



**FIRE DEPARTMENT CITY OF NEW YORK**

# **TERRORISM AND DISASTER PREPAREDNESS STRATEGY**



Michael R. Bloomberg, Mayor  
Nicholas Scoppetta, Fire Commissioner  
Salvatore J. Cassano, Chief of Department

2007



# Terrorism and Disaster Preparedness Strategy



## **MISSION STATEMENT OF THE NEW YORK CITY FIRE DEPARTMENT**

As first responders to fires, medical and other emergencies, disasters and terrorist acts, FDNY protects the lives and property of New York City residents and visitors. The Department advances public safety through its fire prevention, investigation and education programs. The timely delivery of these services enables the FDNY to make significant contributions to the safety of New York City and homeland security efforts.

### ***CORE VALUES***

*Service • Bravery • Safety • Honor • Dedication • Preparedness*



# *FIRE DEPARTMENT*

9 METROTECH CENTER

BROOKLYN, NY 11201-3857

**D**uring the past five years, the Department has made significant progress in preparing for future terrorist threats and natural disasters by developing our capabilities and expanding our capacity to respond to all-hazard events. The constantly changing nature of terrorism mandates that we not only continue to press forward in our work today, but that we do so with an eye to the future. To that end, we must develop a vision and strategy that will define our preparedness objectives and establish the foundation for the path we will take to meet those objectives.

Employing the insight and skills from a cross section of the FDNY's work force, the Department leadership has developed this Terrorism and Disaster Preparedness Strategy. This document will provide direction and unity of vision to the Department's efforts toward enhanced preparedness. It also will provide direction and cohesion across the different bureaus within the Department and lead to a more coordinated approach to planning, training, equipping and responding. As we consider the threats of today and tomorrow, it is important that we identify the critical uncertainties in our environment, remove the blind spots from our thinking and develop a flexible strategic vision for the future.

The information and guidance provided by FDNY uniformed and civilian staff, as well as numerous advisors outside the Department, were instrumental to the successful completion of the Strategy document and will continue to be critical to implementing its proposed framework. We appreciate all who continue to participate in this important preparedness initiative.

A handwritten signature in black ink, reading "Nicholas Scoppetta".

*Fire Commissioner*  
**Nicholas Scoppetta**

A handwritten signature in black ink, reading "Salvatore J. Cassano".

*Chief of Department*  
**Salvatore J. Cassano**

---

## TABLE OF CONTENTS

---

<i>Introduction</i>	7
<b>I. PURPOSE</b>	9
Terrorist Threat	9
Natural Disasters	10
All-Hazards Preparedness	11
<b>II. MISSION AND FOCUS</b>	13
Organizational Adaptability	14
Response Capability	15
Prevention and Protection	19
Coordination and Collaboration	22
<b>III. OPERATIONAL READINESS</b>	25
Planning	25
Organization and Leadership	26
Equipment and Systems	26
Training	26
Exercises, Evaluations and Corrective Actions	27
Personnel	27
<b>IV. COORDINATION AND EVALUATION</b>	29
Coordination	29
Evaluation	30
<i>Conclusion</i>	33
<b>APPENDICES</b>	35
Appendix A--FDNY Role in National Target Capabilities	A-1 to A-3
Appendix B--Acronyms	B-1
Appendix C--Glossary	C-1 to C-2
Appendix D--Endnotes	D-1 to D-2
Appendix E--References	E-1





## *Introduction*

---

**T**he Fire Department of the City of New York (FDNY) Terrorism and Disaster Preparedness Strategy (“the Strategy”) is one of many FDNY initiatives taken in response to the events of September 11, 2001. After 9/11, the Department’s core mission of life safety remained the same. What changed is FDNY’s understanding of the complex threat environment that members now live in and the additional steps that must be taken to operate safely and effectively within these new conditions.

Since 9/11, great strides have been made to increase the ability to effectively execute the Department’s life safety mandate within any response scenario. FDNY members and leadership must continue to advance preparedness levels by learning, adapting and evolving to meet the new challenges presented by changes in the threat landscape.

To ensure the Department is pursuing the right initiatives, FDNY’s role in the homeland security network must be defined, followed by continual and objective assessment of the Department’s ability to fulfill that role. This involves evaluating the outcomes of actions taken to reach these preparedness goals and finding new and better ways to work collaboratively with

security partners. Because of the inevitable constraints imposed by the political economy of homeland security, the Department also must find ways to achieve target levels of preparedness with limited resources.

Given the many variables involved in terrorism and disaster preparedness, the intent of the Strategy is to set a strategic direction for the Department’s preparedness efforts that builds upon the FDNY’s established core capabilities. Concentrating efforts on strengthening the core will further enhance a strong, resilient and adaptable skill-set that will serve this City every day and within any threat environment.

The Strategy also is designed to provide an organizational system for pursuing preparedness goals in a manner that is measurably effective, economically efficient and sustainable over the long-term. The Strategy’s end product is not simply an articulation of where the Department wants to be, but rather a road map describing how to get there.

Chapter I of the Strategy (Purpose) addresses the foundation of terrorism and disaster preparedness, including an examination of the current threat environment. This chapter also explains why the Department requires a Strategy to guide pre-



paredness efforts and the proposed outcomes of the Strategy's implementation.

Chapter II (Mission and Focus) examines the life safety mission of the Department and the key points that must be addressed to achieve a high degree of preparedness and effectiveness, including organizational adaptability; response capability; prevention and protection; and coordination and collaboration.

Chapter III (Operational Readiness) provides an outline describing how the Department is ensuring that responders have the tools, training and support they need to do their job. This chapter covers each of the elements that the Department of Homeland Security National Preparedness Goal identifies as required to fully develop capabilities and achieve a state of operational readiness: planning; organization and leadership; equipment and systems; training; exercises, evaluations and corrective actions; and personnel.

Finally, Chapter IV (Coordination & Evaluation) presents the "Strategy Cycle," which is an organizational system for managing the requisite preparedness efforts to produce a high state of operational readiness. The Cycle involves assessing risks, identifying response requirements, cataloging resources and analyzing operational needs, as well as setting and prioritizing performance goals and strategic objectives. This chapter also defines the approach the FDNY will use to implement initiatives and evaluate its progress toward preparedness, including an examination of both outputs and outcomes and how every preparedness initiative supports the Department's overall mission.

Following the Strategy Cycle will enhance the Department's ability to achieve sustainability and relevancy over the long term and realize the highest possible return on time, effort and financial investments. This Strategy document is not designed to be an end-state, but rather a starting point. It provides critical direction to create a more streamlined and coordinated approach to planning, training, equipping for and responding to terrorist incidents and natural disasters, while ensuring the safety of all FDNY members.

A report released by McKinsey & Company in 2002, which was an evaluation of the FDNY's response to the events of September 11, 2001, proclaimed that "the enormous heroism of the members of the Fire Department of the City of New York stands out as an inspiration in the face of calamity."<sup>1</sup> The report further stated that 9/11 "has reshaped our expectations about future threats and created a new urgency to increase preparedness. Many people believe that more large terrorist attacks on the United States are a certainty. The president and Congress are seeking to increase the nation's preparedness through a massive reorganization of homeland security agencies. The state, the city, and the FDNY must also take steps to prepare for the future."<sup>2</sup>

The FDNY has many crucial responsibilities in homeland security. This Strategy is designed to help members fulfill those responsibilities and work with all homeland security partners to enhance terrorism and disaster preparedness for the Department, the City and the nation.







