TESTIMONY OF THE DIRECTOR OF THE MAYOR'S OFFICE OF RECOVERY AND RESILIENCY BEFORE THE NEW YORK CITY COUNCIL COMMITTEES ON RECOVERY AND RESILIENCY AND FIRE AND CRIMINAL JUSTICE SERVICES

Thursday, November 20, 2014

Introduction

Good morning Chairpersons Treyger and Crowley, and members of the Committee on Recovery and Resiliency and members of the Committee on Fire and Criminal Justice Services. My name is Daniel Zarrilli and I am the Director of the Mayor's Office of Recovery and Resiliency. It is a pleasure to appear before you once again, this time to discuss two bills that impact the City's critical telecommunications infrastructure and emergency planning.

I am joined here by OEM Deputy Commissioner Henry Jackson, OEM Deputy

Commissioner Christina Farrell, and DoITT General Counsel Charles Fraser. Each will

provide detailed testimony about the two bills being heard today. I want to begin by

laying the foundation for our testimony.

Sandy's impacts

In 2012, Hurricane Sandy highlighted many vulnerabilities across the City, claiming the lives of 44 New Yorkers and causing \$19 billion of damage and lost economic activity. I have testified previously on the City's efforts to prepare for future extreme weather

events and the long-term impacts of climate change. Today, I intend to focus on our telecommunications infrastructure.

In order to communicate with friends and family and to support a vibrant global economy, our City relies on a massive telecommunications infrastructure with some 50,000 miles of cables, thousands of cell sites, and more than 100 critical facilities. Sandy exposed vulnerabilities in this system, and caused power outages and telecommunications failures, especially in buildings without hardened utilities. An estimated 35,000 buildings experienced flooding that damaged telecommunications equipment. Some critical facilities were better prepared than others.

For example, in Manhattan, Verizon's Broad Street central office had mechanical equipment, including electric switchgear, at or below grade. Salt water overwhelmed the systems and the building was not operational for eleven days. Verizon's West Street central office, by contrast, had elevated mechanical equipment, newer copper infrastructure and extensive fiber deployment. The building was operational within 24 hours after Sandy. This contrast is illustrative of the potential benefits of implementing proactive telecommunications resiliency measures.

In addition, the Sandy experience made us all aware of the limitations of critically important cell phone towers when grid power is lost for any significant period of time.

Telephone land lines have long been recognized as infrastructure assets that are among

the most resistant to weather interruptions. However, given the near-universal adoption of mobile phones in recent years, it is clear that cellular phone resiliency needs to be strengthened.

The impacts of climate change, including future flood risks, and increased temperature are only going to exacerbate these risks.

Resiliency Work

Performing the necessary work of upgrading our critical telecommunications infrastructure to adapt to future risks is likely to be a costly and lengthy endeavor, requiring partnership between the public and private sector. A Stronger, More Resilient New York, the City's comprehensive climate resiliency plan, outlined several key strategies to increase resiliency in the telecommunications system. These include increasing accountability to promote resiliency, enabling more rapid recovery from extreme weather events, hardening facilities to reduce weather-related impacts, and creating redundancy to reduce the risk of outages. Much progress has been made, and the telecommunications sector is better prepared now than it was when Sandy struck – we have launched a new telecommunications resiliency team, we are working with the private sector on business continuity plans and energy efficiency measures, building code standards have been upgraded, and work is underway to reduce the risk of flooding more broadly in the city. But it is clear that there is more to do as we continue to build resiliency across the city.

And as mentioned before, the power grid is a central component of our telecommunications infrastructure. To address this, the City has been working hard with our local utilities on a range of efforts. For instance, Con Edison is investing \$1 billion over four years to harden its systems to reduce risk during future disasters, and we continue to work with other utilities to prioritize parallel storm hardening measures.

After all, keeping the power on is a critical resiliency measure for our telecommunications sector, and indeed, for the entire city.

Conclusion

In conclusion, the City will continue working to implement its ambitious resiliency agenda. Crucial progress from OEM, DoITT and City agencies has certainly reduced our vulnerability to climate events since 2012, but much remains to be done.

Thank you for your time and attention to this important issue. I look forward to continuing to work with you and your staffs to realize our shared goal of a stronger, more resilient New York. I will now turn it to DoITT General Counsel, Charles Fraser, to discuss Intro 425.



