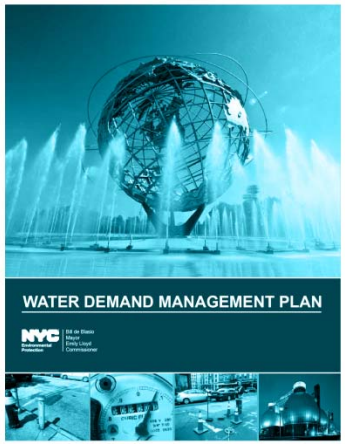
WHO ARE THE PLAYERS?

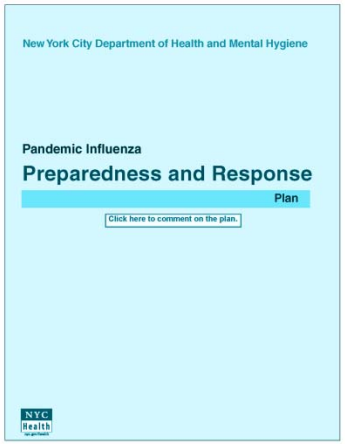
INTERAGENCY PARTNERSHIP:

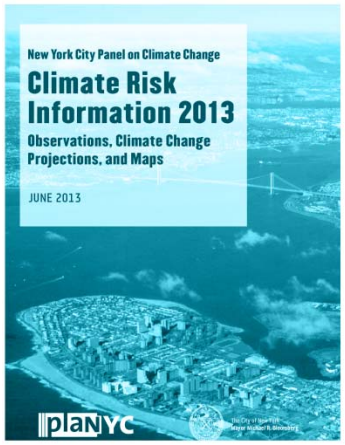
Developed by NYC Emergency Management Department in partnership with NYC Department of City Planning and the Mayor's Office of Recovery and Resiliency, NYC's Risk Landscape is the City's all hazards risk reduction resource.

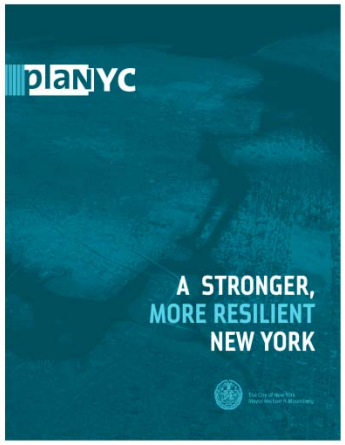
HOW DOES THIS RELATE TO OTHER CITY INITIATIVES?

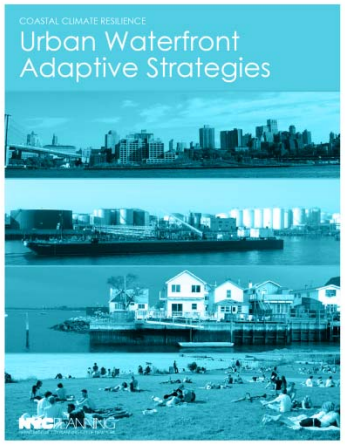












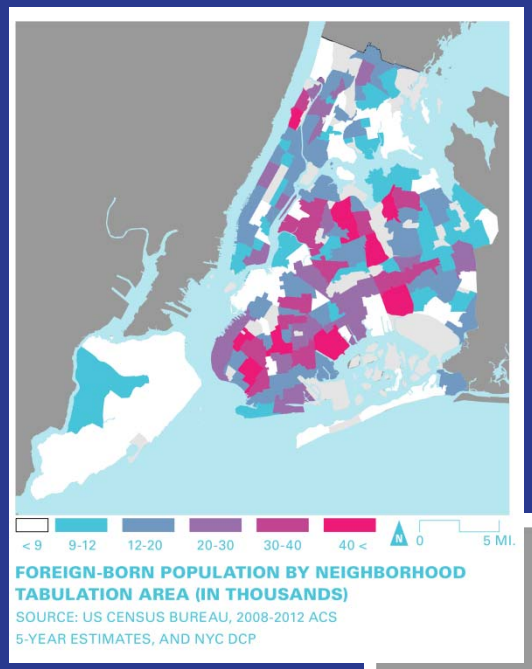
This Guide builds on a comprehensive set of resources developed by the City and its partners to manage the risks we face.