## I. PURPOSE

The FDNY's purpose in creating a Terrorism and Disaster Preparedness Strategy is to ensure the Department is prepared to execute its life safety mission within the full range of possible threats and that preparedness goals be achieved in a manner that is effective, efficient and sustainable. The Strategy and its prescribed overall terrorism and disaster preparedness system will serve as a useful tool for Department leaders to identify and prioritize capability goals and ensure corresponding needs are being met through future initiatives.

During the past several years, a great deal of time, effort and money have been invested across the country to increase the nation's terrorism preparedness. The National Strategy for Homeland Security, released in July 2002, identified the nation's homeland security strategic objectives as:

- prevent terrorist attacks within the United States
- reduce America's vulnerability to terrorism and
- minimize the damage and recover from attacks that do occur.<sup>3</sup>

While preparing for terrorism-related incidents, FDNY has been harshly reminded of the formidable threat that natural disasters pose to the nation's physical infrastructure and the life

and safety of citizens. Members also have been reminded of the difficulties in responding to and managing large-scale and widespread devastation.

Recent history--both home and abroad--has shown that terrorist and natural hazards can occur anywhere, from the top floors of a high-rise building to a train car in a tunnel, aboard a ship docked in port or in a crowded street. Because of the diverse threats, the focus of national preparedness has been broadened to an all-hazards approach, incorporating "terrorist attacks, major disasters, and other emergencies."<sup>4</sup>

Attaining the appropriate response capabilities and requisite state of operational readiness to effectively respond to any hazard requires a comprehensive examination of the specific threats members face. The current threat landscape is both complex and dynamic, presenting a wide range of dangers and potentially devastating consequences.

### Terrorist Threat

Historically, New York City has been and still remains a primary target for terrorists due to its size, concentration of significant critical and economic infrastructure and stature as an icon of the nation's history and ideals.





radiological materials, an IED incident could have far more catastrophic results than that which would be produced by a simple explosion.

Another potential terrorist threat is the use of Improvised Incendiary Devices (IIDs). An IID is designed to produce an intense fire, possibly leading to widespread damage, casualties and panic. Like IEDs, IIDs also can be combined with other agents--such as radioactive isotopes--to make the environment more dangerous for both victims and incoming first responders. The presence of a secondary substance could delay the ability of responders to suppress the fires, attend to the injured and mitigate the scene.

The increased potential and ensuing devastation from weaponized chemical, biological, radiological or nuclear substances is a disturbing and dangerous reality for the first responder community. A small quantity of a biological agent could rapidly expose thousands of people without any immediate indication of exposure, but with severe health effects and staggering economic costs. And, according to a Council on Foreign Relations report, the use of "a terrorist nuclear explosive could devastate a city, whether detonated in the hold of a ship in harbor, in a cargo container, in a cellar, or in an apartment...even if a terrorist set off a device that caused just a one-kiloton explosion, the effect on a city like Manhattan would be devastating."<sup>6</sup>

Substantial security enhancements have been made in and around the City since 9/11. However, terrorists have proved they are extremely adaptive and reactive to changes in the security environment. They seek to exploit the weakness of their targets and are willing to be patient in their planning and execution. They also enjoy the tactical advantage of determining time, place and method of attack. Therefore, to be truly prepared for terrorist incidents, the Department must be adaptive to new threats, proactive in preparedness efforts and vigilant in preventing the dangerous vulnerabilities created by complacency and a false sense of security.

While modern terrorist capabilities have become more sophisticated and now potentially include the use of unconventional (chemical, biological, radiological and nuclear) weapons, terrorists have continued to rely heavily on the use of conventional devices. In 2005, the use of Improvised Explosive Devices (IEDs) and Vehicle Borne Improvised Explosive Devices (VBIEDs) caused approximately 50 percent of all terrorism-related injuries around the world.<sup>5</sup>

These devices continue to be the most popular terrorist methods due to their low cost and ease of use. These methods have proved reliable in achieving the terrorists' objectives, including mass casualties and the disruption of urban systems. The March 11, 2004, bombings in Madrid, which killed 191 people, and the July 7, 2005, coordinated bombings on London's bus and subway cars, which killed 52 people and temporarily crippled the transportation system, illustrate the potential devastation from these simple devices.

While IEDs have been widely used for inflicting targeted damage and shattering public confidence, just as easily they could be combined with unconventional agents to create a weapon of mass destruction. If placed aboard a docked cargo ship carrying flammable and toxic chemicals or next to a rail car transporting

## Natural Disasters

New York City's geographical location and urban structure also make it uniquely vulnerable to numerous types of natural disasters. Meteorologists have predicted that New York City will be hit by a major hurricane sometime within the next several years.<sup>7</sup> The City's hundreds of miles of heavily developed shoreline create the potential for widespread human and economic devastation from a hurricane's powerful winds and pounding rains. Successfully evacuating the populace residing in flood plain areas prior to a hurricane presents a monumental task. Rescuing victims trapped after a hurricane hits will present additional dangerous challenges.

While it may seem unlikely, the City also is vulnerable to a damaging earthquake. The New York City region has experienced numerous small to moderate earthquakes during the past 100 years due to a network of fault lines around the metropolitan region, including one that runs directly through upper Manhattan (the 125th Street fault zone).<sup>8</sup>

Potentially adding to any earthquake damage within the City is the fact that New York City building codes did not include a seismic provision until 1996.<sup>9</sup> This means the dense configuration of buildings, hundreds of miles of roadways and numerous bridges constructed around the City before 1996 were not built to withstand earthquake activity.

An additional factor contributing to the City's vulnerability to structural damage from both hurricanes and earthquakes is the fact that a large part of the City sits on loosely compacted gla-

cial till, rather than bedrock.<sup>10</sup> Major disasters could cause the ground to lose its stability and result in the complete destruction of structures built within glacial till regions. Both a hurricane and an earthquake present serious dangers for building collapses, trapped victims, widespread fires and mass casualties.

## All-Hazards Preparedness

The Department of Homeland Security encourages its homeland security partners to adopt an all-hazards and capabilities-based planning approach. Capabilities-based planning is planning, under uncertainty, to provide capabilities suitable for a wide range of challenges, while working within an economic framework that necessitates prioritization and choice.<sup>11</sup>

Given the many terrorist and natural disaster threats that New York City faces, the FDNY must be prepared to handle all kinds of hazards within difficult and unpredictable response environments. Regardless of the cause, scope or scale of an incident, the FDNY still will rely on its core capabilities to successfully mitigate the situation. Therefore, the purpose and focus of FDNY's all-hazards preparedness efforts have been and will continue to be concentrated on building upon the Department's solid foundation of core skills.

To ensure the right mix and level of skills, FDNY must conduct a comprehensive, objective and accurate measurement of current capabilities and measure them against the most challenging circumstances. This will enable the Department to identify critical gaps in response abilities, set target performance levels and prioritize future preparedness initiatives. It also will force FDNY to recognize that a catastrophic incident can, in fact, stretch the Department or its functions to their breaking points.

A **breaking point** is the point at which operational needs exceed organizational capability (what FDNY can do), capacity (how much FDNY can do), proficiency (how well FDNY can do it) and/or deployment (how rapidly FDNY can do it).