Testimony of Christina Farrell
Deputy Commissioner of External Affairs
New York City Emergency Management
Before the New York City Council
November 20, 2014

Good morning Chairpersons Treyger and Crowley, members of the Committees on Recovery and Resiliency and Fire and Criminal Justice. I am Christina Farrell, Deputy Commissioner of External Affairs at New York City Emergency Management. I am pleased to join you today to discuss Intro. 519 and public outreach and emergency preparedness of local communities.

As you know, the mission of NYC Emergency Management is to plan and prepare for emergencies, to educate the public about preparedness, to coordinate the City's response and recovery operations, and to collect and disseminate critical information to key stakeholders and the public during emergencies. NYC Emergency Management consists of 185 people operating on a city budget under \$5 million; the vast majority of our staff and projects are funded through Department of Homeland Security grants. While our numbers often surprise people, we are experienced consequence managers, and we work hard to prepare the public before, during, and after an emergency by knowing the resources available to the City and leveraging those to get New Yorkers what they need in times of crisis. We know that what people need before a crisis are information and the necessary tools to be personally prepared. Underlining our mission, and all components of our plans and operations, is the extensive and detailed public preparedness campaign that we run for everyone living in, working in and visiting the five boroughs.

NYC Emergency Management is responsible for the development, maintenance, and oversight of over 40 emergency plans, protocols, and playbooks for the City. To reach all New Yorkers, the plans are broad and comprehensive for citywide response by relevant agencies, and with details covering the city as a whole. We model our emergency preparedness materials, public outreach and communications using the same citywide concepts.

Hopefully, you are familiar with our Ready NY campaign. With the exception of the Hurricane Guide and coastal storm preparedness which features specific neighborhood resources, such as coastal storm evacuation zones, which I will explain in more detail shortly, our Ready NY material is applicable to any borough, any community, any neighborhood. Why? While the neighborhoods, by their nature, serve as the foundation of preparedness, people also need to consider communities they work in, where their children go to school, where their elderly parents live, where they own real estate, and a variety of other factors. Knowing this, we have built our Ready NY brochures – a comprehensive listing is at the end of this testimony – upon both the

way the City plans for emergencies and the way that people should prepare themselves for emergencies. If you look at the list of Ready NY brochures — available in 13 languages and in audio format—you will see that the identified hazards are not community specific — information on pandemic preparedness is applicable regardless of community, as is that for winter weather, utility outages, summer heat, pets, and many more. Regardless of the hazard, we urge people to be prepared to shelter-in-place or be prepared to leave — and this is the message that we push through our materials as well as at more than 1,000 public events we present at each year. All of our material is available online for viewing, printing, and ordering in bulk and for those without access to a computer, a call to 311 will get their brochures in the mail to them.

Our flagship guide, My Emergency Plan, walks people through how to develop an emergency plan for themselves or their loved ones and includes details such as medications they need, phone numbers for transportation resources should mass transit not be working, specific resources for their particular needs, and many other details. People can also build their plans digitally by downloading the Ready NYC mobile app available for Apple iOS and soon available for Android. This app encourages New Yorkers to make an emergency plan before a disaster, and I encourage you to download it for your family and ask your constituents to do the same.

Two components of the legislation at hand would require specific community information. We agree that this is necessary for coastal storm evacuation planning and is already incorporated into the Hurricane Guide. In this guide you can identify evacuation zones by address as well as identify all 64 of the Evacuation Centers throughout the city. It's not necessary to go to the Center nearest to your home so by looking at the possibilities people can make the best choice for themselves. You can also go online or call 311 and provide a specific address to generate your zone.

Unlike some counties in Florida or the Carolinas, the City does not designate evacuation routes. In general, in a pre-storm evacuation scenario, before the onset of hazardous conditions, all roadways are open and available for travel. We encourage people not to make specific plans around established routes, but rather to plan around routes and transportation modes with which they are already familiar and comfortable. We also advise people to plan where they are going to go in an evacuation and advise that they to plan how they're going to get there. Since the city is so densely populated, we don't want to clog roadways designated as evacuation routes when there are many other – equally safe – routes to use.

As would be required within this legislation, our materials do not provide contact information for local fire stations, police stations, or ambulance services. There is one number only for emergencies and that is 9-1-1. Directing people to call local numbers could potentially cause delay or confuse an emergency response and the message to New Yorkers should always be to call 9-1-1. When people need information during non-emergencies, the best resource is 311 which has extensive information on all of our programs and available resources.

