

NEW YORK CITY
Office of Emergency Management

Biennial Report 2007



165 Cadman Plaza East, Brooklyn, NY 11201

Michael R. Bloomberg, Mayor
Joseph F. Bruno, Commissioner



NEW YORK CITY OFFICE OF EMERGENCY MANAGEMENT

New York City
Office of Emergency Management

OEM's mission:

- 3 **Plan and prepare for emergencies**
- 9 **Educate the public about preparedness**
- 13 **Coordinate emergency response and recovery**
- 21 **Collect and disseminate critical information**
- 23 **Seek funding opportunities to support the preparedness of the City of New York**



Dear Fellow New Yorkers,

New York City is the greatest city in the world, but that does not mean all is well all the time. New York City's international stature, densely populated coast lines, and unique infrastructure make it more susceptible to hazards than most U.S. cities. The NYC Office of Emergency Management (OEM) works hard to ensure the City's emergency plans are operationally sound and regularly tested and updated so New York City is ready for anything.

One month after I became OEM Commissioner in April 2004, I testified before the September 11th Commission about the new Citywide Incident Management System (CIMS). In June 2005, with CIMS in place via mayoral executive order, I issued "One Year Later," which highlighted the agency's accomplishments during my first year. Now in July 2007, I present OEM's Biennial Report to document our work over the last two years.

One of the most significant accomplishments outlined in this report is the opening of the new, LEED-certified, "green" headquarters in December 2006. The building is the first sustainable city government headquarters and the agency's first real home since our former offices at 7 WTC were destroyed six years ago. OEM's robust Coastal Storm Plan, which outlines how the City will evacuate and shelter residents during a Category 4 hurricane, also deserves mention.

Our Ready New York public awareness campaign trained thousands of New Yorkers over the last two years. CIMS has been fully adopted and tested for all emergency responses, including planned events like the Macy's Thanksgiving Day Parade, and its effectiveness has been enhanced in a number of different ways. Our partnership initiatives with the private sector, like the Corporate Emergency Access System and CorpNet, gain new members and greater participation every week.

Amidst all our planning and relocating, OEM coordinated the City's response to a number of notable emergencies, including the 2005 Transit Union Workers' strike, the July 2006 blackout in Long Island City/Astoria, Queens, and the April 2007 nor'easter.

I am pleased to present this biennial report, which showcases the projects OEM has completed over the past two years and illustrates the progress we have made and hope to continue making in preserving this great city and preparing the people who live in it.

A handwritten signature in black ink, appearing to read "Joseph F. Bruno". The signature is fluid and cursive, written over a light blue horizontal line.

Sincerely,
Joseph F. Bruno
Commissioner
NYC Office of Emergency Management

Plan and prepare for emergencies

WHAT IF NEW YORK CITY
WERE HIT BY A CATEGORY 4 HURRICANE?
WHAT IF THE MOST DENSELY RESIDENTIAL CITY
IN THE COUNTRY LOSES HUNDREDS OF THOUSANDS OF
HOMES IN A FEW HOURS? WHAT IF MILLIONS ARE LEFT WITH
NOWHERE TO LIVE TO WORK OR TO GO TO SCHOOL?

Over the last two years OEM has completed extensive plans that address everything from weather emergencies to continuity of operations for City agencies.

Coastal Storm Plan

OEM began revising the City's Coastal Storm Plan (CSP) in June 2005 to account for adjustments in New York City's census data. The CSP became OEM's most pressing project just a few months later in the wake of Hurricane Katrina.

The devastation Katrina caused and New Orleans' planning shortfalls emphasized the need for a clear, coordinated plan that anticipates a worst-case weather scenario for our city. OEM re-designed the CSP for a Category 4 hurricane that makes landfall in Atlantic City, N.J., and hits New York City head-on. Experts estimate that 151 mph winds and 31-foot storm surge would force approximately 2.3 million people to evacuate the City's coastal hurricane flood zones, and that as many as 605,000 of them would seek public shelter. The City's plan to manage this huge number of evacuees is a flexible, comprehensive blueprint that can be readily tailored to the size and impact of any storm. The plan focuses on seven components:

Storm Tracking and Notification

- > Tracking approaching storms when they are 120 hours from landfall
- > Making pre-evacuation recommendations to the Mayor

Decision-Making

- > Recommending non-essential City activities be halted
- > Calling for a voluntary or mandatory evacuation

Evacuation

- > Determining how far inland storm surge is expected to push
- > Defining evacuation routes and posting signage that guides evacuees to available public and private transportation
- > Alerting special needs and homebound residents to a possible evacuation through an advanced warning system

Measured against populations of all U.S. cities, New York City's sheltering population in a Category 4 storm would rank as the 19th largest city.