During and immediately following the 9/11 response to the World Trade Center and despite the incredible losses the Department incurred on that day, the FDNY still was able to respond to incidents throughout the City's five boroughs. That is a testament to the available resources and exceptional skills within the Department. However, there are scenarios that could, in fact, push FDNY to its breaking point—a point beyond the Department's ability to maintain its response standards. To be fully prepared, FDNY must acknowledge and prepare for those circumstances.

The Department must examine breaking points in terms of **capability** (an incident may require tasks FDNY is in the best position to execute, but does not yet have the full ability to perform); **capacity** (an incident may require more resources than available); **proficiency** (an incident may require skills greater than the level possessed); and **deployment** (an incident may require resources more rapidly than FDNY can position them).



Once members understand these thresholds and compare them against the likeliest incident scenarios, actions can be taken to strengthen response abilities in the areas of prioritized need.

Members also must recognize that not all response gaps can be reasonably filled by the FDNY alone. The complexity and scale of a worst-case scenario incident will require assets and abilities beyond those that could be acquired and sustained over the long-term by any single organization.

Fortunately, the FDNY is a member of a robust emergency response network that extends throughout the New York City region and across the country. This network includes local (other City agencies) and mutual-aid partners that the FDNY can provide support to and receive support from. Collectively, the network has the ability to manage many situations. The Department will continue to foster cooperative efforts with all of its partners to successfully prepare for, prevent, protect against, respond to and recover from future disasters.

The outcome of these preparedness efforts will be FDNY's ability to meet the growing and dynamic challenges that the terrorist and natural threat environments present, while reinforcing the Department's ability to carry out its daily missions.

The FDNY Terrorism and Disaster Preparedness Strategy is designed to set an ambitious tone for the Department's preparedness efforts. FDNY's overall approach to preparedness cannot be short-sighted and shaped by current abilities (what the Department can do now) or possible constraints (what could hold the Department back). Rather, it must include a long-term vision for the Department's state of preparedness and an organizational methodology that can overcome and outlive transient obstacles. It also must include a Department-wide coordinated effort toward achieving and maintaining that vision.







## II. MISSION AND FOCUS

For the FDNY, attaining the optimal state of terrorism and disaster preparedness to achieve the Department's homeland security mission within a complex threat environment demands an organization that is:

- strong and swift in the initial response
- clear about the operational mission
- confident in the leadership and command
- trained and equipped to execute the mission
- dedicated to protecting responders and civilians against danger
- informed and able to maintain a sharp sense of situational awareness
- adaptive to changes in the operational environment and
- resilient enough to sustain operations until the job is completed.

These qualities are imperative for an immediate and effective response, especially when the organization's operational mission is saving lives.

The core mission of the FDNY is *life safety*. Life safety operations include tactical initiatives taken to preserve and protect the public.

These actions are the highest priority incident objectives

and supersede other objectives during an incident. Life safety operations also refer to the phase of incident operations where these tactical measures are implemented in response to imminent hazards or threats to life.<sup>12</sup>

The Department's life safety mission applies to operations at all types of incidents and extends through all phases of hazard mitigation. Fire and emergency medical service agencies long have been recognized as the lead agencies for mitigation activities, which the National Response Plan (NRP) describes as those "designed to reduce or eliminate risks to persons or property or to lessen the actual or potential effects or consequences of an incident."<sup>13</sup> The NRP further states that "mitigation measures may be implemented prior to, during, or after an incident."<sup>14</sup>

Within New York City, the FDNY has an important role to play in all stages of incident mitigation or, stated another way, within each of the nationally delineated mission areas: Prevent, Protect, Respond and Recover. Given the new reality of homeland security and the expansive nature of the threats the Department faces, it is imperative that responders--within the FDNY and across the country--recognize the full spectrum of ways in which they can contribute to terrorism and disaster mitigation.

Achieving a high level of preparedness for mitigating

### **FDNY All-Hazards Life Safety**

Actions taken to save lives, reduce risks and mitigate hazards resulting from fires, public safety and medical emergencies, accidents, terrorist incidents and natural disasters.

major incidents requires the FDNY to maintain a strong focus on four main points:

1. organizational adaptability
2. response capability
3. prevention and protection and
4. coordination and collaboration.

## **Organizational Adaptability**

After 9/11, the FDNY leadership recognized that broad organizational change was needed in order for the Department to be able to adapt its response operations to the large and complex incidents the new threat environment presented. This re-organization has embraced three main concepts: network-centric command, tiered response and decentralization.

### ***Network-Centric Command***

Effective strategic and tactical decision-making for homeland security requires that Commanders receive timely and complete information, as well as an ability to communicate that information to other security partners. To facilitate the management and exchange of information, the Department has developed and is continuing to enhance a network-centric command system.

## **Focus Points**

### **1. Organizational adaptability**

Create an organizational structure that enables the FDNY to rapidly and effectively adapt to complex incident planning and operations

### **2. Response capability**

Strengthen and enhance the Department's core competencies that form the foundation of the FDNY's response operations

### **3. Prevention and protection**

Maximize the FDNY's contribution to preventing terrorist incidents and reducing the City's vulnerability to future attacks

### **4. Coordination and collaboration**

Enhance the FDNY's ability to coordinate and collaborate on homeland security efforts with other public and private entities

Network-centric command is an information-sharing framework that integrates voice, video and data information from multiple internal and external sources. This system provides a comprehensive, real-time picture of credible threats for strategic planning and situational assessments for enhanced tactical command.

Information that can be accessed by the network-centric command system includes real-time threat intelligence, situational images from multiple vantage points and pertinent subject matter data. This information comes from FDNY databases, imaging libraries and field units, as well as from other City, State and Federal agencies, the private sector and the media.

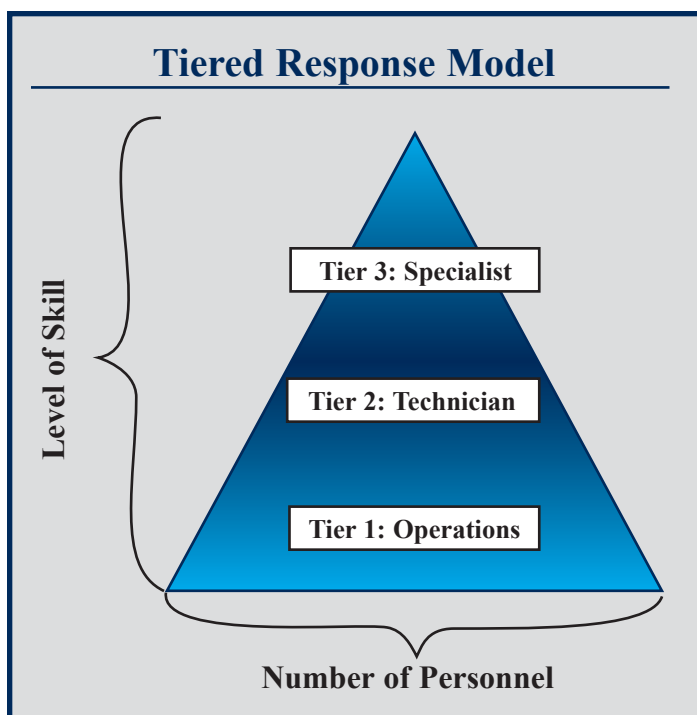
During an incident, network-centric command supports information-sharing among all homeland security partners to improve situational awareness (a constantly evolving picture of the environment) and provide a common operating picture for FDNY Commanders and all response agencies. A real-time view of the total operational picture results in a greatly enhanced collaboration of operations.