The legislation also requires contact information for charitable organizations or non-profits that would provide services or materials during or after an emergency. This is not information we put on guides for several reasons. At the time of an incident, the City's Emergency Operations Center will work with their contracted city partners as well as partners within the private sector to identify and prioritize the need for services and materials and identify the most expedient and

cost-effective options to get those services provided. This is accomplished by coordinating resource requests among all city agencies, often working with charitable organizations and non-profits to fill these needs. Pre-providing contact information and locations for these organizations could potentially delay and duplicate requests for resources, as well as overwhelm the capacities of these charitable organizations or non-profits. The list of charitable organizations or non-profits that would actually provide services or materials could also change depending on the nature or need of an incident.

The very nature of emergencies is that we don't know what the emergency will be, where it will be, or what the scope of devastation and crisis will be. We cannot pre-identify locations as it may send people into harm's way. The location of recovery centers depends on safety, power, accessibility, and the ability to get the needed services in. During recovery operations for any emergency, we provide real-time information to the public on available city services such as donation management, food services, sheltering, supplies, and many others. While different City agencies take the lead in providing these services, NYC Emergency Management coordinates information flow to the public through the press, social media, elected officials, the private and non-profit sectors, Notify NYC and 311. I hope you are all registered for Notify NYC, and that you urge your constituents to register as well. It's free, it's real-time and it will provide important information to direct them to safety or to needed recovery operations after an incident.

With respect to community-based planning, there is significant programmatic work happening. We have recently started two pilot programs in Staten Island and the Rockaway peninsula to engage in grassroots, community-based planning to assist local organizations in building out their planning with input and information from the larger, citywide perspective. Strong elected official cooperation and assistance in working with community leaders is needed to succeed at these programs and, with your help, we are happy to expand these pilots to other neighborhoods, as they have already improved communication and coordination between our agency and important community partners.

As part of this community-based planning model, we also recently introduced a community space survey, and I have brought copies for all of you today. Traditionally, when the City needs to open a space to the public, be it a shelter after a fire or flood in a specific neighborhood, a residential service center like what was opened in East Harlem after the building explosion last March or large-scale recovery resources centers that were vital after Hurricane Sandy, we look to City locations like public schools to open these centers. However, as you all know very well, the place people congregate and feel comfortable visiting may not be government locations. They may be a local American Legion Hall or a community center run by a non-profit or a faith-based institution. That is why we are committed to working with all of you and additional partners to get identify as many spaces as we can across the five boroughs so when we need to find a suitable space in which to offer services, we can consider both government and community spaces.

We are also an integral partner in the NY Rising Program, run out of the Governor's Office and based around community planning. There are many ways we can work with your communities to provide best practices, suggestions, and subject-matter expertise without legislation. If you are interested in connecting your local groups to us for this program, please let us know. Also, please utilize our existing programs — Ready NY for individual preparedness, Citizen Corps for

community-level preparedness, and CERT as our principal community-based volunteer program – all of these working together are available for you to schedule town halls with your constituents, meetings with your business partners, and community-leader round tables.

In addition, NYC Emergency Management coordinates the development of the NYC Hazard Mitigation Plan. Updated this past March, this resource-rich document provides an overview of NYC, the factors that make it vulnerable, and assesses the hazards that pose a threat to the city. This document includes maps, tables, and additional information that is available on our website to help communities understand their geographical, physical, and social vulnerabilities to an array of natural and man-made hazards. This week we launched a shorter version of this plan, called NYC's Risk Landscape: A Guide to Hazard Mitigation, as well as a Reduce Your Risk information campaign. This Guide is targeted at a larger audience and is more user-friendly and accessible. The guide is meant to inform New Yorkers of specific hazards the city is vulnerable to and how to apply best practices for risk reduction. Hazards in the guide include coastal storms, coastal erosion, flooding, strong windstorms, winter weather, extreme heat, water shortage, earthquakes, and pandemic influenza. These documents demonstrate our continued commitment promote awareness of the risks we face as New Yorkers.

