NEW YORK CITY OFFICE OF EMERGENCY MANAGEMENT

TESTIMONY OF JOSEPH F. BRUNO

COMMISSIONER OF THE

NEW YORK CITY OFFICE OF EMERGENCY MANAGEMENT

Before the New York City Council Committees on Technology and Fire and Criminal Justice Services

October 15, 2009

Good morning Chairman Vacca and Chairwoman Brewer, and thank you for inviting me to update you on Notify NYC – a service designed to enhance the delivery of emergency and non-emergency information to the public – and OEM's newly established Office of Emergency Public Communications. I am joined today by Chief Spadafora of the Fire Department of New York and Michael Lebow, Chief Technology Office of the Department of Information, Technology and Telecommunications.

In recent years, many cities and states have begun to re-evaluate their public communication programs in the context of emerging technologies, the constantly evolving nature of emergency management practices and the fact that, over time, each community will undoubtedly face a unique series of emergency and unplanned events.

Two events here in Lower Manhattan – the 9/11 attacks and fire at 130 Liberty Street –illustrate the different ways in which public communications are evolving. The impact of the 9/11 attacks, for instance, challenged us to develop and disseminate public communications that were citywide in nature, while the fire at 130 Liberty Street in August of 2007 highlighted the need for localized communications about potential environmental and public impacts associated with the event.

These events – and others, led us to re-examine and enhance the City's ability to communicate with the public during emergencies. To be effective, we determined that any public information program must:

1) Be able to deliver a message that is accurate, relevant and timely; and
2) Work to ensure a consistent message across government sources so that people do not receive conflicting or inaccurate information.

As you know, the City has already built a number of public communication systems that meet those standards:

- o 311, www.nyc.gov and the City's TV stations have all been used to effectively communicate with the public during past emergencies, including the transit strike in December of 2005.
- o We have also enhanced our ability to transmit directly to the public by developing a number of Emergency Television and Radio Sites (ETVRS) across the City where the Mayor and other senior administration officials – such as the Commissioners for Police, Fire and Emergency Management – can hold public briefings with little or no notice. These facilities are connected by fiber to video switching facilities, which allow members of the media to access and broadcast our feeds – even when circumstances prevent them from getting reporters or satellite trucks to our location.
- o And we have established a local Emergency Alert System (EAS), which allows the Mayor (or his designee) to broadcast a short audio message over radio and TV stations, and cable systems. EAS was not operational in the City on 9/11, but since September of 2004 we have developed and maintained strong, voluntary partnerships with local broadcasters and media organizations to ensure that EAS is available for large-scale emergencies that could require a Citywide evacuation.

The value of Notify NYC within our toolset of public messaging options is to allow granularity. Many of these other communication methods rely on broadcast media to reach their intended audiences. Notify NYC allows us to focus emergency information by geography, getting the information to the constituents most likely to be impacted by an emergency event. Messages, therefore are geo-targeted, currently by zip code, to achieve the option of pin point messaging while also allowing us to direct this messaging to larger areas, entire boroughs or citywide. The other unique value of this program is that it allows constituents to receive these messages on mobile devices, through email, voice and text messaging. No longer do you need to be in front of a TV, radio, or computer to receive critical information, we are bringing this information directly to you through the devices with which you are most comfortable. Additionally, with the proliferation of mobile devices throughout our communities, we are utilizing the tools that will be most effective in getting critical information to people quickly.

Currently, Notify NYC provides information in the following categories:
- Emergency Alerts –reserved for priority use during life-threatening situations (e.g., AMBER Alerts, natural disasters) **Every registrant will be automatically registered to receive Alerts.**
- Significant Events Notifications – information about unplanned events which may have a more localized impact area (e.g., utility disruptions)
- Public Health Notifications – information about important public health issues in your community
- Public School Closing/Delay Advisories – updates about unscheduled public school closings, delays and early dismissals
- Unscheduled Parking Rules Suspensions – updates about unscheduled suspensions of citywide parking rules.

We are consistently reevaluating opportunities for expanding the capacity of the program.

