

A low-angle, upward-looking photograph of the Federal Reserve Bank of New York building. The building's facade is made of light-colored stone with many windows. An American flag flies from a pole on the left side of the building. In the background, other skyscrapers of Lower Manhattan are visible under a clear blue sky. A dark blue banner is overlaid at the bottom of the image, containing white text.

FEDERAL RESERVE BANK *of* NEW YORK

# Business Continuity Planning and Crisis Management

Federal Reserve Bank of New York

May 2015

# Today's Agenda

- Introduction
- Top Risks for Business Continuity Environment
- Business Continuity Program Highlights
- Best Practices
- NY Business Continuity Program - Focus
- Case Study: Superstorm Sandy



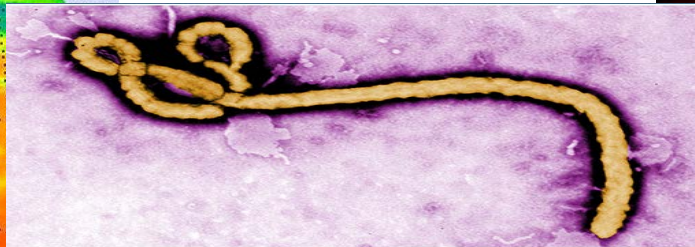
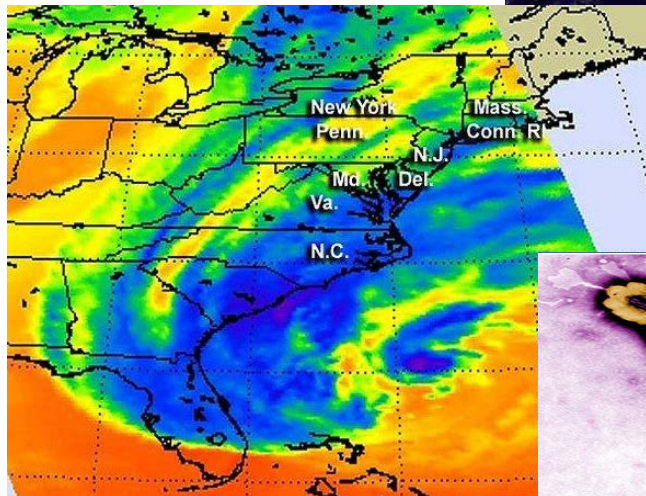
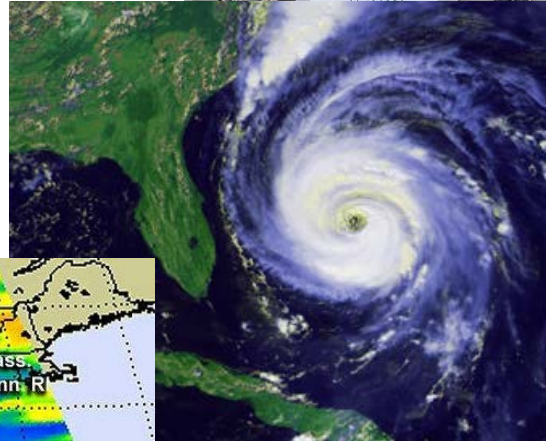
# Why Plan?

- Continue our mission:
  - Execute monetary policy,
  - Support financial stability through oversight of depository institutions, market and payments systems, and lender of last resort,
  - Provide financial services to financial institutions, the U.S. Government and foreign central banks.
- Business Continuity Planning is a component of the Annual Risk Assessment
  - An effective business continuity plan mitigates the effects of business interruptions and reduces overall risk to the Bank