In summary, we support the intent of this legislation but have some concerns with the bill as it is written and would like to talk with the Council further about it. We have an existing and robust program that meets the comprehensive needs of New Yorkers and want to continue to work with you and your communities' leaders to improve our plans and communications. We provide materials in the way in which we plan, which is all-city. We need the flexibility of providing real-time information in order to make sure people go to right place for the right service without putting themselves in danger. We are in agreement with the Council that personal preparedness is essential and the first step to saving lives and we applaud the Council's efforts to push this issue and hope you will work with us to better inform your constituents.

I am happy to take your questions.

Ready NY Brochures: http://www.nyc.gov/html/oem/html/ready/ready guides.shtml

- General Preparedness
- Pandemic Flu
- Pocket Guide
- Flooding
- Hurricanes
- Business
- Pets
- Beat the Heat
- My Emergency Plan (Special needs)
- Emergency Reference Card
- Kids: K-5 + Coloring Book
- Tween: Choose Your Own Path to Preparedness
- Earthquake Safety Guide
- Winter Weather Health and Safety Tips Guide
- Reduce Your Risk Guide

Available Languages:

- English
- Spanish
- French
- Haitian Creole
- Arabic
- Urdu
- Korean
- Bengali
- Chinese
- Russian
- Polish
- Hebrew
- Italian
- Audio format



Testimony of Henry Jackson
Deputy Commissioner of Technology
New York City Emergency Management
Before the New York City Council
November 20, 2014

Good morning Chairpersons Treyger and Crowley, members of the Committees on Recovery and Resiliency and Fire and Criminal Justice. I am Henry Jackson, Deputy Commissioner of Technology at New York City Emergency Management. I am here today to speak to Intro No. 425 that proposes the creation of a Communications Access Plan. Certainly, we recognize the importance of communications before, during and after an emergency. In fact we often say that communications is the most important facet of managing an emergency.

NYC Emergency Management is responsible for the development, maintenance, and oversight of emergency plans, protocols and playbooks that help prepare the City to respond effectively during an incident in order to reduce disruptions to people and services. We create and update the City's emergency plans for a range of natural and man-made hazards. The plans focus on citywide coordination and operations and are either operation-specific, such as debris management, or hazard-specific, such as coastal storms, winter weather, or heat. Plans outline the decision-making process and operational strategies during a hazardous event. This includes coordinated roles and responsibilities of key stakeholders for events, primarily City agencies.

Interagency coordination is the heart of NYC Emergency Management's core competency. As the City's coordinating agency during large-scale incidents, with a focus on consequence management, we activate the City's Emergency Operations Center, co-located at our headquarters, to bring in the Mayor and representatives from agencies involved in the response. We coordinate all players, from the largest to the smallest agencies, including city, state, and federal and, of specific note for this hearing, private sector partners such as those from the telecommunication and utility companies.

We know that the public expects minimal disruptions to telecommunication systems, and quick restoration when impacts occur. In an emergency where telecommunications are impacted, the system takes a hit and vendors respond quickly to restore services. When this happens, those in the EOC work with city vendors to provide the safe access they need to the impacted areas so they can do the restoration work. The City has developed many tools and programs over the years to ensure effective communications to the public. Among them are Notify NYC, Wireless Emergency Alerts, information received through 311 and traditional media outlets, and the consolidated Joint Information Center concept to centralize and coordinate effective public communications.

Communications before an emergency is equally important, but can present challenges in personal preparedness and readiness. Through our programs like Ready NY and the Know Your Zone campaign, we work to educate citizens about hazards faced by the City. We encourage people to have a plan; and a communications plan is one of the most important parts of that plan. We explain the significance about having a reunification point with their family and phone numbers of a point person outside the city that family members can call and report in to. We encourage people to keep a battery operated radio at home because radio is the most reliable, resilient and affordable communication tool that the City uses to get information to the public.

The intent of this legislation is to ensure that we have resilient communications infrastructure. The Office of Recovery and Resiliency and DoITT have discussed their work in this sphere, and NYC Emergency Management shares in the goal of working with them to improve resiliency. To that end I would like to outline a few of our concerns with the bill.

The Community Access Plan as described calls for "a communications access plan to be utilized in preparation for coastal storms and other severe weather and natural disaster events where such events may disrupt the public's access to communications;" which should include: "a description of the city's current, and planned, communications infrastructure, both public and private." The challenge here, as DoITT has described, is that the City's communication infrastructure consists mainly of its public safety radio systems and NYCWIN, the New York City Wireless Information Network. And, also as explained, there are challenges with compelling the private sector to share that information with us.