When an emergency happens, we work with the Mayor's office to develop a message and then issue media releases, provide updates to 311, nyc.gov and our own website, and send messages to our corporate partners through Corp Net and our special needs partners through the Advanced Warning System (AWS). For serious and large scale events, we can also consider utilizing EAS (the Emergency Alert System), ETVRS or, now, Notify NYC.

During an emergency, OEM also manages the City's Joint Information Center (JIC), which is a one-stop-shop for information related to an incident. The city is also using the concept of a virtual JIC to allow agencies to communicate with each other and offer the best alternative to address an information need or address the public. Notify NYC complements all of these mass communication tools.

OEM's role in the Notify NYC program is twofold. First, our agency is serving as the lead agency, working with DoITT, City Hall and other partner agencies, such as PD, FD, DOHMH, DOB, DOE and DEP, to coordinate and operate the program. This effort includes the refinement of response protocols, the management and training of dedicated staff, and the marketing of Notify NYC.

The second role for OEM is that of "Notifier." We are the ones who ultimately click the button that sends the Alerts and Notifications to the public. This function is consistent with our role established in the Citywide Incident Management System (CIMS), to coordinate the City's response to an emergency and collect and disseminate critical information. We fulfill this obligation through a combination of our response staff, which deploys to the field to coordinate activities and collect real time situational awareness, and through our 24/7 Watch Command that monitors various sources of data to maintain continuous situational awareness throughout the City and beyond. From Watch Command, we coordinate with other city agencies, both in the field and via their command centers. This includes monitoring radio traffic and dispatch systems of all public safety agencies, the National Advance Warning System (NAWAS), and direct lines to the state and federal governments as well as our regional partners, operating authorities, private sector utility providers, non-governmental organizations and the airports. Thus, as the Notify NYC program developed, it was a natural decision to have OEM's Watch Command play the role of information aggregator for the purposes of this public warning system.

A great deal of the City's effort during the rollout of Notify NYC has focused on the operational protocol. How do we gather emergency information quickly, verify it with field commanders and agency operations centers, and then deliver that information promptly. I believe no jurisdiction in this country has spent the time and effort that we have to focus on this critical aspect of public messaging and given the complex nature of emergencies in New York City, it was appropriate to do so.

The City has also dedicated resources to manage this program. At OEM we have created a Public Warning Specialist position that is staffed 24/7/365. A program such as this requires a dedicated effort to focus on public warnings in the early stages of an emergency. The responsibilities of the Public Warning Specialists include monitoring multiple sources of local, regional and federal emergency information and distinguishing which incidents have an impact on New Yorkers. As part of the Office of Emergency Public Notifications, these public warning specialists are also responsible for initiating important public warnings through the EAS and ETVRS systems, should that be necessary. Additionally, they manage the customer service activities of Notify NYC by answering constituent questions and helping with technical difficulties that the public may have. Together these staff members ensure that we have an effective, professional program that focuses on the timely delivery of relevant emergency content to the public.

The initial pilot, launched in December 2007, provide notification services to four community boards throughout the City. The pilot was expanded to provide these same services citywide in May 2009. Since December 2007, we have initiated 136 messages representing 111 unique incidents. We have also implemented a protocol that separates messages into two types: a Notification, which provides general information about an event, and an Alert, which provides information about an event and direction to the receiver. There are 59 community districts in this City, and a myriad of emergency events on any given day. The focus of Notify NYC is to identify those events that have the potential to affect public health and safety or cause significant public disruption or property damage. Events, such as utility outages, large disruptions in

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transportation systems or other types of high-impact events in your communities, often fall into the significant event category.

Currently there are 19,513 registrants in the Notify NYC system. That is twice as many people as we had during the four area pilot. We have processed hundreds of customer service requests during the time since the program went citywide. First, I will talk about the lessons we have learned from our customer service initiatives, then I will discuss the lessons we have learned from looking at other systems around the country and I will conclude with a discussion about what we are doing to drive more registrants into the program.