# Crisis Comes in All Forms....



# Top Risks for Business Continuity Environment

- Man-made Disasters
  - IT Threats
    - Anonymous Cyber Threats
    - Hackers
  - Terrorist Threats
    - September 11, 2001 Terrorist Attacks
    - 2010 Time Square Attempted Car Bombing
    - 2011 Norway Bombings
    - 2013 Boston Marathon
  - Civil Disturbances
    - Anonymous Protests
    - Occupy Wall Street Campaign
  - Insider Threats
    - Internal Sabotage
    - Work Place Violence/Active Shooter
- Natural Disasters
  - Weather-Related Threats
    - Winter Storms
    - Tornadoes
    - Earthquakes
    - Hurricanes
      - [Superstorm Sandy](#)
  - Pandemic
    - Avian Flu
    - Swine Flu
    - MERS
    - Ebola



# Business Continuity Program Highlights

- System-wide Business Continuity Framework and Principles
- Business Continuity Department Within the Bank
- All Hazards Approach
- Strategic Business Partners
- Crisis Management
- Business Continuity Plans
- Flexible Contingency Arrangements
- Training and Awareness



# System wide Business Continuity Framework and Principles

- Provides a common set of assumptions for business continuity planning across the System
  - Better define scope of effective business continuity
  - Focus System's business continuity resources on highest priorities and risks
  - Improve the System's preparedness and resiliency
- Based on:
  - The Bank for International Settlements (BIS) High-level Business Continuity Principles for the financial sector
  - Disaster Recovery Institute International (drii) professional practices
- Used across Federal Reserve System to assess business continuity and find improvement opportunities and best practices



# System wide Business Continuity Framework and Principles

- Leadership
- Business Continuity Management Proportionate to Risk
- Safety & Operations
- Flexibility
- Interdependencies
- Communication
- Testing





# Business Continuity Office Placement Within the Bank

- The Bank's Business Continuity Program is positioned within Corporate Group to maximize synergies between services provided by the Business Continuity Office (BCO) and Real Estate (both departments within the Enterprise Services and Resiliency Planning (ESRP) Function within Corporate

## Business Continuity\*

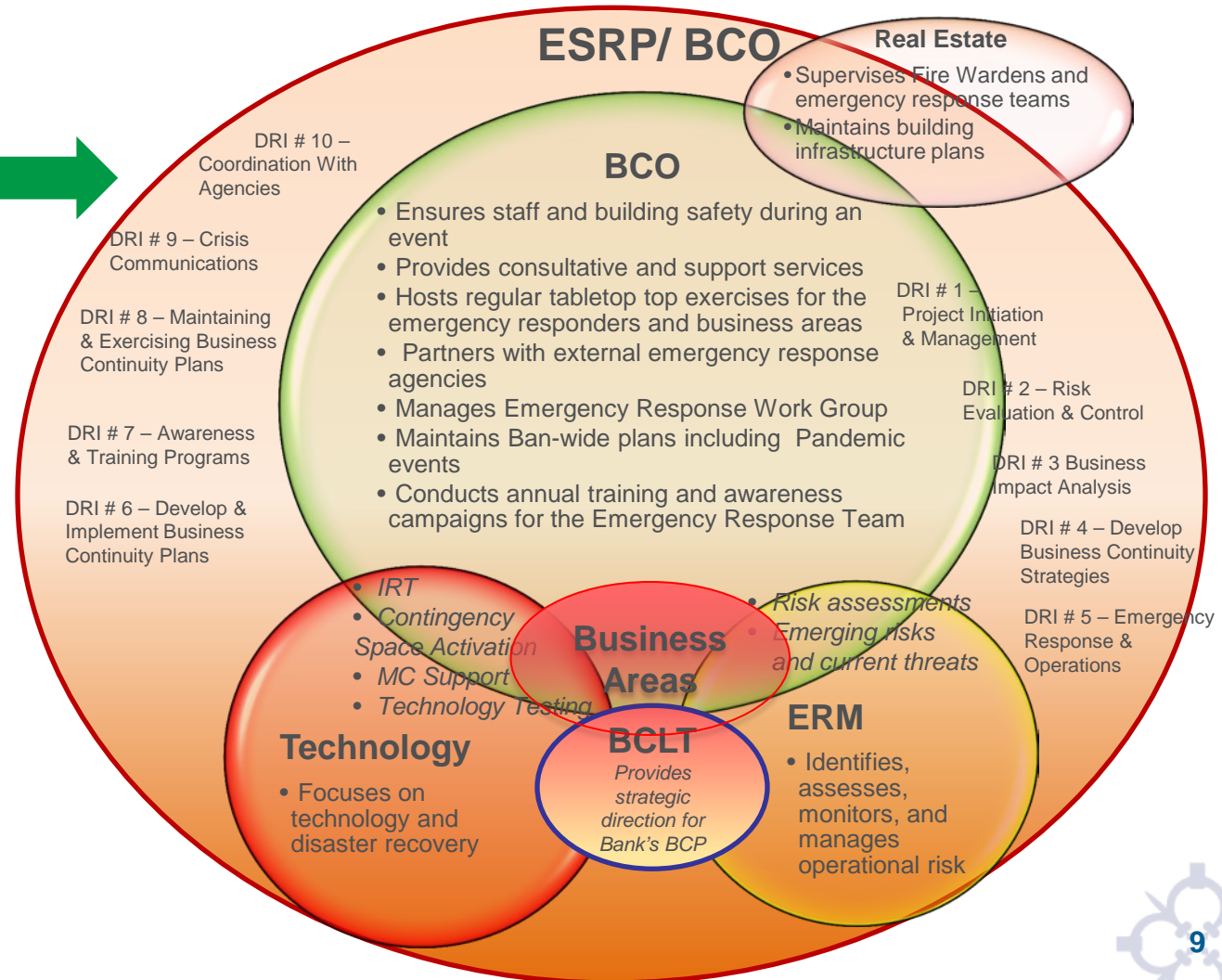
Oversees the strategic vision for the Bank's BCP and ensures alignment with 10 FRS Principles DRI Professional Practices