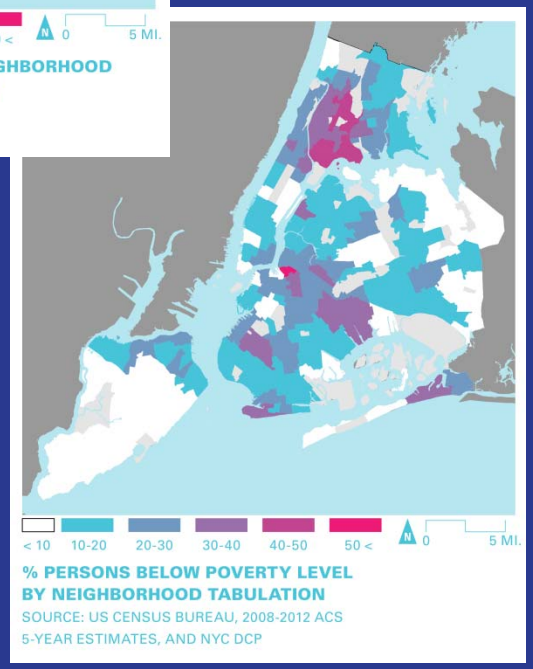
AN INTRODUCTION TO NYC'S RISK LANDSCAPE

AT A GLANCE:

- Located on a coastline that is 520 miles long
- Roughly 8.4 million residents
- Occupy only 305 square miles with a population density varying significantly across the city
- Embedded in a metro region with a population of roughly 22 million people
- Immense building stock , totaling approximately 1 million buildings

AN INTRODUCTION TO NYC'S RISK LANDSCAPE





PEOPLE AT RISK:

Children: Twenty-one percent of New Yorkers are under age of 18, and 6.5 % under 5.

Seniors: The number of New Yorkers over the age of 65 has grown by 12.4 percent since 2000.

People with disabilities: 10% of New Yorkers are estimated to have a disability.

People with language constraints: Over 200 languages are spoken in the City. 23 % of New Yorkers speak English less than very well.

People with low income: Over 21 percent of the City's population live below the federal poverty line.