The plan should also include "an evaluation of the resiliency of all such communications infrastructure, including an assessment of neighborhood vulnerabilities." Again, we can and do evaluate the resiliency of our public safety radio system continually, so could meet the goal here as it relates to the public sector communications infrastructure that can safely be shared; however, we have neither the expertise nor experience to write planning assumptions based on the resiliency of technology systems we do not own or control.

Another component of the plan is "an assessment of short and long term infrastructure improvements that can be implemented in identified vulnerable areas to improve their resiliency." On the public safety side we are always making these assessments and improvements. On the private sector side, we have few tools to compel the private sector to make substantial improvements to their system. The Office of Recovery and Resiliency has published their reports that identify vulnerable areas and different strategies for defending against those vulnerabilities.

Finally, the plan calls for "a description of how the agency will coordinate with other relevant agencies, authorities and communication service providers to assist such entities in planning for resilience in future communications infrastructure and for identifying areas most in need of such infrastructure improvements." I have described how the Emergency Operations Center works during an emergency. Within our planning efforts, we take the same approach of pulling everyone in a room so that all needs are identified and addressed. As described by DoITT, their Telecommunications Planning and Resiliency Office is working with providers to continue to enhance communication resiliency.

To summarize, NYC Emergency Management is a coordinating agency and we use all the expertise at our disposal to serve the people. Citywide plans for emergencies are built on agencies operationalizing their own programs and competencies and then feeding that information to us. The representatives sitting at the table with me today are colleagues and partners and, in any emergency, we will have these agencies sitting with us in the Emergency Operations Center. As a city, there are specifics of the legislation that we have addressed, or are working towards at the operational level.

The Council's determination in preparing the citizens of New York City is commendable and we agree that infrastructure and telecommunications resiliency is a key component to a faster, better recovery from any emergency. We look forward to continuing our conversation with you about how to best prepare and plan for emergencies and natural disasters.

I am happy to take your questions at the end of the panel's testimony.

DEPARTMENT OF INFORMATION TECHNOLOGY AND TELECOMMUNICATIONS TESTIMONY BEFORE THE CITY COUNCIL COMMITTEES ON RECOVERY AND RESILIENCY & FIRE AND CRIMINAL JUSTICE SERVICES RE: INTRO. 0425-2014 / COMMUNICATIONS ACCESS PLANNING THURSDAY, NOVEMBER 20, 2014

Good morning Chair Treyger and Chair Crowley, and members of the Committee on Recovery and Resiliency and the Committee on Fire and Criminal Justice Services. My name is Charles Fraser and I am the General Counsel of the Department of Information Technology and Telecommunications, or DoITT. With me today are Priya Shrinivasan, our Assistant Commissioner for Telecommunications Planning and Resiliency, and Patrick Bryant, the Senior Policy Analyst for the Telecom Planning and Resiliency Office. I am overseeing that office pending the hiring of a new Deputy Commissioner for Telecommunications Planning, which I am hopeful will be completed by the end of the year.

Thank you for the opportunity to testify today on Intro. 425 of 2014, which would amend the New York City Administrative Code in relation to a communications access plan for certain emergency events.

The strength and devastation of Hurricane Sandy was a wake-up call for all of us to get serious about climate change and its consequences, especially rising sea levels and stronger and more frequent storms. The City conducted a comprehensive analysis of the vulnerabilities of the City's infrastructure to Sandy-like events in the future, summarized in a report issued in June 2013. The report outlined, in 18 chapters, recommendations for mitigation of those vulnerabilities.

Chapter 9 of the 2013 report concerned the resiliency of the private sector's provision of telecommunication services in the City. The lead recommendation of that chapter was the creation in DoITT of a Telecommunications Planning and Resiliency Office, and we completed the implementation of that recommendation last summer with the hiring of Assistant Commissioner Shrinivasan, who comes to us from the Federal Communications Commission (FCC, where she spent 20 years in telecommunications policy and enforcement.

The initial steps for that office are information-gathering, and to that end, we have begun regular meetings with the private telecom providers in New York.

It is important to understand the legal context of the City's relationship with the private telecommunications industry. Telecommunications services are regulated primarily at the federal level, and secondarily at the state level, pre-empting regulation in some areas by municipalities such as New York. Therefore gathering information from private telecom providers relies in very large part on the voluntary cooperation of those providers, and given the highly competitive nature of the modern telecom industry, as might be expected, providers have so far been cooperative in varying degrees.