The FDNY's newly designed and substantially upgraded Fire Department Operations Center (FDOC) serves as the hub for the Department's network-centric command system and interoperable communications capabilities. Additional components of the network-centric command system include a Borough Communications Center, Field Communications System, Mobile Command Centers, Geographic Information Systems, Automatic Vehicle Locator System, live video feeds from the public and private sectors and network connections to the Department of Homeland Security (DHS), Federal Bureau of Investigations (FBI), New York City Police Department (NYPD), New York City Office of Emergency Management (OEM) and other City, State and Federal agencies.

### ***Tiered Response***

To ensure the optimal availability and distribution of response resources, the FDNY established a tiered response system. Tiered response is a system of layered resource grades, with each layer containing a defined number of units with incrementally higher levels of special response capabilities. This system enables Incident Commanders to rapidly deploy the appropriately scaled mix of specialty units in a manner that is responsive to an incident's escalation or recession, while maintaining adequate capabilities to manage additional incidents and coverage throughout the Department's entire response area.

While having every member of the Department trained and equipped to the highest level for every special task—including hazardous materials, search and rescue and medical treatment—may be ideal, reaching and maintaining that state for a department as large as the FDNY would be highly time-consuming and cost-prohibitive. By training FDNY units with a variety of response capabilities at incremental proficiency levels and strategically locating those units across the City's five boroughs, the tiered response system maximizes the FDNY's capabilities for incident response in a manner that is highly effective, economically efficient and sustainable over the long term.



The FDNY's system of tiered response follows the two main principles of the National Incident Management System (NIMS): flexibility and standardization.<sup>15</sup> Just like the Incident Command System (ICS), which is a component of NIMS, tiered response "has considerable flexibility. It can grow or shrink to meet different needs. This flexibility makes it a very cost-effective and efficient management approach for both small and large situations."<sup>16</sup>

The FDNY's tiered response system also adheres to stringent standardization that exceeds the national level of qualifications for personnel, training and equipment within each tier of its response model. Uniform and stringent standards for units and individuals that fall within nationally recognized capability levels (e.g., Hazardous Materials Technician) give FDNY Commanders a clear understanding of the scope of capabilities for each unit they assign within the response matrix. As mandated by NIMS, standardization also improves the interoperability of FDNY units with other agencies (City, State or Federal) during major incident operations.

### **Decentralization**

New York City covers 321 square miles and is composed of five boroughs on four separate land masses (including three islands), all of which are connected by a series of bridges and tunnels. Given the City's size and geography, simultaneous terrorist incidents or natural disasters occurring within multiple boroughs could make it difficult to get the right resources to the right location in a timely fashion. Additionally, damage to the City's connecting physical and technological corridors could completely disable the movement of resources and disrupt normal communications among the boroughs.

Recognizing this possibility, FDNY response resources have been decentralized and strategically located throughout the City, essentially creating a separate tiered response scheme within each of the City's five boroughs. This configuration ensures an appropriate mix of response resources (including those for fire suppression, search and rescue operations, hazardous materials mitigation and emergency medical services) are immediately available to handle any incident scenario within any borough. Resource logistics are managed by the FDNY dispatch system, which also has been designed to operate independently within each of the City's boroughs.

To further enhance borough autonomy, the Department established a Borough Command System. In addition to providing the day-to-day management and leadership for his respective borough, each of the FDNY's five Borough Commanders has the ability to manage borough operations independently. This decentralization of command enables each borough to essentially function as a separate entity, managing incidents that fall within that borough.

The Borough Command System enables the FDNY to adhere to the Incident Command System (ICS) principle of appropriate span of control, ensuring no single individual is tasked with managing too many organizational elements. For example, if there are simultaneous incidents within multiple boroughs, the City-wide command structure functions much like the ICS Area Command model, with the Area Command Chiefs operating out of the FDOC and Borough Commanders serving as the Incident Commander for the incident within his borough. This ensures each incident has the full attention of one Commander, while City-wide strategy and resource allocation are properly managed according to overarching priorities. As incidents are mitigated, the command structure collapses back to a single City-wide Commander.

Collectively, the organizational principles of network-centric command, tiered response and decentralization ensure the FDNY can adapt to changes in the threat and operational environments and continue to provide an effective response regardless of incident conditions.

## **Response Capability**

The core competencies identified as FDNY mandates include:<sup>17</sup>

- fire suppression
- pre-hospital emergency medical care
- structural evacuation
- search and rescue
- CBRN/haz-mat life safety and decontamination and
- arson investigation.

### **Fire Suppression**

The FDNY's cadre of personnel available to handle fire events includes more than 11,000 Firefighters and Fire Officers,



trained and equipped to handle large and small incidents across the City.

As was the case on 9/11, it will be the FDNY's primary responsibility to mitigate the effects of all fires, regardless of their cause, and rescue victims trapped within the fire scene. Doing so will require Firefighters to have a keen sense of situational awareness for potential additional dangers, including hazardous materials that may be intentionally planted to feed the fire or create a poisonous plume. Dangers also include the possibility of secondary attacks directly targeting first responders. With the appropriate counterterrorism and hazardous materials training, Firefighters are becoming better able to identify the signs of danger and take appropriate actions to protect themselves and their fellow responders.

To address threats that occur within the many waterways surrounding the City, the FDNY has both marine- and land-based resources with specialized marine response training. FDNY Marine Operations includes more than 100 dedicated members, three operational and two reserve fireboats, four operational and four reserve small patrol firefighting rescue craft and two 13-foot boats, plus three rigid-bottom inflatable vessels for hurricane response.

The Marine companies provide safety and surveillance patrols for 560 miles of shoreline and a reliable source of water and/or foam solution for fire suppression and haz-mat mitigation throughout the harbor and to any land point along the waterways. In addition to the Marine companies, 3000+ land-based Firefighters have received special training in marine firefighting.