FOCUSED LIST OF HAZARDS

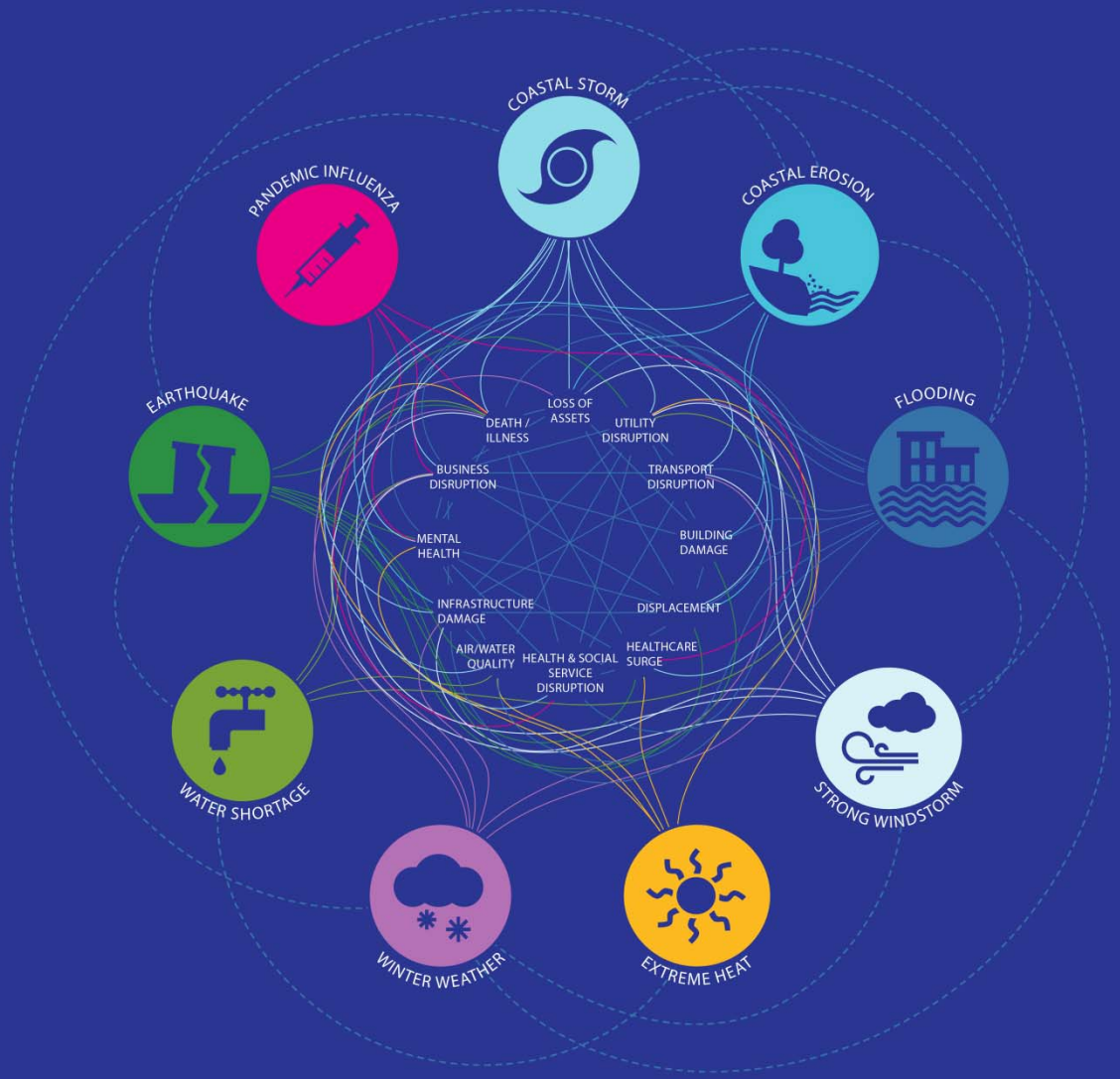
For each hazard we addressed the following questions:

What is the Hazard?

What is the Risk?

How do we manage the Risk?