The Telecom Resiliency Office will work on a number of matters, including:

 Developing more strategic communication with telecommunications providers so the City has an ongoing dialogue to discuss resiliency initiatives and address barriers to implementation;

- Developing resiliency and disaster recovery negotiation objectives for future telecommunications franchise agreements (this might include things like providing back-up power sources, tightening service and restoration standards, etc.);
- Ensuring that the City has access to more complete and detailed maps about telecommunications assets installed in, on, or above City streets;
- Standardizing the formats and frequency of performance data reporting about significant outages across providers;
- Exploring options to increase conduit resiliency;
- Exploring options with providers for voluntary real-time outage reporting for use by first-responders; and
- Advocating for State and Federal regulatory changes and State, Federal and Local legislative changes that would lead to better emergency preparation, awareness and response.

Before I turn to Intro 425 itself, I would like to review some of the other measures that the City has undertaken in the telecom field following Hurricane Sandy.

The City maintains a program of vigorous advocacy before the FCC and the New York State Public Service Commission (PSC). We regularly submit comments on policy initiatives, including those involving resiliency measures, and submit policy recommendations of our own. DoITT and the Law Department are leaders on the Intergovernmental Advisory Committee to the FCC, where we have earned respect for thorough policy analysis and thoughtful commentary on policy proposals and initiatives.

For instance, in December 2013, the City submitted comments to the FCC encouraging stronger backup power requirements for wireless companies, better transparency on outages to customers and more immediate communication with first responders regarding outages within affected areas.

Similarly, in July of this year, DoITT submitted comments to the PSC urging increased PSC focus on telecom resiliency issues.

As proposed in the City's Hurricane Sandy After-Action report in May 2013, DoITT works with the Mayor's Office and the Office of Emergency Management on the Emergency Management Data Task Force, which is establishing protocols for regular reporting of outages to the City from utility providers.

Earlier this week, we joined Mayor de Blasio in announcing LinkNYC, the winning proposal to replace public pay telephones with sleek, modern structures that will provide free, unlimited, high-speed WiFi service and free domestic telephone calling for all users. This proposed franchise agreement is subject to Franchise and Concession Review Committee approval and, notably, is the first telecom franchise to incorporate climate change-related resiliency requirements – including a fiber optic network to minimize outages as a result of flooding, and battery back-up to sustain 911 calling functionality for 24 hours after a power outage. We expect to negotiate for similar resiliency provisions in future telecommunications franchise agreements.

DoITT's primary concern about Intro 425 is that, as written, it contemplates greater City access to private telecom industry information than we believe is realistic. In order for the Commissioner of Emergency Management to develop and issue the plan contemplated by the bill, at the level of detail described in the bill, the Commissioner would need comprehensive access to private telecom industry operational information, business continuity plans, and other information that, in our experience, is not easy to come by. Our concern is therefore that the bill will create expectations that may prove to be unrealistic in light of the City's existing legal authority in the field of private sector telecommunications services.

Preparing and fortifying New York City's telecommunications infrastructure for the next emergency event is a priority for DoITT, and we look forward to continuing our work with the City Council, our agency partners, telecommunications partners, and the public to that end.

I thank the committee members for their time this morning, and look forward to answering any questions.



The purpose of the Brooklyn Long-Term Recovery Group is to assess and address the unmet needs of Brooklyn residents impacted by Superstorm Sandy through collaboration with community-based organizations (CBOs), faith-based organizations (FBOs), non-government organizations (NGOs), and government agencies, and to assist the community in preparing and responding to future disasters.

Risk, Resiliency and Reality

Testimony from the Brooklyn Long Term Recovery Group Board of Directors

Resilient communities do not prepare for disaster; they prepare to recover from disaster.

Two processes, in motion well before the Sandy disaster, will drive significant change in our coastal communities as we recover from, and prepare for, coastal storms. These issues revolve around the availability and cost of flood insurance. Superstorm Sandy revealed that much of the built environment of coastal New York City is no longer physically or financially sustainable. Sandy did not cause this disconnect; macro-environmental changes and federal economic policy combined to create a challenge to our sustainability.

Why Insurance Matters

Historically, insurance provides 80% of disaster recovery resources. It is considered the fastest and least complicated resource and policies can be individually tailored to reflect individual risk tolerances.