From feed back we have received from the public we have learned that:
- People generally appreciate the service, and they would like more choices and an ability to filter what they receive. Some subscribers would like to receive all Notify NYC messages and others only want information pertinent to where they live or work. Subscribers would like the ability to change the device they receive information on based on the time of day. Subscribers want as much flexibility as possible.
- There are limitations to the amount of information that can be provided in a text message, so those messages need to be carefully crafted.
- There can be problems with receiving messages on mobile devices based on inconsistent cellular coverage.
- There is a delicate balance between sending out too much information and too little information.
- People receive their information from many sources. To that end we are implementing technologies that allow the push of information to websites. For example, you may go to the Notify NYC website and sign up for an RSS feed (Real Simple Syndication) feed that will post all messages to your website or Blog
- Information received from a 911 call or a radio transmission is not always completely accurate. It always needs to be verified before a message can be sent. Thus, the challenge has been to verify the event as quickly as possible by coordinating with the Incident Commander in the field or the agency operations unit to determine what messaging needs to be crafted. We have been doing this for more than a year throughout the pilot and now in the citywide program, and continue to hone our skills and update our protocols as needed.

We have heard these suggestions and have incorporated them into our evolving program today and in our ability to provide these features in the next phase of Notify NYC. A Request for Proposal (RFP) has been sent out to procure a final messaging system and responses from that RFP are currently being evaluated. All of these suggestions have been incorporated into the scope of services for the next release.

Throughout the country and the world, notification systems face some inherent challenges. We have spoken with many other jurisdictions about the challenges they have faced and have found many common issues.

- First, the technology is dependent on public infrastructure, e.g. (1) there are limited telephone lines to carry the message; and (2) cell towers to deliver text messages may be affected by excess usage or technical problems.
- Second, there is a heavy reliance on private vendors or "soft infrastructure" that is used within the Public Warning programs (i.e. notification vendors and cell carriers) and this creates additional potential points of failure
- With regard to sending SMS messages, , or text messages, this technology is not always as reliable as we want since SMS messaging channels are not given priority and message size is limited by the size of the display on the phone or PDA. Our goal is to send one message that does not get broken into many pieces. Therefore we limit our character count to 108 so that we deliver one text message.
- Making a large number of phone calls takes time – the metrics of how many calls can be made in a certain amount of time are significant and sending a large number of phone calls may require a time frame that may not be as quick as we would like.

We have also heard from other jurisdictions about the issues they have had with getting people to sign up or register for services such as these. Washington DC has had a system for five years and currently has 84,000 people registered. Philadelphia launched a system prior to our launch and is currently at 8,000 people.

We have found that registrations go up after incidents that draw significant public attention. For example, a few weeks ago when the F train was shut down, we had over 130 new registrants. This fact has driven us to add Notify NYC information to the incident based mailings we do so that when a particular event happens in a community we follow up with a mailing to that community to help them be better prepared in the future, which includes signing up for Notify NYC service.

That is just one of the efforts we are taking to drive more registrations. Others include:
- Engagement in a marketing campaign that ran over the summer and into the early fall. That campaign was comprised of mostly web ads and newspaper ads. The effectiveness of that campaign is currently being evaluated and we will modify future campaigns on these lessons learned for a new campaign that will begin to run in January, 2010.
- Incorporating Notify NYC information into all of the OEM Ready NY trainings which we conduct. Last year we did 251 preparedness events, and we will continue to use this grass roots approach.
- We have expanded Notify NYC notifications to the social networking sites to increase our reach. The objective of the Notify NYC program is to get critical information out to the public. In this regard, we view the information as the important commodity. We are happy to have our Notify NYC messages rebroadcast by other entities. Information from these notifications can be broadcasted across multiple social media, such as Twitter, Facebook, NYC.gov, other websites and 311. This creates a larger distribution focus than just Notify NYC subscribers. As I noted when I began this testimony, Notify NYC is part of a total package of information options

and when we push messages to subscribers and they pass it on, it has a positive viral effect.

- We are currently working on a PSA to be broadcast in taxicabs, on radio and other local media outlets.
- We are planning an advertising campaign on the sides of Sanitation trucks.
- We are also talking to our other City agency partners about ways we can incorporate Notify NYC information into their outreach programs.