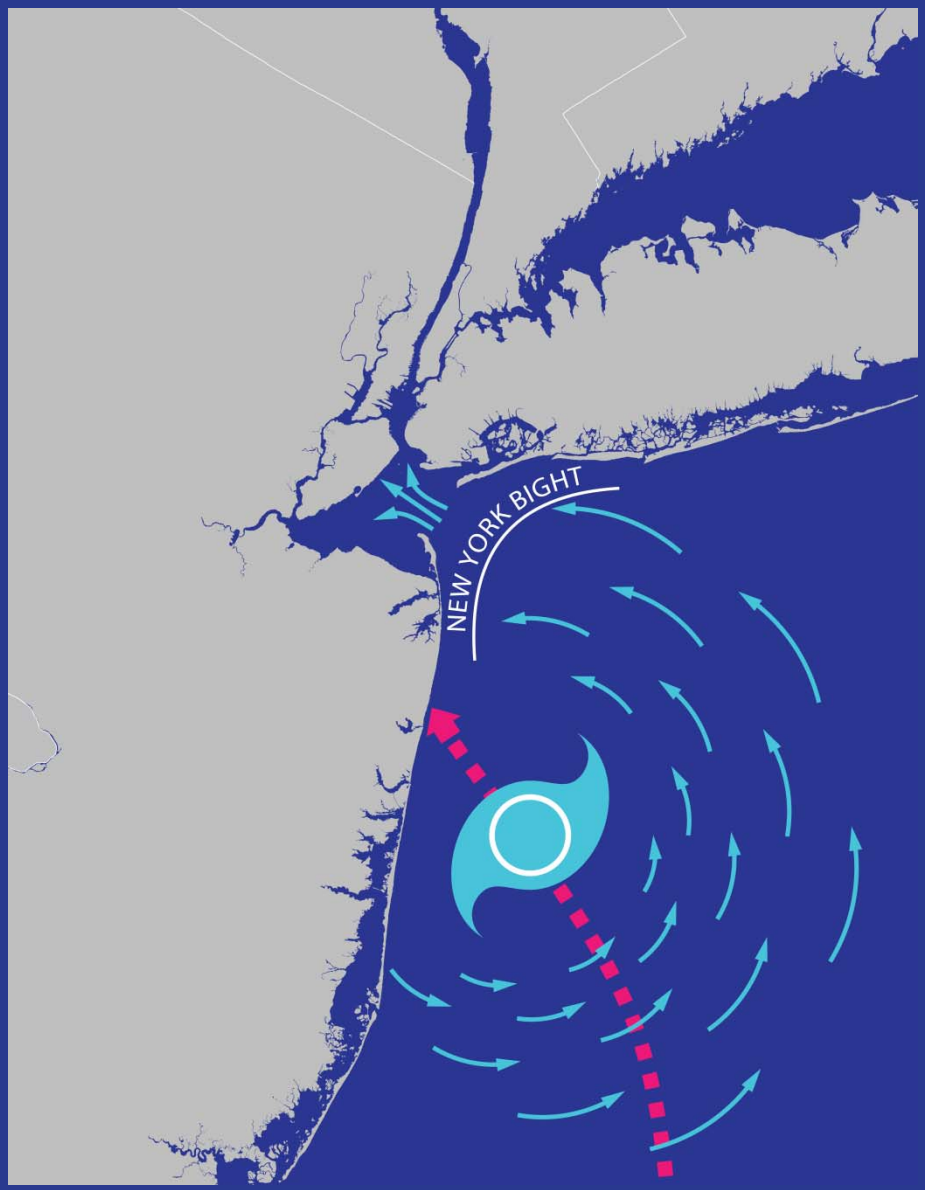
HAZARD IMPACT DIAGRAM



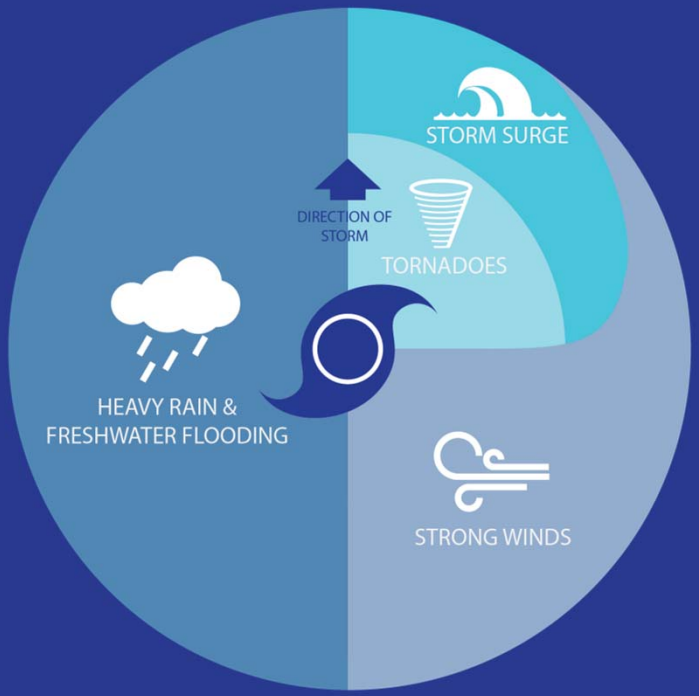
WHAT IS THE HAZARD?

FLOODING

WHAT IS THE HAZARD?