The reality of the Sandy disaster was starkly different.

The flood risk was not anywhere near fully insured. Swiss Re estimated that of the \$70 Billion in economic loss caused by Sandy, only half will be covered by insurance: \$20 to \$25 Billion by private insurance and the rest by the bankrupt National Flood Insurance Program (NFIP), currently \$24 Billion in debt to U.S. taxpayers.

The process of paying claims was overwhelmed by the scale and complexity of the losses; our built environment is very different from what the NFIP policy was designed to cover. Homeowners policies covered only minor parts of the damage and thousands of homeowners had no flood coverage, believing that they were not at risk.

And instead of being tailored to reflect individual risk management, both homeowners and flood policies were poorly crafted by agents and misunderstood by the insured. My colleagues in the flood insurance industry believe that 30% of the NFIP policies were incorrectly written. One NYC resident discovered that the contents of his garden apartment was not covered by his flood policy only after submitting his claim. He had been paying NFIP premiums for more that a decade.

THE NATIONAL FLOOD INSURANCE PROGRAM

The NFIP is a flood plain management program, not a traditional insurance company. Our city has agreed to certain flood plain management standards and as long as we adhere to them, residents of

www.BrooklynRecovers.org

email: info@brooklynrecovers.org



NYC can purchase flood coverage from the NFIP. The NFIP policy is designed to provide sufficient coverage to make a home safe and functional. It was never intended to make the owner whole.

Biggert-Waters Insurance Reform Act of 2012

When the NFIP program was created in 1968, existing structures in the newly defined Special Flood Hazard Areas (SFHA) were granted premium subsidies to encourage participation in the program. These structures received the same premium rates as resilient structures built after the adoption of the Flood Insurance Rate Map (FIRM). Post-FIRM structures, like Arverne-by-the-Sea, must be built resilient for the municipality to remain in the NFIP program. Premiums for Post-FIRM buildings are actuarially sound; the premiums reflect the real risk. Pre-FIRM buildings do not. Losses from pre-FIRM structures depleted all the funds in the NFIP and forced the agency to go to Congress again and again to meet their policy obligations.

In 2012, Congress passed the Biggert-Waters Reform Act to move the NFIP to a more fiscally sound footing. The phasing-out of subsidies for pre-FIRM buildings by category and over time was designed to give communities and individual owners opportunity to adjust to the realities of flood risk. Nation-wide only 5% of policy holders are adversely affected by the subsidy removal, but due to differences in the built environment, especially age, density and building type, NYC is disproportionately impacted. With thousands of additional homes about to enter an expanded SFHA, much of coastal NYC faces a financial and physical crisis.

Intervening legislative, the Homeowners Flood Insurance Affordability Act (HFIAA), hit the pause button on the BW12 reforms. It delays implementation. It does not change financial realities or physical risks. When Congress, we hope, re-authorizes the NFIP in 2017, the financial stability of the NFIP will be a crucial consideration.

NFIP Mapping

As Sandy demonstrated, the NYC Flood Insurance Rate Maps (FIRM) were badly out of date. Half of the properties affected by the storm surge were not mapped in a SFHA. New FIRMs were scheduled to be released in August of 2013, but NFIP released them early since decisions about rebuilding must be made now. NYC is using these Preliminary Maps for building codes and zoning.

We expect the new maps to be adopted in 2016. Once adopted, they become effective for rating NFIP policies and will add approximately 31,000 more properties to the SFHA, an increase of 91%.

FINANCIAL REALITIES

When HFIAA sunsets and BW12 is implemented, homeowners will see premiums increase significantly. NFIP estimates the annual premium for a non-resilient home in the SFHA will increase from about \$500 to nearly \$10,000. An estimated 40% of the non-resilient homes in our expanded SFHA cannot be elevated, the primary approach to affordable flood insurance.

These rates will push homeowners into foreclosure. Foreclosures in Sandy-affected neighborhoods are already rising. Owners who rely on basement rentals to meet their mortgages are in deep

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trouble. Basement habitation in a SFHA is not just an insurance affordability issue; it is unsafe. Federal funds cannot be used to repair these units.