Sheltering

- > Planning how the City will triage, track, and house up to 605,000 evacuees through a combination of 65 evacuation centers and 509 shelters, and mobilize and train more than 60,000 City employees to manage and staff the sites
- > Pre-positioning assets to manage the shelters
- > Coordinating with the Department of Homeless Services, Human Resources Administration, Department of Education, City University of New York, and the not-for-profit community to manage the City's sheltering program

Logistics

- > Securing and stockpiling the materials the City needs to assist up to 605,000 in hurricane shelters and many more residents who stay in their homes

Public Information

- > Pre-storm, distributing OEM's hurricane guide and providing information to residents, community groups, and private partners about coastal storm preparedness
- > Providing accurate and timely information to the public when a storm is threatening our city

Recovery and Restoration

- > Accommodating residents with critical medical needs, distributing food, assessing damages, removing debris, restoring services, and repairing infrastructure

The Disaster Housing Challenge

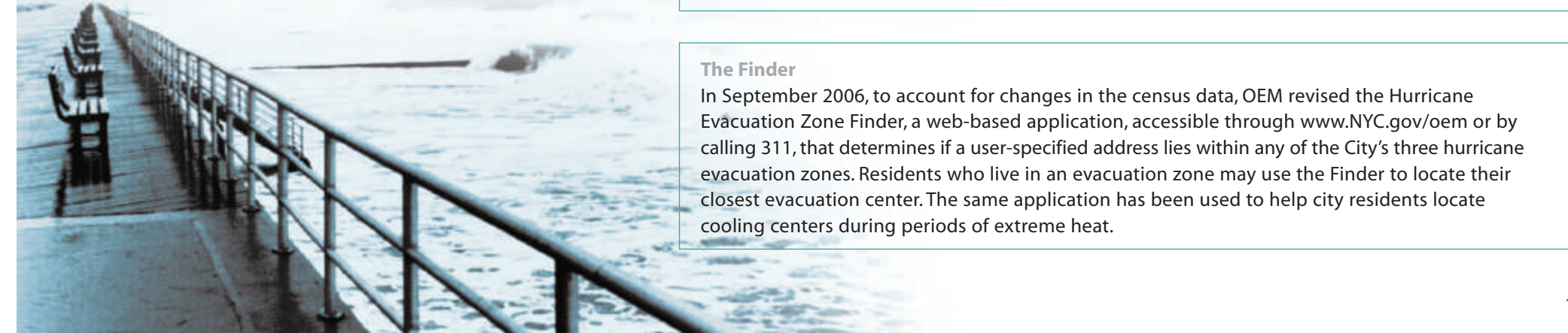
OEM, in partnership with not-for-profit Architecture for Humanity and with the financial support of the Rockefeller Foundation, will introduce a Disaster Housing and Urban Design Competition in summer 2007 to address the challenge of housing thousands of displaced New Yorkers in the wake of a major hurricane. OEM hopes to attract multi-disciplinary teams to design temporary housing for a dense and complex urban setting like New York City. The winning designs will serve as a catalogue of solutions the City can implement should a disaster severely damage a large section of New York City's housing stock. The competition will inform a similar project sponsored by Rockefeller in Asia.

The Finder

In September 2006, to account for changes in the census data, OEM revised the Hurricane Evacuation Zone Finder, a web-based application, accessible through www.NYC.gov/oem or by calling 311, that determines if a user-specified address lies within any of the City's three hurricane evacuation zones. Residents who live in an evacuation zone may use the Finder to locate their closest evacuation center. The same application has been used to help city residents locate cooling centers during periods of extreme heat.



Coastal evacuation signs, which are posted throughout the five boroughs, direct traffic to evacuation centers.



Planning for Weather

StormReady

- > In November 2006, New York City became the country's first major city certified as StormReady by the National Oceanic & Atmospheric Administration. StormReady is a nationwide community preparedness program that helps communities develop plans to handle severe weather and flooding threats. The City's Coastal Storm and Winter Weather Plans and the Ready New York public outreach campaign helped the City meet the preparedness criteria and earn its three-year certification.

Winter Weather Emergency

- > New York City released its updated Winter Weather Emergency Plan in December 2006. The plan outlines procedures to reduce the hazardous effects of winter weather on general and at-risk populations. It details specific strategies for responding to everything from frozen fire hydrants to heat outages to incidents involving carbon monoxide. At Mayor Bloomberg's direction, the plan addresses sheltering issues and providing essential City services in the event of two back-to-back, record-breaking snowfalls.



Mock evacuees arrive at an evacuation center during the 2006 HurrEx exercise.