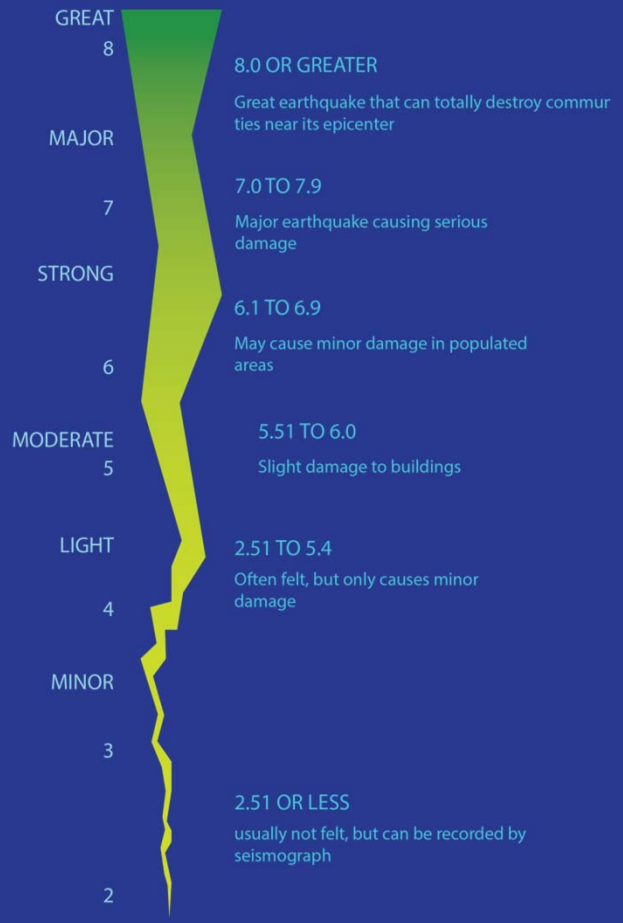


COASTAL STORMS



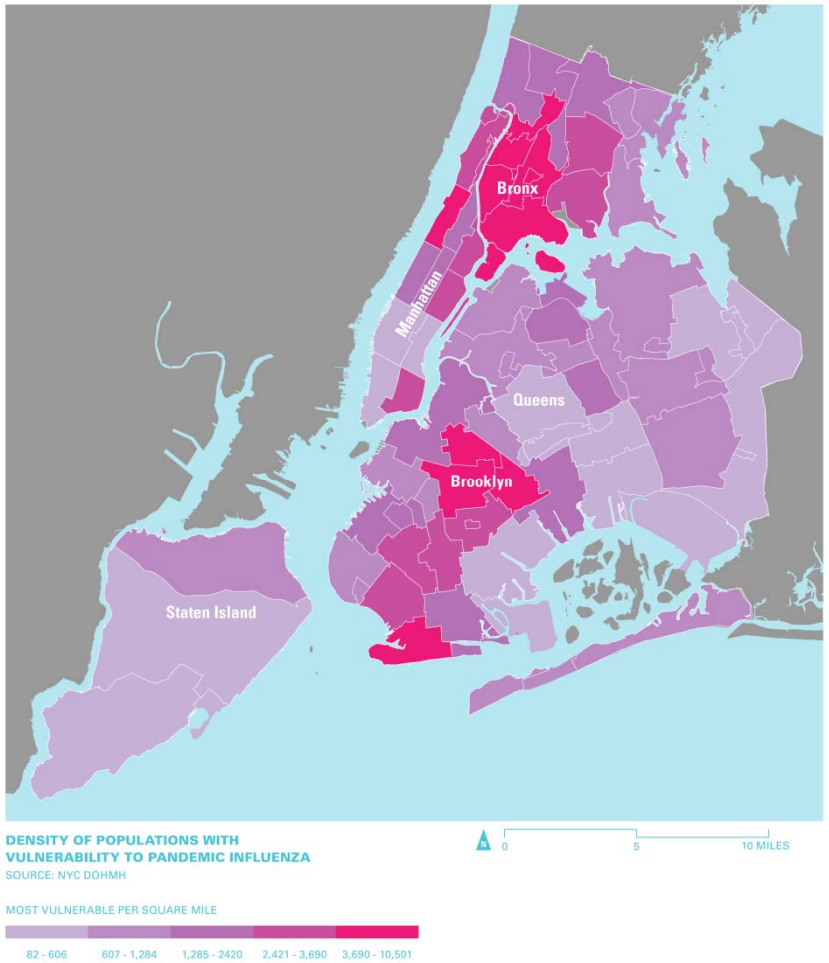
WHAT IS THE HAZARD?