Enhances the strategic vision for the System business continuity landscape

Leads staff awareness efforts

Provides on-going services to support BC Community of Practice

Leads efforts related to the Bank's response to a contingency event

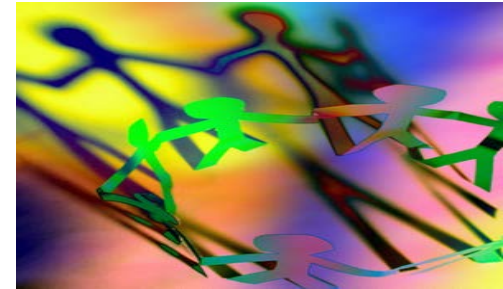


# All Hazards Approach

- Effects of threats are unpredictable
  - Localized and regional
  - Interruption can be a few days, months or years
  - May be expected or unexpected
- All hazards type of approach to contingency planning.
  - We plan by considering the following situations:
    - Building Unavailable
    - Communications Unavailable (e.g. Network, Telecommunications, Blackberry)
    - Staff Unavailable
    - Combination – building, communications and/or staff unavailable

# Strategic Business Partners

- Federal Reserve System Subcommittee on Business Continuity
  - Develop and maintain high level System guidance regarding business continuity planning and testing
  - Identify and share business continuity and crisis management best practices
  - Lead System-wide communication about System initiatives to strengthen business continuity
- New York Business Continuity Leadership Team (BCLT)
  - Help improve the Bank's ability to manage business continuity risks before, during and after a disruption
  - Enhance the Bank's Business Continuity Management (BCM) planning, testing and crisis management
  - Review Bank-wide contingency issues and lessons learned from events, create action plans to address problems and facilitate follow-up
- Business Continuity Liaisons/Managers
  - Manage and endorses business continuity preparedness in their respective business areas
  - Coordinate local emergency response in their respective business areas
- External partners such as:
  - Financial and Banking Information Infrastructure Committee (FBIIC)
  - Securities Industry and Financial Markets Association
  - Office of Emergency Management
  - New York Police Department



# Crisis Management – Roles and Responsibilities

- First Responders
- Emergency Action Plan Director (EAP)
- Evacuation Coordinators/Fire Wardens
- Incident Response Team
- Crisis Management Officer/Senior Management Team
  - Duty Officer
- External Partners (Fire, Police, Office of Emergency Mgmt.)