Strengthening Relationships

Continuity of Operations Planning (COOP)

- > Led by OEM, the City is in the process of establishing a Continuity of Operations Planning (COOP) program for City agencies. Based on federal standards and existing City emergency plans, COOP will ensure City agencies can provide essential services to the public during and after any emergency. OEM, in partnership with the Department of Information Technology and Telecommunications (DOITT) and IBM consultants, developed a software-based template



OEM staff and partners train for a winter weather emergency during SnowEx 2007.



Commissioner Bruno addresses the crowd at the conclusion of TRIFECTA 2006.



to help City agencies write COOP plans. In October 2006, the COOP planning team began a pilot program to establish a COOP plan for three City agencies: Administration for Children's Services, Department of Sanitation, and the Office of the Mayor. Next steps include revising COOP methodology, making modifications to the COOP software, and rolling out the program to all City agencies.

Big City Emergency Managers Meeting

- > In September 2006, OEM hosted the Council for Excellence in Government's Big City Emergency Managers Meeting, which brought together emergency managers from major metropolitan areas across the U.S. to share ideas and lessons learned. Emergency management leaders from New York City, Chicago, Los Angeles, San Francisco, Philadelphia, Miami/Dade County, and Houston, convened at OEM headquarters to discuss everything from working with the private sector to developing strategies to contain and combat a pandemic flu to motivating the public to prepare. Undersecretary George Foresman of the Department of Homeland Security and Federal Emergency Management Agency Director David Paulison also attended the meeting to answer questions about the working relationship between local and federal authorities.

Training and Exercises

OEM's ability to effectively manage emergencies depends on the strength and training of not only its first responders but the city as a whole. OEM coordinates drills to test City agencies' ability to respond to everything from a biological or chemical incident to a Category 4 hurricane. Exercise highlights since April 2005 include:

- > **PODEx**, a two-day exercise held in June 2005, tested the City's ability to respond to a biological event. The exercise included a test of New York City's ability to deliver medications from the Strategic National Stockpile to Point of Dispensing (POD) sites in the five boroughs.
- > In March 2006, OEM coordinated **TRIFECTA** to test the City's response to a chemical incident. The exercise focused specifically on the implementation of Citywide Incident Management System protocols during a hazardous materials response. TRIFECTA also tested responder safety and decontamination procedures, and used the Unified Victim Identification System to test fatality management.
- > **HurrEx** 2006 was a series of exercises designed to test various aspects of the City's newly updated Coastal Storm Plan. The first exercise challenged high-level City officials to make decisions leading up to a general evacuation order. The second exercise tested the City's ability to coordinate the evacuation of hospitals and nursing homes in flood zones. The final exercise in the series challenged 900 City employees and volunteers to activate and operate an evacuation center and hurricane shelter. In 2008, OEM will expand the HurrEx series to include regional partners like Suffolk, Nassau, and Westchester counties in a mass evacuation drill.

Educate the public about preparedness

- > In November 2006, an exercise on the **Staten Island Ferry** tested the City's ability to respond to a terrorist attack resulting in a waterway emergency.
- > In March 2007, OEM organized **SnowEx**, an internal exercise that tested the agency's ability to manage City operations during two major snowstorms striking the city back to back. The exercise allowed OEM staffers to familiarize themselves with the new Emergency Operations Center and highlighted areas for improving the space for future training.
- > In March 2007, OEM invited representatives from the finance industry to the first **Tabletop Training 101** (TTX 101). TTX 101 is a training session offered by OEM staff that teaches leaders from the public and private sectors how to facilitate a tabletop exercise in eight basic steps. Participants use this training to run drills that strengthen their own continuity of operations plans.

Urban Search and Rescue Drills

OEM manages the City's Urban Search & Rescue team, New York Task Force 1 (NY-TF 1), a group of responders who specialize in the location, extraction, and medical stabilization of victims trapped in confined spaces. US&R drills regularly for disasters involving the collapse of heavy steel and concrete.

- > In May 2005, an 80-member US&R team was deployed to the Center for National Response, a federally owned training facility in West Virginia, for three days of training that tested the full range of US&R skills. The drill's facilitators used an abandoned tunnel on the premises to stage hazmat drills, technical searches, canine searches, confined space rescues, patient triage and stabilization, and patient evacuation drills.
- > In November 2006, OEM organized a US&R mobilization drill at the Concord Hotel, in Monticello, New York to test NY-TF 1's response to collapsed buildings and a crippled overpass.



NY-TF 1 members navigate a tunnel as they search for trapped victims during a drill.



NY-TF 1 members extract mock victims from collapsed structures.



Among OEM's biggest tasks is educating New Yorkers about preparing for all types of disasters.