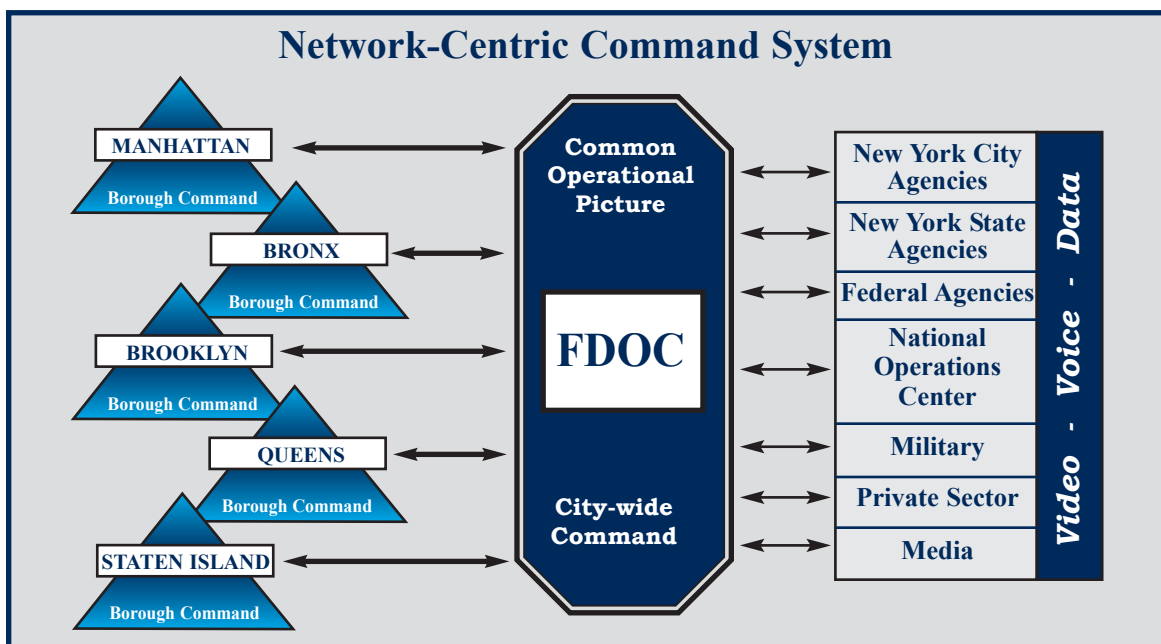
On land or at sea and whether originating from a terrorist attack or natural calamity, most disaster scenarios have the potential to produce a single or multiple fires. If these fires are not rapidly extinguished, they can grow and spread, posing an immediate life safety risk. If large fires erupt in a densely populated

urban setting--such as New York City--they could further result in widespread panic, civil unrest and breaches in security.

In addition to fire being a component of other incidents, the potential use of fire as a terrorist weapon is a recognized threat and one for which FDNY is preparing. Terrorists continue to utilize conventional weapons (explosive and incendiary devices) as their weapons of choice because they are inexpensive, readily available and tactically simple to use. While improvised explosive devices (IEDs) have received much attention, the use of improvised incendiary devices (IIDs) actually may pose a greater threat to life safety.

IIDs (or "fire bombs") range from the crudely constructed Molotov cocktail, made with alcohol or gasoline, to more sophisticated devices composed of materials such as napalm, thermite, chlorine trifluoride or white phosphorus, which create fires that cannot be extinguished by conventional means. Unlike IEDs, IIDs do not produce shattering shock or massive pressure waves. Instead, they are designed to ignite intense fires that can burn both combustible and non-combustible materials. When these fires are ignited within a building, they can burn at temperatures extreme enough to weaken structural members remote from the site of ignition and potentially cause a progressive collapse of the structure.

The September 11, 2001, attacks on the World Trade Center proved that terrorists can create fires larger than New York City buildings are designed to contain. The tremendous fire generated from the jet fuel of the airliners crashing into the World Trade Center towers ignited the combustible materials on a number of floors of the towers and the resulting fire weakened the structural members, causing the total pancake collapse of both 110-story structures. Devices strategically placed in other structures--including buildings, bridges, tunnels, ships, trains or aircraft--could have similarly devastating effects.





### *Pre-Hospital Emergency Medical Care*

Any terrorist attack or natural disaster likely could result in a mass casualty incident (MCI), which is generally defined as an incident involving five or more patients and potentially requiring extraordinary resources. These incidents also could produce MCI situations with exacerbating circumstances, such as the presence of a hazardous material. To save the greatest possible number of patients from death or serious injury requires mass decontamination (five or more patients), prompt triage, appropriate treatment and prioritized patient transport to designated medical facilities.

To address an MCI, the FDNY has 3000 Emergency Medical Technicians (EMTs) and Paramedics, who are supplemented by an additional 2000 contracted emergency medical personnel. All FDNY emergency medical service personnel have New York State emergency medical certification and currently are being trained to the HazMat Operations level.

To further supplement the Department's emergency medical response capabilities, most Firefighters have received Certified First Responder/Defibrillator (CFR-D) training. The



Department will seek to expand the medical capabilities of its Firefighters to include certified EMTs and Paramedics. This will increase the FDNY's capacity to manage incidents involving large numbers of victims who require immediate medical care.

FDNY pre-hospital care operations are supported by the FDNY's Office of Medical Affairs (OMA), which actively participates in the development of protocols and exercises to enhance the Department's capabilities for responding to a mass-casualty incident. OMA is responsible for medical direction, control and oversight of the practice of medicine in the pre-hospital setting; physician field responses to MCIs; the issuance of field orders to initiate public/victim antidote administration; and interface with regional providers of pre-hospital care via the Regional Emergency Medical Advisory Committee, Regional Emergency Medical Services Council and Greater New York Hospital Association. OMA also participates in the FEMA-sponsored Urban Search and Rescue New York Task Force 1 (NYTF-1) and continually works to develop ways to streamline and improve all pre-hospital care for disaster response.

Recognizing the important interface with area hospitals during an MCI, the FDNY will continue to foster relationships and strengthen communications with hospitals on a variety of MCI-related issues, including protocols for accepting "decontaminated" patients involved in haz-mat incidents.

### *Structural Evacuation*

The FDNY is responsible for making all tactical and strategic decisions regarding structural evacuation, including the decision to shelter in place. The events of 9/11 demonstrated the FDNY's ability to quickly mobilize its resources and effectively save lives. In fact, the New York City Urban Area Homeland Security Initial Assessment and Strategy acknowledged that the actions taken by the FDNY "as the lead response agency on September 11th saved more than 25,000 lives, and displayed the Department's extensive homeland security responsibilities in the aftermath of a terrorist strike."<sup>18</sup>

Effective evacuation requires that responders are familiar with a building's composition and contents. During routine building inspections and responses, FDNY Firefighters and Fire



Officers become familiar with the building layouts, means of egress, HVAC systems (systems that provide heating, ventilating and/or cooling for a building) and the potential presence of hazardous materials within the buildings in their normal response area.

Additional information about a building and its condition (e.g., construction in a section of the building or an elevator bank that is inoperable) is provided to the responding units by the building's fire safety director and/or security personnel. The FDNY is responsible for developing laws that require evacuation plans for buildings within the City and working with building personnel to provide guidance regarding how to exercise their evacuation plans.

The prior knowledge of buildings, existence of exercised evacuation plans and pre-incident relationships with fire safety and security personnel facilitates the rapid movement of people out of a building or the orderly sheltering of people within the structure.

Safe evacuation and sheltering also require a high degree of situational awareness for secondary dangers, including potential explosions, noxious releases, partial collapses or falling objects. The training Firefighters receive in normal fire operations, haz-mat operations and counterterrorism, combined with their vast experiential knowledge, provide them with sophisticated situational awareness and the ability to steer evacuees away from secondary dangers and on to safety.

### ***Search and Rescue***

Search and rescue involves the location, rescue (disentanglement and extrication) and initial medical stabilization of victims trapped in confined spaces. Victims may become trapped as a result of structural collapse, transportation accidents, falls or caved-in trenches, due to a variety of emergencies or disasters, including earthquakes, hurricanes, tornadoes, floods, technological accidents, terrorist activities and hazardous materials releases.

The FDNY directs all search and rescue efforts within New York City. Disciplines of search and rescue that FDNY personnel perform include high-angle urban/structural rope rescue, dive rescue, confined space rescue, trench/excavation rescue and building collapse rescue, among others.

Inherent dangers present in search and rescue operations include the potential for rescuers to become injured (e.g., asphyxiated) or trapped within the usually hazardous atmosphere surrounding their operations. Therefore, the ability to successfully perform search and rescue requires a vast array of tools and capabilities, including those required to securely shore up a trench; evaluate and stabilize damaged structures; and assess and control hazardous materials.