# Business Continuity Plans

## Business Continuity Plans include:

- Description of Business
- Business Impact Analysis
- Identification of Critical Processes and Applications
- Recovery Times Objectives and Recovery Point Objectives
- Infrastructure and Space Requirements
- Business Interdependencies
- Contact Information
- Contingency Backup Sites

## Maintaining Plans:

- Policy on Business Continuity Planning and Testing
- FRBNY Standard for Business Continuity Plans
- Annual Review/Certification of Business Continuity Plans
- Quality Assurance Framework



# Flexible Contingency Arrangements

- Hot/Cold Contingency Sites
- Buddy Banks
- Split-Operations
- Work from Home Arrangements
- Prioritization of services/operations



# Training and Awareness

## **Employee Safety is the First Priority**

- Safety Drills and evacuation procedures
- Computer-based Bank-wide Training
- National Preparedness Month (September)
- Active Shooter Awareness Sessions

## **On-going crisis management training and exercises/tests**

- Technical Readiness Tests
- Table Top Exercises
- Crisis Management Scenario Exercises
- Practice, Practice, Practice!



# Awareness Tools

- Wallet Cards
- Magnets
- All Staff Emergency Handbook
- Awareness Sessions and On-line training
- Crisis Management Toolkit for Senior Management

## EMERGENCY PROCEDURES HANDBOOK

FEDERAL RESERVE BANK OF NEW YORK



33 MAIDEN LANE



33 LIBERTY STREET  
(MAIN BUILDING)



EROC



3 WORLD FINANCIAL CENTER



Updated June 2011

Handbook - A high-level, overarching guideline for crisis management as well as information regarding the following:

- Disaster Recovery
- Command Center Relocation Sites
- Roles and Responsibilities

Includes the following information:

- Team membership for the Business Continuity Program
- Relocation Decision Protocol

Information made available in paper format, BlackBerry for members of the Management Committee and Incident Response Team and on-line



# Communication Tools

## Frequent and effective communications is critical:

- Broadcasts over building speakers
- Emergency phones not tied to the Bank's internal network
- Email
- Voicemail
- Calling trees
- Automated notification system
- Blackberry/Cell phones (multiple providers)
  - Texts and pin to pin messages
- Mobile internet connectivity devices (aircards)
- Satellite Phones
- Remote network connectivity
- Internet/Intranet access to information
- Emergency toll-free number
- Priority Calling
- Back-up chargers/power sources



# NY Business Continuity Program – Focus

- Evaluate the efficacy of current resiliency plans
- Develop and implement a comprehensive multi year training and testing strategy
- Assess recovery and resiliency plans in the event of cyber intrusion
- Provide leadership and participation on FRS/SBC business continuity initiatives



# Best Practices

- Crisis Management Roles and Responsibilities
  - Ensure key/critical staffs are aware of their specific roles and responsibilities in the event of a contingency.
- Workforce Safety and Potential Impacts
  - Pre-position essential staff prior to the onset of the event, if possible
  - Establish policies and guidelines regarding leave/compensation and other personnel related issues that may arise during a contingency situation.
  - Ensure access to various equipment and supplies that could be used by essential staff on-site during contingency events, such as: personal hygiene items, sheets/blankets, snow shovels, food and beverages, etc.

- Continuity of Operations
  - Ensure capacity to operate from alternate site(s)/location(s) for extended periods of time; self sufficient as first responders/emergency management may not be available to immediately provide assistance.
  - Consider establishing contracts or memoranda of understanding (MOUs) with nearby hotels, fuel providers, etc., in the event of availability issues in a contingency situation.
  - Ensure staff has the necessary equipment, such as laptops, internet connectivity options, back-up power sources, etc., that could be used if they are providing support remotely.