Ready New York

- > Since its launch in 2003, the Ready New York preparedness campaign has grown to include seven multi-lingual publications, public service announcements, an advertising campaign, robust web content, a speakers' bureau, a reprinting program, corporate partnerships, and an extensive community outreach program.

Ready New York Highlights

- > A revised version of the **Hurricanes and New York City** brochure accompanied the release of New York City's revised Coastal Storm Plan in June 2006. The new brochure houses a map of the City's 65 evacuation centers and offers hurricane preparedness tips. **Hurricanes and New York City**, which is available in 11 languages, was mailed to every household located in evacuation zones A and B – 625,000 in all – in summer 2006. OEM also developed a presentation to educate the city's at-risk communities about hurricane hazards.
- > OEM introduced a new pet preparedness brochure in September 2006 at the American Kennel Club's Responsible Dog Ownership Day in Madison Square Park. **Ready New York for Pets** offers tips and information for pet owners on how to plan and care for their pets during emergencies.
- > In September 2005, OEM released the **Ready New York Pocket Guide**, a pocket-sized brochure that features the most basic steps New Yorkers should take to prepare for disasters. In September 2006, over 100,000 City employees received a copy of this guide with their paychecks, and 125,000 New Yorkers received the pocket guide during the National Preparedness Month kick-off events in September 2005 and September 2006.
- > OEM unveiled the **Ready New York truck** during National Preparedness Month 2006. It tailed Commissioner Bruno through the five boroughs, acting as a moving billboard for the Ready New York campaign and a point of distribution for preparedness materials. OEM plans to refurbish the interior of the truck in fall 2007 and turn it into a hands-on, mobile preparedness training center.
- > **Ready New York ads** appeared on city buses, subways, and bus shelters from September through November 2006, covered sanitation trucks, subways, phone kiosks, check-cashing offices, and appeared on MTA metrocards in March through May 2007. Spring 2007 also marked the first time OEM ran ads in Chinese, Russian, and Spanish.
- > **On the Horizon:** In September 2007, during National Preparedness Month, OEM will roll out a **Ready New York for Kids** guide in collaboration with the Department of Education. The guide, which will be distributed to the city's 1.1 million public school students, will encourage kids and their families to be better prepared for disasters. New versions of Ready New York guides for families and businesses will also be released in summer 2007. Also in the summer of 2007, evacuation zone C will receive **Hurricanes and New York City** in the mail.



OEM staff distribute the Ready New York for Pets brochure at American Kennel Club's Responsible Dog Ownership Day in Madison Square Park.



Since 2003, OEM has distributed 3.25 million emergency preparedness guides in up to 12 different languages.



National Preparedness Month 2005 kicks off at Grand Central Terminal.



Ready New York billboards encourage residents to prepare for hurricanes.



Red Cross Partnership

- > Each year a grant from the City Council funds a partnership between OEM and the American Red Cross in Greater New York to ensure New Yorkers receive a unified disaster preparedness message. Over the last two years, the Red Cross has helped expand and diversify OEM's Ready New York campaign by co-branding and distributing over 100,000 guides at events throughout the five boroughs. Red Cross volunteers also facilitated over 300 of OEM's Ready New York presentations.

Commissioner's Roundtable

- > In March 2006, OEM launched the Commissioner's Roundtable series, a program that offers executives in various industries the opportunity to establish ongoing relationships with OEM's commissioner and senior staff and gain insights into emergency management. The roundtables also offer OEM's private sector partners an opportunity to provide feedback on the City's emergency plans and outline ways the City can support their private continuity programs. Past participants have included media executives from organizations including Time Warner, Disney, NBC, Time Inc., and the New York Times, and representatives from the logistics sector including big box stores like Home Depot, Macy's, and Target, and fuel suppliers like Hess and Rapid Petroleum. Future roundtables will address representatives from universities and cultural institutions.

Citizen Corps Council

- > Coordinated by OEM, the Citizen Corps Council of New York City brings together leaders from law enforcement, fire services, emergency medical services, emergency management, volunteer and community organizations, the private sector, and local elected officials to engage citizens in homeland security issues and promote community preparedness through public education, outreach, and volunteer programs.
 - In September of each year, OEM and the Citizen Corps Council organize public outreach events to promote National Preparedness Month (NPM).
 - In 2005, NPM kicked off at Grand Central Terminal with an outreach event that introduced the Ready New York Pocket Guide to the public. Over 10,000 guides were distributed to commuters in under two hours.
 - In 2006, OEM and the Citizen Corps Council organized a NPM kick-off event at a major transportation hub in each of the five boroughs. Citizen Corps members handed out over 100,000 pocket guides.
- > In April 2007, the Citizen Corps Council hosted more than 200 volunteer leaders from Council member groups at its first annual Disaster Volunteer Conference at St. Francis College in Brooklyn. The conference promoted professional development, encouraged resource sharing, and helped volunteers better understand their role in the City's disaster response and recovery plans. In addition, the conference served as a networking hub and provided guidance on working with vulnerable populations, volunteer retention, and team building and strengthening.