The FDNY's search and rescue resources are organized following the tiered response model and include five Rescue Companies, with the highest level of technical extrication and victim-removal capabilities for rescuing civilians or first responders in extraordinary situations. There are seven Squad Companies, whose members receive more than 280 hours of spe-



cialized rescue training in collapse response and rescue operations. Five of these units are also SCUBA-qualified for in-water firefighting; two units are trained and equipped for specialized response to high-angle rescue incidents; and five units have advanced hydraulics and search equipment for operating at building collapses.

Additionally, 25 Special Operations Ladder Companies are available to provide personnel and equipment to support search and rescue operations. All search and rescue members receive advanced training in collapse and have equipment caches (collapse pods) stocked with shoring equipment, etc., to assist with collapse operations. Having personnel trained at different levels and strategically placed around the City allows the Department to scale its search and rescue response for a single, large incident or multiple, simultaneous incidents.

While Special Operations Firefighters are trained to provide preliminary medical care to trapped victims, at times, complex rescue situations require that victims receive immediate advanced medical care prior to being extracted from the incident site. To address this, the FDNY is cross-training 50+ members with Paramedic certification, as well as confined space operations, trench rescue and collapse rescue qualifications. These members understand the skills, techniques and use of tools that are necessary to function effectively in a structural collapse operation and are able to safely enter, rescue, package and retrieve victims from confined areas.

The advanced rescue training FDNY search and rescue Firefighters and Paramedics receive satisfies the training requirements for their participation in the New York Task Force 1, Urban Search and Rescue Team, an elite inter-agency unit that is part of a national network of search and rescue teams under the Federal Emergency Management Agency. The FDNY's own Chiefs Ray Downey and Jack Fanning, who perished on 9/11 during response operations, were the key pioneers of this national search and rescue network.



### ***CBRN/Haz-Mat Life Safety and Decontamination***

To handle incidents involving the release of hazardous materials, the FDNY has a highly specialized and dedicated Hazardous Materials (HazMat) Company 1, with members trained to the Hazardous Materials Specialist Level (more than 500 hours training each) and beyond. HazMat 1 members also have received advanced training in nuclear, biological and chemical warfare response.

Operational support for HazMat 1 is provided by 1600+ members trained to the Technician I or II level; 600+ Technical Decontamination members; and 800+ Chemical Protective Clothing (CPC) qualified members. Additionally, all 11,000+ Fire personnel members are trained at least to the HazMat Operations level.

To provide medical treatment in a haz-mat environment, the FDNY has 35 Hazardous Materials Tactical (HazTac) Ambulance Units, with more than 300 members who are trained to the HazMat Technician Level and are able to perform medical monitoring and intervention in hot and warm zones and other contaminated areas. Soon, all 3000 FDNY EMS members also will have Operations level haz-mat training.

In addition to handling land-based haz-mat incidents, the FDNY is capable of addressing the threat of attacks or major incidents within the City's waterways. Terrorists have made it clear that maritime areas are favorable targets due to their numerous vulnerabilities and the great economic consequences that would result from such an attack. The characteristics of maritime vehicles--e.g., their extremely large fuel loads, possible chemical or radiological cargo and high-voltage electrical systems--make every shipboard incident a haz-mat incident. This presents terrorists with the opportunity to cause an intense, but self-contained incident when a ship is floating in the harbor or an even higher impact land-based incident when a ship is anchored in the port.

Because every shipboard incident also has the potential for a confined space component (due to the composition and configuration of ship interiors), all Firefighters assigned to respond to incidents occurring within the City's waterways are trained to safely operate under the unique conditions they will face once shipboard.

### ***Investigation, Intelligence and Security***

The primary mission of the FDNY Bureau of Fire Investigation (BFI) is to investigate complex, fatal and suspicious fires in the City of New York and deter additional acts of arson. FDNY Fire Marshals are experts in the cause and origin of fires and the investigative efforts and data they compile can be critical in reducing the incidence of trends involving both incendiary and accidental causes. This information has been used to enhance both fire and arson awareness initiatives which, in turn, saves lives and reduces property damage.

The BFI works closely with other law enforcement agencies and the intelligence community on threat analysis and complex incident investigations. Fire Marshals are members of numerous collaboration and intelligence networks, including the



Joint Terrorist Task Force (JTTF) with the Federal Bureau of Investigations. The information FDNY Fire Marshals exchange through the JTTF not only aids in incident investigations, but also helps FDNY and all New York City security and response agencies prepare for and prevent future incidents.

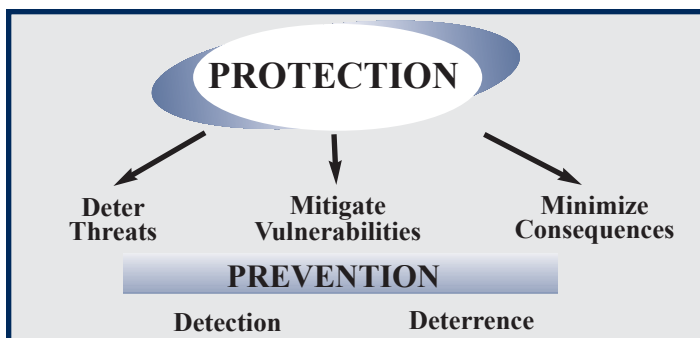
The BFI consists of approximately 100 Fire Marshals who, in addition to firefighting experience, have full police powers (CPL, section 1.20/34 (I)) and are recognized as expert witnesses regarding fire cause and origin in New York State court of law. The FDNY Fire Marshals also are recognized nationwide for their unique expertise and case load in the arena of fire and arson investigation. They played an important role in the responses and investigations of the World Trade Center attacks in both 1993 and 2001 and they will continue to be vital components protecting first responders and the public during future incidents.

After 9/11, the BFI took on the mission of augmenting and enhancing the safety and security of all FDNY personnel. During incident responses, BFI Fire Marshals assist local law enforcement in protecting emergency responders from secondary attacks. The BFI also has specially trained members to provide for and augment security at various Department functions and ceremonies.

BFI Fire Marshals have become an increasingly important sector of FDNY operations during the past five years, but during that same time, the size of BFI actually has been reduced. The FDNY will work to increase the number of Fire Marshals within the Department so they can continue to effectively execute their role in member safety and homeland security, as well as the many other critical functions they perform.

### ***Prevention and Protection***

As the agency tasked with championing life safety within New York City, the FDNY is responsible for ensuring that mandates are effectively fulfilled. Additionally, the Department also must continue to work with other City, State and Federal agencies, as well as the private sector, to enhance the quality, capability and cohesiveness of the City's and nation's overall ability to provide homeland security.



### *Information-Sharing*

One of the most effective ways to enhance homeland security efforts is by sharing information with security partners. The FDNY has worked steadily toward increasing the ability to interface with other local, State and Federal emergency management, intelligence and law enforcement agencies to collectively enhance prevention and preparedness through the rapid and comprehensive exchange of information.

Real-time intelligence and information lead to a heightened state of situational awareness, which is imperative in both the planning and responding stages of operations. In reaction to information gathered and based on the type of intelligence received, the FDNY can increase inspection activity to assist in detection or strategically locate additional resources to act as a terrorism deterrent. The Department also can bolster the presence of Fire Marshals at high-risk incidents to ensure the lives of first responders are protected against secondary threats.