EARTHQUAKES



WHAT IS THE RISK?

PANDEMIC INFLUENZA



Differences in social position based on income, wealth, education, occupation, race/ethnicity

Disparities in exposure to influenza virus

Disparities in access to treatment, once disease has developed

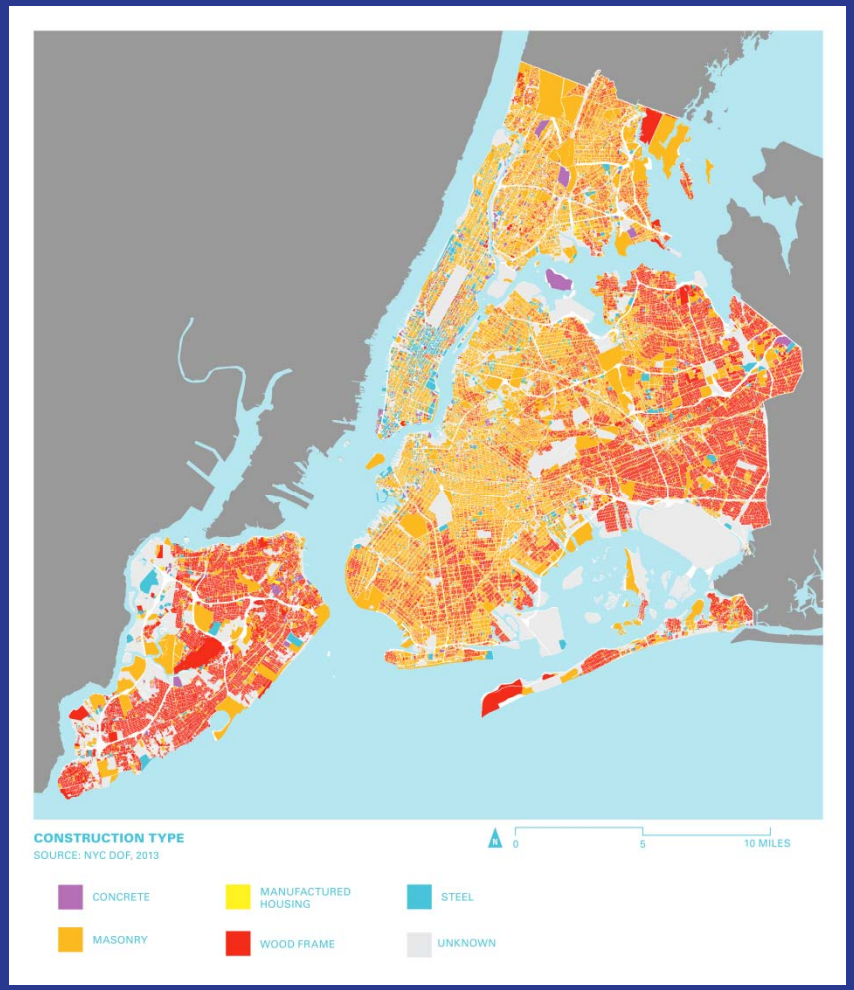
Disparities in susceptibility to contracting influenza disease, once exposed

Additive effects of multiple disparities

Unequal levels of illness and death

WHAT IS THE RISK?

EARTHQUAKES



WHAT IS THE RISK?

COASTAL STORMS

HOW DO WE MANAGE THE RISK?

PROTECTING INFRASTRUCTURE: WATER SHORTAGES

HOW DO WE MANAGE THE RISK?

ENGINEERING STRATEGIES: EARTHQUAKES

HOW DO WE MANAGE THE RISK?

ENVIRONMENTAL CONTROLS: EXTREME HEAT

HOW DO WE MANAGE THE RISK?

PROMOTING PREPAREDNESS: ALL HAZARDS

Mitigation minimizes the repeated cycle of disruption and damage. Every recovery phase following a hazard becomes an opportunity for learning for the next disaster.

It also means that our work is never done.

QUESTIONS?