# Best Practices

- Communications (Internal and External)
  - Review crisis communications protocols and logistics prior to a contingency event, such as drafting holding statements, etc.
  - Ensure a variety of alternate communications options are available that could be used during a contingency event.
  - Ensure contact information for Bank staff, customers and other constituents is accurate and updated.
  - Anticipate customer information needs.
  - During an event, ensure consistent and frequent communications
- Coordinate Response Actions with External Partners
  - Establish/Maintain relationships with key critical contacts, such as first responders, public/health safety groups as well as trade associates and state/federal regulators; these relationships can be leveraged in a contingency event.
  - Participate in a credentialing program that allows designated employees to gain access to restricted areas following a disaster or serious emergency by using a secure identification card recognized by the police.

Safety of staff

Effective Senior Oversight

Robust Business Continuity Program and Crisis Response

Effective Communications Tools

Practice! Practice! Practice!



**Protecting the Bank's Reputation**

# Questions?

Contact information:

Irina Kholdina

[irina.kholdina@ny.frb.org](mailto:irina.kholdina@ny.frb.org)

Deborah Willse

[deborah.willse@ny.frb.org](mailto:deborah.willse@ny.frb.org)



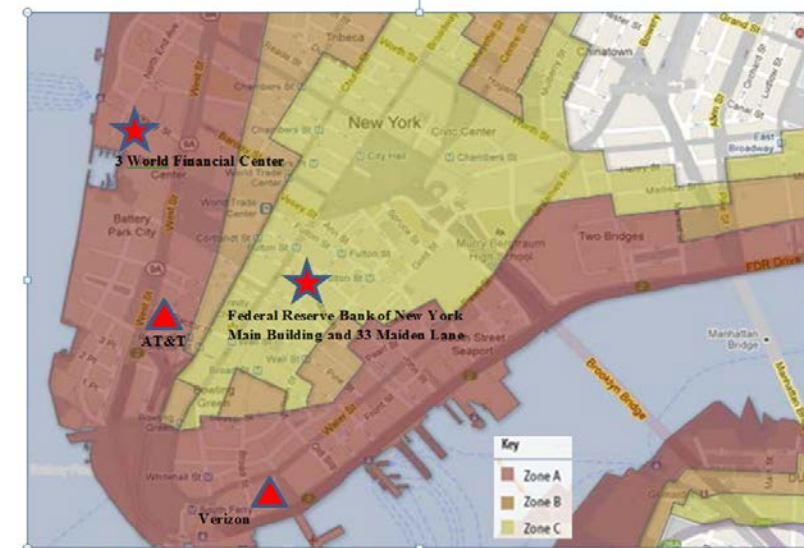
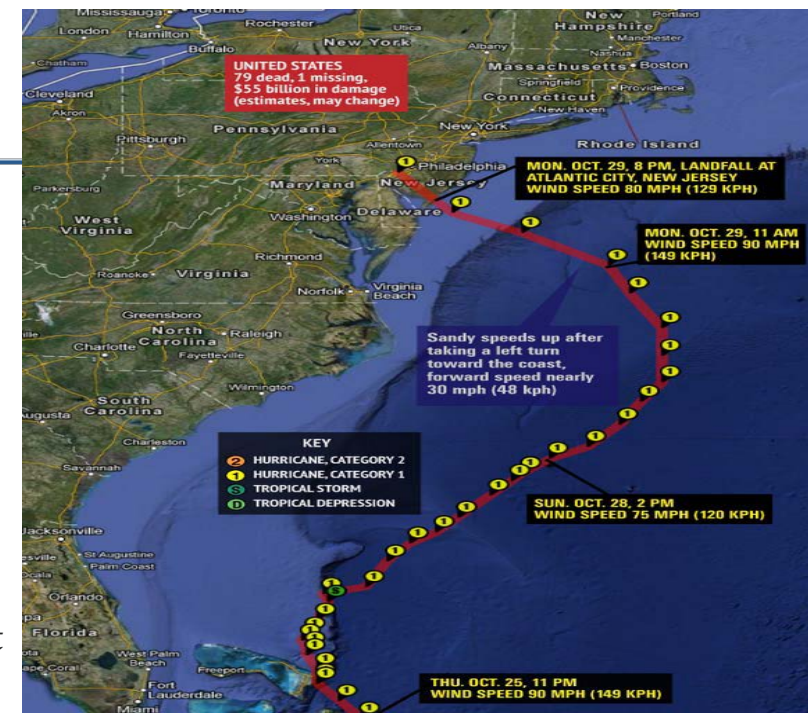
# Case Study - Superstorm Sandy 2012