Community Emergency Response Teams

- > New York City's Community Emergency Response Teams (CERT), whose members undergo intensive training in disaster preparedness and basic response, continue to prepare their communities and support first responders during emergencies.
 - During the 2006 Queens Power outage, teams helped the City and the Red Cross distribute ice, water, and meals to distressed residents. The teams also distributed information about compensation for spoiled food to businesses affected by the outage. In total, over 60 CERT volunteers supported response operations almost every day of the two-week emergency.
 - CERT expanded its reach into the private sector in January 2007 with the creation of the first Corporate Volunteer Emergency Response Team (CoVERT) in cooperation with BNP Paribas bank. The CoVERT team is the first of its kind, but OEM hopes to build on the model and draw more private sector partners.
 - Eight new CERTs completed the 11-week training program in May 2007, bringing the number of active teams in New York City to 56. By 2008 OEM aims to have a CERT team in every Community Board in NYC.



Volunteers attend a session at the Citizen Corps Council's Disaster Volunteer Conference in April 2007.

Coordinate emergency response and recovery





OEM coordinates and supports City operations during disasters affecting New York City. OEM and its partner agencies also develop tools to streamline coordination between City agencies during an emergency response. Over the past two years, OEM applied these tools during responses to emergency incidents from blackouts to coastal storms, as well as to planned events like the Macy's Thanksgiving Day Parade.

New Headquarters

On December 5, 2006, OEM cut the ribbon to its new headquarters and the City's new Emergency Operations Center at 165 Cadman Plaza East in Brooklyn. The high-tech facility replaces the agency's former headquarters at 7 World Trade Center, which was destroyed on September 11, 2001, and its interim location at 11 Water Street in Brooklyn. The new facility is the City's first green agency headquarters. In February 2007, it received silver LEED (Leadership in Energy and Environmental Design) certification.

- Building highlights include a 130-seat Emergency Operations Center, a 24-hour Watch Command, general office space, training and conference rooms, full back-up generation, a press room with a direct feed to every news channel in the city, and 162 miles of cable to support telecommunications.
- Some of the building's green features include columns and floors reused from the previous occupant, heat-reflecting roof tiles made from recycled materials, environmentally safe indoor building materials, water-saving devices, and thermal control windows, among many other features.
- In December 2006, OEM's headquarters received an award of merit for adaptive reuse of an existing building from New York Construction Magazine.
- In June 2007, OEM's headquarters won an award of excellence for rehabilitation from the Society of American Registered Architects.



The City's new EOC can accommodate up to 130 public and private partners during an activation.



Emergency Response Tools

Citywide Incident Management System

> On April 11, 2005, Mayor Bloomberg issued an executive order to announce New York's adoption of the Citywide Incident Management System (CIMS), a protocol for responding to and recovering from emergencies and managing planned events. CIMS, New York City's adaptation of the National Incident Management System (NIMS), establishes roles and responsibilities and designates authority for agencies supporting emergency response. Since its implementation, the system has been applied to all interagency responses, including the Transit Strike in December 2005, the Roosevelt Island Tram Rescue in April 2006, and the summer 2006 heat wave.

OEM's integration of CIMS has also evolved through:

- Conducting after-action reviews of CIMS incidents to enhance its effectiveness.
- Establishing mandatory National Incident Management System (NIMS) training and testing to ensure City employees are familiar with both NIMS and CIMS.
- Conducting drills designed to test the effectiveness of CIMS in all types of emergencies.

State and Local Integration Program

> In February 2007, OEM proposed the State and Local Integration Program (SLIP) to representatives from the Federal Emergency Management Agency, the Department of Homeland Security, and the Department of Defense in Washington, D.C., to address the gaps between federal response plans and state and local response. SLIP is a combination planning tool and response management system that enables state and local authorities to better manage resources in a disaster. The program consists of four parts:

- A **State/Local Asset Database** that helps local authorities determine their resource capabilities in an emergency situation.
- **Consequence Models** that predict the impacts on populations and critical infrastructure of the 15 national planning scenarios (e.g. major earthquake, major hurricane, etc.).
- A **Template Request System** that standardizes the process for local authorities to request and track assets from the federal government.
- **Operational Plans** that span the 15 emergency support functions, from power to transportation to housing, including standard operating procedures and practices for state and local authorities to receive and deploy federal resources.