The challenges with driving registrations in a program like this are not unique to NYC. We have developed an aggressive campaign that will (1) continue to work to encourage people to sign up for emergency messages, (2) continue to listen to the feedback from our constituents and (3) seek to use the most appropriate technologies to get emergency public information out to the citizens of NYC.

We also rely on all our partners, including those in the private, non-profit and academic sectors to assist us in getting the word out about Notify NYC. As you did during the pilot, we encourage all of you to spread the word to your constituents about Notify NYC.

As we move towards a citywide fully implemented program, we will continue to modify these procedures and approaches. As I hope has been made clear, we take our role as the provider of public information extremely seriously. This is an important service, and one that we will continue to develop with tremendous care. Thank you.

COMMUNITY BOARD NO. 1

The Council of the City of New York
Committees on Fire and Criminal Justice Services and Technology in Government

Oversight Hearing on
The Implementation of Notify NYC
Testimony by Marc Ameruso, Assistant Secretary
Community Board One, Manhattan

Thursday, October 15, 10 a.m.
City Hall, Committee Room, New York, NY

Thank you for convening this important public hearing on the Implementation of Notify NYC and for giving me the opportunity to testify on behalf of Manhattan Community Board One. I am Marc Ameruso, Assistant Secretary of Community Board One.

Community Board One is very grateful that Lower Manhattan was one of the areas in which the Notify NYC Pilot Program was initiated prior to the official citywide launch in September 2009. In recent years CB1 has experienced several emergencies that dramatized the need for an effective system of notification. The most prominent of these occurred on 9/11, when confusion existed among local residents and workers about how to react to the terrible events of that day. The other was the tragic fire at the 130 Liberty Street (also know as the Deutsche Bank) building in August of 2007, when people wondered whether it was safe to remain near a contaminated, burning building, inhaling smoke reminiscent of 9/11 with toxic health effects. But in this case the public but had no way to get authoritative information from City agencies.

City of New York

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In the aftermath of these incidents, CB1 urged the City to develop effective ways to notify citizens about such emergency situations. We were very pleased when the City launched Notify NYC and made CB1 a pilot community for the project. Many of our members and constituents signed up for the program and felt more secure knowing that it was in place.

Given our satisfaction with the Notify NYC Pilot Program, we are encouraged that it has been launched citywide. We hope that as the number of users continues to increase, modifications will be made to it when events point to the need for the Program to be improved. In this way the Program can become as effective as possible.

At our meeting on February 24, 2009, CB1 unanimously passed a resolution (attached) expressing concern when no notice was given about two recent incidents in Lower Manhattan. In the first case, a plane landed in the Hudson River. While everyone was grateful and commended the City and others involved for the extraordinary rescue of all passengers and crew, nearby residents wondered whether there was any danger from breathing the fumes that were noticeable throughout Battery Park City. In the second incident, the Wall Street Journal building at the Winter Financial Center was cordoned off and hazmat trucks converged on the area after white powder was received there.

More recently, there was a well-publicized incident in which Air Force One flew so low over Lower Manhattan that its image could be captured in photographs. Many people told us that they would have remained calm if there had been advance notice via Notify NYC and, in fact, said that they had signed up with the program for exactly such incidents.

Even if incidents such as these do not in fact pose a risk of harm to residents and workers, they cause reasonable people to be concerned for their safety and to desire information in order to assess risks and determine the proper course of action. CB1 believes

that notice should have been given in these events, and that proper notice should be given whenever events occur that are likely to cause significant anxiety and panic among residents or workers in an area, even if primary responsibility for the emergency is held by a state or federal agency.

Additionally, we have had reports of certain alerts being received by some people but not others in the same area. We would like to know if the City maintains different lists and sends some alerts to some people but not others. To this end, we would welcome a presentation at CB1 about Notify NYC so that guidelines for alerts that go out can be clarified.

We would also like to learn more about the chain of command for alerts from initiating to finalizing how the alert is issued, education of the public and how is the public supposed to respond to different types of threats.