The FDNY will continue to work with security partners to fill the significant information-sharing gaps that exist. The FDNY currently has numerous members with "Top Secret" and "Secret" level clearances and has connections to the intelligence community, including direct communications with the Department of Homeland Security. Additionally, the Department has liaisons with the NYPD and the FBI. Several members of the BFI also serve on the JTTF. These important connections help inform the Department's leaders of current threats the FDNY must prepare for, as well as how the Department can better contribute to the City's preparedness efforts.

The FDNY also is working with the DHS Office of Intelligence and Analysis to establish a direct information conduit between the FDNY and DHS. By sharing pre-incident intelligence, field observation reports and real-time incident updates, this two-way exchange of information will enhance both the FDNY's and the nation's preparedness efforts. It also will be imperative to establishing a common operational picture on the local and national levels during a major incident.

Information-sharing among all City, State and Federal agencies would be greatly enhanced through the creation of a City-wide fusion center within New York City. The Department is attempting to forge the necessary relationships to form such an establishment and will continue to advocate for its creation.

### *Terrorism Prevention*

The history of fire prevention in the FDNY dates back to 1865, when the Department officially was formed. Prevention, however, did not receive a high level of public support until March 25, 1911, when a fire broke out in the Triangle Shirtwaist factory in the Greenwich Village neighborhood of Manhattan. When Firefighters arrived, fire was consuming the upper floors of the building, trapping victims beyond the reach of Fire Department ladders. Bystanders watched in horror as desperate workers jumped to their death. In total, 146 people died.

On May 1, 1913, the Bureau of Fire Prevention was formed as a direct result of the Factory Investigation Commission. For the Fire Department, this marked the first time that prevention was recognized as having equal importance with fire suppression in the protection of life and property.

The similarities between the Triangle Shirtwaist fire and the World Trade Center attack are striking. Both incidents involved minimal levels of concern given to prevention before the tragedy, a fast-moving fire that prohibited Firefighters from getting to people before they jumped and a large death toll. These events also resulted in post-incident Commission Reports that impelled significant changes within the Department.

The events of 9/11, like 1911, again prompted the Fire Department to see prevention on the same level as consequence management. And, like fire prevention, terrorism prevention is a role of the FDNY that needs to develop and grow.

An examination of the events leading to 9/11 highlighted many gaps in information-gathering capabilities and information-sharing protocols within the homeland security community. The FDNY recognized that the Department could help to fill some of these gaps by contributing to local intelligence-gathering efforts. When routinely shared with intelligence and law enforcement agencies, the information gathered by FDNY personnel could make a significant contribution to existing intelligence and lead to the identification and disruption of terrorist activities.

Terrorism-related information can be gathered by the FDNY in many ways. During the course of routine building inspections, arson investigations and the response to fires and medical emergencies, FDNY personnel have unique access to homes and buildings that generally are concealed from outsiders. For example, the FDNY conducts frequent building inspections, system testing and safety and evacuation plan reviews throughout the City.

Department personnel visit all premises storing or operating hazardous materials or equipment, communicate inter-agency referrals for high-hazard conditions, help coordinate the sealing and demolition of vacant buildings and process general complaints from the public. FDNY Firefighters and inspectors also have a presence at many high-profile (and, therefore, target-rich) events, where they work to ensure public safety. The scope of access for FDNY personnel enables them to spot suspicious materials and activities that otherwise may go unseen.

FDNY personnel also may observe characteristics--materials, equipment, literature, etc.--during their normal response



operations that would indicate a threat of terrorist activity. The hazardous materials monitoring equipment carried by every Fire Department unit can detect radiation and potentially lead to the discovery of materials intended for use in a dirty bomb attack. Identification of unusual patterns of symptoms in medical patients (through the EMS syndromic surveillance system) also could alert personnel to the presence of a bioterrorist or pandemic event. Such early warning is vital in preventing a widespread event.

The FDNY's information-gathering potential is substantial. Each year, FDNY units make approximately two million fire, medical and other emergency responses and 300,000 building inspections.<sup>19</sup> That means in just one year during the course of normal operations, personnel set foot in commercial buildings, enter residential dwellings and walk through public system facilities millions of times, representing an equal number of chances for terrorism-related activities or materials to be spotted and reported to law enforcement officials.

Collectively, this represents an incredible opportunity for FDNY personnel to be what the President has labeled the nation's **"First Preventers"**--first responders who are able to recognize tell-tale signs of danger to homeland security, report the suspicious activity and preserve the scene until the proper authorities arrive. The FDNY currently is developing a training program to provide personnel with the skills they need to be optimally effective in identifying and reporting suspicious materials, activities or symptoms.

### *Infrastructure Protection*

The National Infrastructure Protection Plan defines risk as a product of threat, vulnerability and consequence ( $Risk = Threat \times Vulnerability \times Consequence$ ).<sup>20</sup> Calculating the threat of a terrorist attack on critical infrastructure and key resources (those assets, systems, networks and functions that provide vital services to the nation) begins with a realistic assessment of likely terrorist targets, coupled with timely information from law enforcement and intelligence agencies on credible threats to specific structures. However, terrorists are not the only threat with which FDNY must be concerned. The damage to the critical infrastructure within and surrounding the city of New Orleans that resulted from Hurricane Katrina in 2005 illustrated the widespread damage that natural disasters can cause.

Given the relative uncertainty of the threat element of risk, effective risk assessment and reduction for New York City's and the nation's critical infrastructure requires integrating threat intelligence with advanced knowledge of structural vulnerability and consequence management. Collectively, this information can be used both to enhance structural protection measures (target hardening) for critical infrastructure, as well as bolster emergency responder preparedness and safety for response operations at specific structures.

While law enforcement generally examines structures from a security perspective, the Fire Department provides another dimension of knowledge by looking at the same structure from a vulnerability and consequence management point of view.



When fire personnel conduct building inspections or perform a size-up of an incident, they observe those characteristics that would profoundly affect a building's vulnerability to attack and the likely associated consequences of an attack (e.g., building construction, normal occupancy, water supply, auxiliary appliances, exposures, street conditions and presence of hazardous materials).

The Department is greatly enhancing the ability to reduce the vulnerability of critical infrastructure across the City through the *Risk Assessment and Target Hazard (RATH)* program. The RATH unit coordinates the evaluation of sites that are part of New York City's Threat Matrix, including special inspection of critical infrastructure throughout the City and the development of tactical response plans for specific structures (e.g., bridges, tunnels, stadiums, government buildings, transportation systems, etc.).

The RATH Unit also is collaborating with the FDNY Bureau of Fire Prevention to expand the Department's system for collecting and disseminating data on structures throughout the City. This information will be entered into a database that will be accessed by the Fire Department Operations Center, Mobile Command Centers and Electronic Command Boards. Initial sources of data will be internal, including FDNY field unit observations, the Fire Prevention Bureau database and the Phoenix Unit mapping data. Eventually, buildings, planning and intelligence data from other City, State and Federal databases will be tied into this system to provide more comprehensive site information for incident planning and management for all relevant agencies.



The RATH Unit is working closely with the Department of Homeland Security Office of Infrastructure Protection to ensure the risk assessment models and databases FDNY produces follow national guidelines and can be integrated with national systems.