Corporate Emergency Access System

> OEM's Corporate Emergency Access System (CEAS) allows private businesses to pre-credential essential employees to access restricted areas following an emergency. The program has grown significantly during the last two years. As of spring 2007, 234 corporations have enrolled and 15,360 individuals have been approved for emergency access to 917 facilities.

The Growth of CEAS	Spring 2005	Spring 2007	Change
1. Corporations enrolled	77	234	300%
2. Facilities	154	917	595%
3. Cards approved	3818	15,360	400%

Incidents

Macy's Thanksgiving Day Parade Taskforce

- > During the 2005 Macy's Thanksgiving Day Parade, a balloon shaped like a giant M&M collided with the marquee of an office building on Broadway between 43rd and 44th Streets. The balloon pulled a lamp head off a street light and sent it crashing into spectators below, injuring two of them. In response to this accident Mayor Bloomberg created the Macy's Thanksgiving Day Parade Task Force to determine what went wrong in 2005 and ensure public safety during future parades. Mayor Bloomberg named OEM Commissioner Joseph Bruno and Michael A. Cardozo, the City's Corporation Counsel, co-chairs of the task force. Before the 2006 parade, the task force issued its recommendations and OEM helped City agencies implement them. During the parade, CIMS went into effect with NYPD acting as the incident commander and OEM serving as the City's liaison.

Task Force Actions:

- Established a 56-foot safety envelope to eliminate potential collisions by limiting the size of balloons, establishing maximum wind speeds at which these balloons were allowed to fly, and clearing the parade route of all obstacles.
- Developed a wind testing system that provides wind speed measurements from anemometers at key points along the parade route and transmits the information to balloon operators who adjust the flight heights of their balloons accordingly. By controlling the length of the tether, balloon operators can prevent the wind from pushing balloons outside of the 56-foot safety envelope.

Water Main Task Force

- > In February 2005, a water main broke under a main thoroughfare in Astoria, Queens, flooding 50 homes and interrupting businesses in the area. In response, OEM formed the Water Main Task Force and Protocol to better manage large water main breaks. New York City sees nearly 600 water mains breaks every year; the larger ones often demand the special skills of up to 20 City agencies. Under the new protocol, when a water main breaks, an OEM Citywide Interagency Coordinator (CIC) conducts a field assessment to determine which agencies should respond. The CIC considers the extent of the flooding and evacuations, the involvement of potentially hazardous materials or sensitive locations, the impact on utility or transportation systems, undermining of roadways or structures, community disruption, and other impacts. OEM's Watch Command then dispatches necessary agencies to begin the recovery process. The Water Main Task Force continues to evolve with each response and recently formed a partnership with Community Emergency Response Teams (CERT) to provide better services to affected families and neighborhoods.

The Water Main Task Force responds to a large water main break.



London Bombings

- > OEM's role in emergency management extends well past the five boroughs. In July 2005, senior officials from the Office of Emergency Management and the Metropolitan Transit Authority traveled to London to meet with transportation police and London Underground Operations personnel to discuss the bombings on the transit system. The two groups shared information about responding to terrorist incidents and the lessons they have learned.

Hurricane Katrina

- > On August 30, 2005, 36 members of New York City's Urban Search and Rescue (US&R) team, NY-TF 1, deployed to Mississippi to search for survivors and assist in the aftermath of Hurricane Katrina. This mission marked the first time in the history of the US&R program that all 28 US&R teams have been deployed to the same mission. NY-TF 1 spent 10 days searching for both survivors and victims in neighborhoods devastated by the hurricane.
- > On September 15, 2005, OEM, in partnership with the Human Resource Administration, the Department of Homeless Services, and the American Red Cross in Greater New York, opened a **Disaster Assistance Service Center (DASC)** and **Welcome Center** to help more than 2,500 Hurricane Katrina evacuees adjust to their new lives in New York City. The DASC hosted a range of resources under one roof that addressed everything from housing to school enrollment to financial recovery. The Welcome Center offered basic case assessments and referrals to the DASC. Both centers remained open for four months until the needs of all evacuees were addressed.
- In September 2005, New York City sent personnel and equipment to support Louisiana's recovery from the impact of Hurricane Katrina. Under the **Emergency Management Assistance Compact (EMAC)**, a state-to-state, post-disaster mutual aid agreement, the City deployed more than 1,000 police officers, firefighters, corrections officers, building inspectors, and OEM personnel to assist with the recovery effort. The City also donated food, clothing, and emergency response equipment including the fire engine "The Spirit of Louisiana."



NY-TF 1 members search for survivors in Mississippi after Hurricane Katrina.