Especially with the recent FDNY budget cuts, we are concerned about communication within buildings. Lastly, has any thought been given to using the new bus shelter electronic message boards to broadcast emergency notifications?

Edward Skyler, the Deputy Mayor who has overseen the Notify NYC, said of the program, "It can be useful sometimes because it can help people make decisions, and other times because it can lower their anxieties." (The New York Times, December 5, 2007, by Fernanda Santos) We completely agree with this assessment.

Again, I thank you for this opportunity to comment. Notify NYC is a much needed program when data in real time makes all the difference, and CB1 looks forward to continuing to work with the City to refine it so that it best meets the needs of the City.

COMMUNITY BOARD #1 – MANHATTAN
RESOLUTION

DATE: FEBRUARY 24, 2009

COMMITTEE OF ORIGIN: BATTERY PARK CITY

COMMITTEE VOTE:	8 In Favor	0 Opposed	0 Abstained	0 Recused
PUBLIC MEMBERS:	1 In Favor	0 Opposed	0 Abstained	0 Recused
BOARD VOTE:	38 In Favor	0 Opposed	1 Abstained	0 Recused

RE: Emergency Notification System

WHEREAS: On January 15, 2009, US Airways flight 1549 crash-landed in the Hudson River, ultimately coming to be tethered to the seawall in the northern portion of Battery Park City, from where jet fuel spilled into the Hudson River and floated into the Battery Park City Marina, resulting in a strong odor of jet fuel across a large area of Battery Park City, and

WHEREAS: On January 21, 2009, the Wall Street Journal Offices at 1 World Financial Center were evacuated due to a "white powder" scare, causing Liberty Street and South End Avenue to be closed to all traffic, while hazmat trucks converged on the area, and

WHEREAS: In neither case did the pilot Notify NYC program provide notice to the local residents or workers regarding the incidents, and

WHEREAS: Even if incidents such as these do not in fact pose a risk of harm to residents and workers, the nature of these incidents – the strong smell of jet fuel, and the presence of hazmat trucks surrounding evacuated offices – would cause reasonable people to be concerned for their safety and to desire information in order to assess risks and the proper course of action to deal with perceived risks such as these, and

WHEREAS: This is particularly so in a neighborhood adjacent to the World Trade Center, where many local residents and workers had experienced the events of September 11th, and

WHEREAS: It appears that the failure to give notice of US Airways jet fuel spill may have resulted from the fact that jurisdiction for this event had passed to federal authorities, while the failure to give notice regarding the "white powder" scare may have been based on a judgment call by relevant officials that notice was not required, and

WHEREAS: CB#1 believes that notice should have been given by Notify NYC of each of the events of January 15 and 21, and that the failure to give such notice resulted in unnecessary anxiety and panic among residents and workers, now

THEREFORE
BE IT
RESOLVED
THAT: CB#1 requests that the administrators of the Notify NYC program examine the program's response to the events of January 15 and 21 to determine how the program's responses to future events could be improved, with specific reference (a) to assuring that proper notice is given under the program even if primary responsibility for the emergency is held by a state or federal agency and (b) to assuring that events that are likely to cause great anxiety and panic locally, such as when an area is sealed off and surrounded by hazmat trucks, result in proper notice under the program.

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: _____

(PLEASE PRINT)

Name: COMMISSIONER Joseph BRUNO

Address: _____

I represent: OEM

Address: _____

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: _____

(PLEASE PRINT)

Name: HENRY JACKSON, DEPUTY COMMISSIONER

Address: _____

I represent: OEM

Address: _____

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: _____

(PLEASE PRINT)

Name: MICHAEL LEBOW CHIEF TECH OFFICER

Address: _____ 7 1 _____

I represent: De ITT

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. _____ Res. No. _____

☐ in favor   ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Chief Ronald Spadafora

Address: _____

I represent: FDNY _____

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. _____ Res. No. _____

☐ in favor   ☐ in opposition

Date: _____

(PLEASE PRINT)

Name: Marc Ameruso

Address: _____

I represent: Community Board One - Manhattan

Address: _____

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