The 2013 NYC Special Initiative for Rebuilding and Resiliency report (SIRR) considered the possibility of a NYC program to subsidize flood insurance for low and moderate income (LMI) homeowners but estimated \$200 as the needed subsidy, well below the \$9,500 difference in annual premium homeowners face. In any event, although a correctly written, paid-up insurance policy may indemnify a homeowner for losses, only resilient homes create sustainable communities.

Infrastructure mitigation will not solve the problem: the timeline for implementation is too long to address the NFIP financial instability that prompted BW12. Additionally, neither soft nor hard mitigation changes the building type or elevation, the parameters of NFIP rating.

Buy-back is not a solution to sustainable communities: properties acquired with these funds cannot be rebuilt for habitation. NYC cannot, and will not, become a coastal theme park of sand dunes and salt marshes.

Advocacy and Collaboration

Coastal communities must be informed of both the short term and long term impacts of NFIP challenges. For our coastal communities, if it is not insurable, it's not sustainable.

Our residents need information to make sound risk management choices. They need to know who qualifies for the NFIP Preferred Risk Policy and what flood policies cover. They need to understand not just what they are paying for homeowners insurance, but what they are buying for their premium.

These issues are too crucial to sustainable coastal communities to be a side-bar of other programs. Dedicated staff and funded programs are a necessity.

A Chance to Get it Right, or Very Wrong

The dramatic redesign of the built environment needed for sustainability in a coastal city will challenge our concept of community. But we have an opportunity to build economically diverse, resilient and sustainable coastal neighborhoods in a just and equitable city.

Prepared by E. Malone, 11/15/2014

THE COUNCIL THE CITY OF NEW YORK

Appearance Card
I intend to appear and speak on Int. No. 422 Res. No. 519
in favor in opposition
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Name: Tony Schloss Address: 75 Verona St
Address: 75 Verona St
I represent: 120d Hook Tritative
Address: 767 Hick St
THE COUNCIL
THE CITY OF NEW YORK
Appearance Card
I intend to appear and speak on Int. No Res. No
in favor in opposition
Date: 11 20
Name: Charles Frager
Address: 255 Greenman
I represent: Do III
Address:
TUE CAINCH
THE CULTURE MADE
THE CITY OF NEW YORK
Appearance Card
I intend to appear and speak on Int. No Res. No
in favor in opposition
Date: 11 20 14
Name: Daviel Zawilli
Address: May as office, Recount Resiliuin
I represent:
Address:

Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL THE CITY OF NEW YORK

Appearance Card
I intend to appear and speak on Int. No. 519 Res. No.
in favor in opposition
Date: 11/20/14
Name: Christina Farrell
Address: 165 (adman Plaza Bast
I represent: DEM
Address:
THE COUNCIL
THE CITY OF NEW YORK
Appearance Card
I intend to appear and speak on Int. No. 425 Res. No.
in favor in opposition
Date: 11/20/14
Name: HENRY JACKSON
Name: MENNY SUCKSON Address: 165 Gadman Plaza E.
<u> </u>
I represent: OCM
Address:
THE COUNCIL
THE CITY OF NEW YORK
Appearance Card
I intend to appear and speak on Int. No. 519 Res. No
in favor in opposition
Date:
(PLEASE PRINT)
Name: ERIL J. HEBERT
Address: 2765 W5TH ST APT 17B, BIKLYNM 1/224
I represent: NYC CERT
Address:
Please complete this card and return to the Sergeant-at-Arms

THE COUNCIL THE CITY OF NEW YORK

Appearance Card
L. V. N. 519 B. N.
I intend to appear and speak on Int. No. 2 Res. No
Date: 11/20/14
(PLEASE PRINT)
Name: Elizabeth Malone
Address: 9715 Are L. Brodelyn Ny 11223
Right AD contra Could
1000 Ramiles Grand
Address: , Lovy (FVM 11/00/17) Voug
THE COUNCIL
THE CITY OF NEW YORK
Appearance Card
Ho
I intend to appear and speak on Int. No Res. No
in favor in opposition
Date:
(PLEASE PRINT)
Name: 155 Grenwich St.
Destel
I represent: DO 17 1
Address:
THE COUNCIL
THE COULDE
THE CITY OF NEW YORK
Appearance Card
I intend to appear and speak on Int. No Res. No
☐ in favor ☐ in opposition
Date: ///20/14
Name: Ann Valde 7
3170 7
1 represent: Coney + Sland and Community Voices
Address: 45 E. 106th St N.Y. N.Y.