Waste Management Strike

- > The employees of Waste Management, a private waste collection company that services restaurants and other private businesses in the city, went on strike in April 2006. Left unchecked, the accumulation of garbage on New York City's streets would have resulted in a serious risk to public health. OEM collaborated with the Department of Health and Mental Hygiene, the Department of Sanitation, the Business Improvement Commission, the Department of Information Technology and Telecommunications, the Police Department, and the Fire Department to have City sanitation vehicles collect commercial garbage that posed a health risk.

WTC Remains Project

- > On October 18, 2006, while running utility checks to support the construction of the Freedom Tower, Consolidated Edison opened a man hole and discovered human remains among the debris. The Commissioner of the Department of Design and Construction and the Executive Director of the Lower Manhattan Construction Command Center (LMCCC) identified a number of underground sites and damaged buildings that may contain remains of victims from the September 11th attacks. Mayor Bloomberg authorized an expanded search to recover any yet-to-be-discovered remains and charged OEM with coordinating the project.
 - OEM is responsible for coordinating personnel and resources, and providing logistical support for more than a dozen City agencies and other organizations, including the Office of Chief Medical Examiner (OCME), Police Department, Fire Department, Department of Sanitation, the Port Authority, and a variety of specialized contractors.
 - As the coordinating lead for the project, OEM also supports OCME, the technical lead, by ensuring all agencies adhere to OCME's forensic protocols.



Mayor Bloomberg, Deputy Mayor Ed Skyler, City commissioners, and OEM staff meet in the Situation Room during the April 2007 nor'easter.



Emergency Operations Center Activations

Nor'easter

- > On April 15, 2007, a strong nor'easter hit New York City. Seven inches of rain fell over two days causing coastal and small stream flooding in urban areas. Sustained winds of 30 miles per hour and gusts up to 50 miles per hour knocked down trees and branches and took down power lines in several neighborhoods. OEM opened the Emergency Operations Center (EOC) to coordinate the City's response. During the storm, the City opened nine shelters for residents who lived in the flood zones. The EOC also coordinated a sandbagging operation with the National Guard in the Seagate section of Coney Island, Brooklyn, monitored power outages in several boroughs, and worked with the Fire Department and other agencies to pump out flooded transportation tunnels and public parks.

Long Island City Blackout

- > In July 2006, roughly 174,000 people in Long Island City lost power for nine days. OEM opened the EOC and worked closely with many City agencies, the private sector, and Con Edison to prevent the entire Long Island City network from crashing. Through the EOC, OEM coordinated the influx of personnel and massive amounts of food, water, and equipment to the affected areas. The City also opened a Special Services Center in Long Island City to assist area residents with food spoilage claims and other blackout-related issues. OEM served as a key adviser to the Mayor on the City's continuing response to the blackout by implementing its **Power Outage Response Team (PORT)** protocol.

Heat Emergency

- > Mayor Bloomberg signed an Executive Order declaring a Heat Emergency on July 30, 2006. The EOC was activated to ensure all City agencies were helping New Yorkers beat the heat and conserve power. OEM coordinated power load shedding to prevent blackouts and the City opened cooling centers throughout the five boroughs. Over 4,000 New Yorkers visited these air-conditioned public spaces during the emergency.

Transit Strike

- > At midnight on December 15, 2005, MTA's contract with Transport Union Local 100 expired before a new contract could be negotiated. New York City transit workers went on strike. After a year of planning in anticipation of a possible strike, OEM executed four major changes to the city's transportation system to accommodate the 7.5 million commuters who relied upon public transportation daily:
 - Opened the EOC to coordinate City agencies and regional partners during the response.
 - Reduced public demand for transportation by coordinating with private sector partners to stagger work schedules and promote telecommuting and carpooling



In order to overcome the scarcity of accurate information during the Long Island City blackout, OEM developed the *Power Outage Response Team (PORT)* protocol to allow the City to determine the extent of any outages and to ensure the accuracy of utility predictions. The team is composed of representatives from OEM, the Mayor's Community Assistance Unit, the Police Department, and the Fire Department. The team activates any time over 1000 individuals are potentially without power.

- Improved traffic flow on highways and roadways by imposing HOV restrictions on vehicles entering Manhattan below 96th Street, prohibiting non-emergency roadwork, reserving emergency routes for special vehicles, and applying lane reversals in peak directions at selected bridges and tunnels during rush hours
- Optimized working public transportation by extending hours of operation for LIRR trains, the Staten Island Ferry, and Metro North, adding park-and-ride sites near working transportation hubs, and amending taxi and for-hire vehicle rules to allow for zone pricing and multiple riders and fares

Situation Room

- > A Situation Room activation, the smallest type of OEM activation, typically uses OEM personnel only to coordinate emergency operations. Situation Room activations involve communicating with agencies by telephone and conducting incident action planning through a series of interagency conference calls. Notable Situation Room activations in the last two years include:

Situation Room Activations

Date	Incident	Mission
September 2005	Hurricane Katrina	Coordinate DASC Operations and mutual aid to Louisiana, Mississippi, Alabama.
June 2005	Staten Island (Neighborhoods) Power Outage	Assist Con Edison with power restoration and community outreach, as well as mitigate the consequences of a power disruption.
October 2006	Plane Crash Upper East Side at 72nd Street	Provide logistics and interoperability support for response.
December 2006	Verizon Phone Outage	Partner with DoITT to assist Verizon with information dissemination and consequence management of the phone outage in lower Manhattan.
January 2007	Gas Odor	Assist with information collection and dissemination regarding a gas odor that permeated Manhattan.