# Superstorm Sandy 2012

## The Situation As It Evolved: In Advance of the Storm October 27-29, 2012

- State of emergency declared
- Firms invoked business continuity plans
- Industry groups, regulators, local authorities and the Federal Reserve Bank's Incident Response Team began holding regular calls and coordinating communication at least 2 days in advance of the storm
- Mayor Bloomberg ordered a mandatory evacuation of all parts of the City in Flood Zone A (Primary telecommunications provider offices (Verizon and AT&T) are located in Flood Zone A)
- Essential staff pre-positioned to conduct critical operations at primary & back-up sites
- Transportation systems suspended
- Fuel tankers moved out to sea to prevent fuel spills in NY Harbor
- Utility provider shut off electrical service to a portion of lower Manhattan



The day before Hurricane Sandy made landfall, Mayor Bloomberg ordered a mandatory evacuation of all parts of the city in Flood Zone A.



# Superstorm Sandy 2012

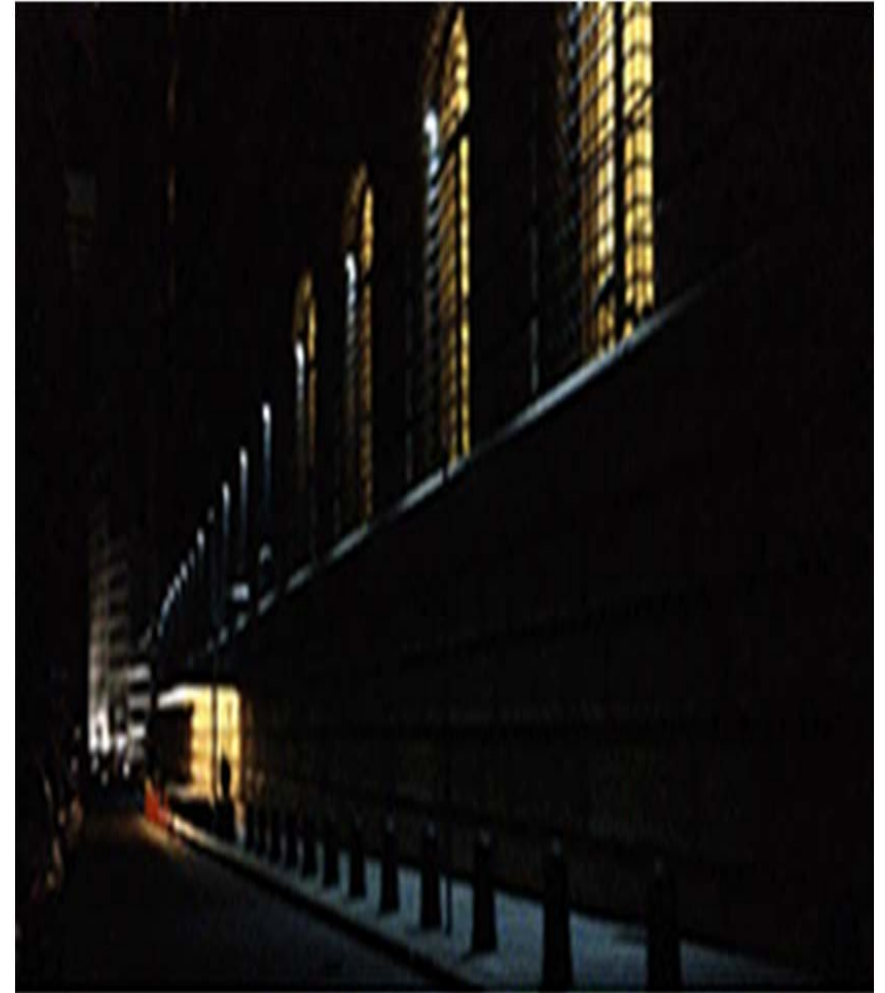
## Impact of the Storm:

- Widespread flooding
- 8.5 million customers without power
- Power restored to Manhattan after 7 days
- Telecommunications outages
  - Central offices inoperable for months
  - Wireless out for weeks
- No heat to lower Manhattan for 10 days
- Mass transit suspensions for weeks/months
- Bridges and tunnels closed for weeks/months
- Fuel shortages for weeks



# Superstorm Sandy 2012

## Limited power in New York City



Bank's lights were among the few in the area

# Superstorm Sandy 2012

## Widespread Flooding

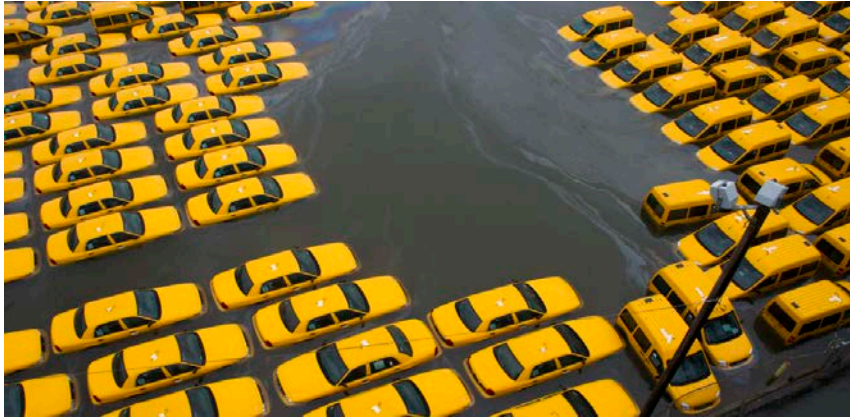


## Widespread Destruction



# Superstorm Sandy 2012

## Flooding Impacted Transportation



All Road Tunnels Leading into Manhattan Flooded



Subways Were Suspended from Weeks to 3 Months



Airports Closed for 3 to 4 Days



Rail Transportation Suspended for 4 to 5 Days

# Superstorm Sandy 2012

## Markets Closed





# Superstorm Sandy 2012

## Strengths and Challenges

The Bank effectively responded to Super Storm Sandy. The storm served as an opportunity to review and validate current contingency practices as well as identify enhancements to the Bank's Business Continuity Program

- **Strengths: Planning ahead pays off**
- **Internal** – Excellent execution of plans, safety of staff, continuity of operations, consistency and frequency of internal communications, interagency communication, established business and personal relationships, established governance processes and chain of command
- **External** - Institutions appeared to operate reasonably well in contingency mode, raised similar issues related to telecommunications and transportation.
- **Challenges:**
- **Internal** - Vulnerability of downtown location, depth of geographic dispersion, dependency on services providers and supply chain
- **External** – Industry level communications were confusing at times, especially right after the storm. Inconsistent levels of representation on the industry conference calls sometimes lead to circulation of incorrect information and spread of rumors.

Unscheduled market closings are extraordinary events that are viewed as an action of last resort. There was a need for more clarity, governance and communication around decision making by market participants to close markets.



## Lessons Learned

- Clear governance, protocols and decision-making
- Pre-planning and practice
- Recognizing dependencies: cross-sector, key partners, underlying infrastructure
- Establishing and maintaining key business and personal relationships in advance
- Clear communications