Notable Responses

- > Even when responses do not meet the threshold for activating the EOC or a Situation Room, OEM still plays a critical role. At each of the following large-scale events, including the largest fire in New York City’s history, OEM coordinated the establishment of an incident command structure to divide responsibilities among the responding agencies.
- Roosevelt Island Tram Rescue - April 18, 2006
- 10-alarm fire in Greenpoint - May 2, 2006
- Building explosion at 62nd Street - July 10, 2006



April 2006 Roosevelt Island Tram rescue



July 2006 building explosion and collapse



May 2006 10-alarm fire in Greenpoint

Collect and disseminate critical information





Commissioner Bruno addresses the crowd at the conclusion of Hurricane 2006.

Vulnerability study

- > In 2004, OEM became one of the first emergency management agencies to gather demographic data to identify the city's most vulnerable populations. The data helped OEM identify the 11 most dominant languages spoken among residents in hurricane evacuation areas. Over the last two years, OEM has used this information to tailor its public outreach efforts, like the Ready New York and coastal storm outreach programs, to the specific languages and needs of New York's diverse communities.

Ethnic and Independent Media Outreach

- > In May 2006, Commissioner Bruno and OEM executive staff visited 30 ethnic and community media outlets in 30 days in an effort to reach some of the city's more isolated populations living in coastal storm evacuation zones. Commissioner Bruno gave interviews on Russian television and Chinese radio programs, among others. OEM continues to nurture its relationships with ethnic and independent media to ensure it can effectively provide emergency information.

CorpNet

- > OEM uses the CorpNet e-mail emergency information service to share information with more than 1,000 corporate subscribers. The program has grown significantly in the past two years and become popular with business continuity managers in the private sector.

Website

- > OEM launched its redesigned website in July 2006. The site offers an array of information about how the City plans for emergencies and how New Yorkers can better prepare themselves. The website also encourages New Yorkers to sign up for OEM's e-mail alerts, which provide updates about local emergencies, news and events, and information for community-based organizations.

Critical Infrastructure GIS Data Sets

- > The Critical Infrastructure Geographic Information Systems (GIS) Data Sets were created to assist recovery operations at the World Trade Center in 2001. The project has grown into a significant GIS effort to map the entire underground infrastructure of New York City. OEM receives architectural drawings of subway stations from the MTA and transforms the drawings into data sets to add information about how best to get people and equipment in and out of confined areas. Until recently, most emergency plans relied on aerial photography. The London and Madrid bombings emphasized the importance of disaster planning for underground infrastructure. To date, the GIS department has mapped all the subway stations in Manhattan below 59th Street, as well as all of downtown Brooklyn.

Seek funding to support the preparedness of the City of New York



Since April 2005, OEM has been awarded substantial funding from federal, state, city and private sources to support virtually all OEM initiatives. Additional funding has been requested from federal, state, and private funds to continue support of OEM initiatives including Ready New York, CIMS, Training and Exercises, COOP, Planning, the Post-Disaster Housing Competition, and a hurricane exercise.

Project/ Grant	Area of Focus
Homeland Security/DHS	Ready New York, exercises, training, personnel, logistics planning, CIMS, business continuity, GIS, evacuation planning
Citizen Corps/DHS, New York State Emergency Management Office	Organization of non-profits around disaster preparedness, CERT, private grants, city community training
MMRS/DHS	Coordination of medical planning for mass casualty events
Ready NY/Private grants	Development, translation, printing of Ready New York guides; advertising
LEMPG/DHS,SEMO	Administration of Office of Emergency Management — staff, OTPS
Coastal Storm Program/City Tax Levy	Staff training, consultants, part-time personnel
Hurricane Exercise/City Tax Levy	Development of hurricane exercises and drills, consultants; agency overtime

Urban Area Security Initiative

OEM chairs and manages the region’s Urban Area Workgroup, which receives risk-based Urban Area Security Initiative funding. Mandated by the Department of Homeland Security, the group is working to finalize mutual aid agreements and is currently working on a logistics integration system and regional planning.