## Coordination and Collaboration

To manage the Department's core competencies, the Department must be able to rapidly scale resources to respond to a large spectrum of conventional and unconventional terrorist attacks and natural disasters. This requires the ability to manage communications, command, control and information during exacerbating circumstances and throughout lengthy operations.

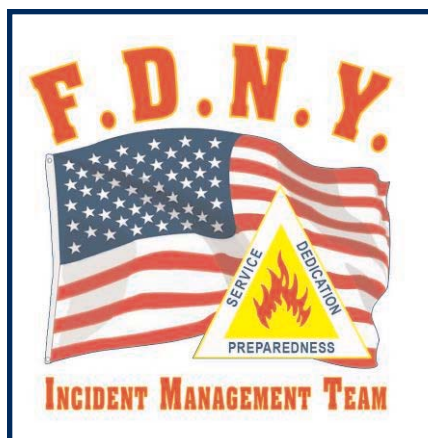
### *Incident Management*

In compliance with NIMS and because of its value and effectiveness for incident management, the FDNY has adopted the Incident Command System and integrated ICS into everyday planning, organization and incident operations. All FDNY Fire and EMS personnel have received ICS 100, 200 and 700 training; Fire Lieutenants and Captains have been through ICS 300 training and all Fire and EMS Chiefs have been through ICS 800. Additionally, 35 FDNY members also have successfully completed ICS 400 training.

The employment of ICS and a unified command structure greatly reduces information gaps among responding agencies at an incident scene. The close, collaborative efforts achieved through unified command ensure that all responding parties receive a comprehensive picture of the response environment, enabling them to maximize their contribution to the effort, while protecting all responders from undue dangers.

Safe and effective operations also require that information streaming into and out of the Department comes from multiple perspectives and reaches multiple agencies. For example, on 9/11, the FDNY's response operations would have been enhanced by information coming from an aerial view. This information gap now is being addressed by placing FDNY Chiefs in helicopters above major incidents so they can provide direct accounts of scene conditions. Further information will be received via a live feed from

local news helicopters directly to the FDOC. The Department will continue to train Commanders on the principles and benefits of unified command and educate all members on the importance of sharing vital information with other agencies operating at the scene.



To provide for the most effective operational management and leadership at long-term incidents, the FDNY has established its own Incident Management Team (IMT). This 52-member team (with more than 85 additional members in training) ensures appropriate resource needs for large-scale, long-term response and recovery operations are procured, deployed and coordinated with other government agencies, the private sector and non-governmental organizations.

The FDNY will continue to expand incident management capacity and proficiency through enhanced information-sharing protocols, additional IMT member recruitment and training and exercising for a multitude of response scenarios.

### *Mutual Aid*

The ability of the IMT to establish command and control for handling major incidents under the guiding principles of ICS demonstrates their value and importance in New York City. These skills also make IMT members--as a collective team or as individuals assisting other IMTs--valuable mutual-aid resources for the entire nation.

While the FDNY's operational authority exists within the physical area of New York City, the Department's duty goes beyond the City limits. The FDNY has an obligation to provide response and management resources to support other jurisdictions that face



The FDNY's Incident Management Team can provide service anywhere in the country when requested by Federal officials. The IMT originally was created in 2003 under a joint agreement between the FDNY and the U.S. Department of Agriculture Forest Service to provide additional resources for homeland security within New York City. However, since completing their training, the FDNY's IMT members have been deployed as individuals assisting other IMT groups at more than 100 incidents across the country. In some cases, these deployments have paired FDNY members with Forest Service officials and, in other cases, the FDNY has worked in direct collaboration with local fire and emergency response agencies. Incidents responded to by members of the FDNY IMT include forest fires in Arizona, Utah, New Mexico, Montana and Alaska, as well as the storm-ravaged areas of Texas, Louisiana and Mississippi.

Within the New York City region, the Department coordinates its mutual-aid activities through the New York City Office of Emergency Management. The FDNY currently has regional mutual-aid agreements in place or pending with the State of New Jersey and Westchester, Suffolk and Nassau Counties for both fire and EMS resources. The Department will continue to develop these formal agreements, draft mutual-aid emergency response plans and exercise mutual-aid capabilities.

Protecting the lives of New York City residents and visitors means not only working with public sector partners to provide a robust response, it also means empowering the private sector with the knowledge and training they need to protect themselves. The FDNY has launched a campaign to increase the number of local residents with the skills to perform cardiopulmonary resuscitation (CPR) and has worked closely with the New York City Office of Emergency Management to train hundreds of local residents regarding how to prepare themselves and their communities through the Community Emergency Response Team (CERT) program.

The map illustrates the five Regional Mutual Aid areas centered on New York City. The areas are defined by concentric red circles. The innermost circle covers the New York City Metro Area. The second circle covers the Philadelphia Metro Area. The third circle covers the Baltimore Metro Area. The fourth circle covers the Washington Metro Area. The outermost circle covers the Boston Metro Area. The map shows the geographical distribution of these areas across the Northeast United States, with major cities and states labeled.

Structural evacuation, especially when it is the evacuation of one of the City's 5982 high-rise buildings,<sup>21</sup> presents many challenges. A Centers for Disease Control and Prevention report<sup>22</sup> on the World Trade Center evacuation stressed that "improved preparedness at the individual, organizational, and building environmental levels can facilitate rapid evacuation."<sup>23</sup> As a result of New York City Local Law 26, implemented in August 2006, high-rise office buildings must submit an emergency action plan (EAP), which addresses non-fire emergencies (chemical, biological, radiological, nuclear or explosive).

The FDNY will continue to help improve citizen preparedness at the individual, business and property owner levels through continued participation in the CPR and CERT training programs. The Department also will actively further FDNY's valuable public-public and public-private partnerships through joint exercise design and execution. Additional important preparedness actions for enhancing life safety include updating protocols for building evacuation and sheltering in place.







### III. OPERATIONAL READINESS

Operational readiness is the ability of a unit or system to fully execute the missions or functions for which it is designed. In the homeland security context, this requires giving responders the tools, training and support they need to do their job. DHS' National Preparedness Goal identifies several elements that are required to fully develop capabilities and achieve a state of operational readiness: Planning; Organization and Leadership; Equipment and Systems; Training; Exercises, Evaluations and Corrective Actions; and Personnel (POETEP).

#### Planning

The FDNY develops written intra-departmental procedures and plans at various levels of detail, including standard operating procedures (SOPs) for specific tactics, incident action plans for special events (e.g., parades, concerts, etc.) and emergency response plans (ERPs) for all-hazard and complex incident scenarios. The Department also contributes to the development of City-wide response plans for special events and incident scenarios. Through collaboration in the City-wide planning process, the FDNY provides expertise to the response plan design and gains a

better understanding of the Department's role in the response matrix. The Department will continue to rely on both internal and external subject matter experts to participate in drafting and updating emergency response plans and standard operating procedures for all likely response scenarios.

In addition to incident response plans, the Department currently is creating a Continuity of Operations Plan (COOP). The COOP will provide Department administrators with a menu of options regarding how to proceed should any section(s) of the Department's support functions be crippled or disabled. The COOP will be critical in maintaining effective and efficient support services for Department operations, especially if the administrative disruption is a product of a physical incident that requires a sustained operational response. The COOP will outline the protocols and functions of the Crisis Task Force, a group composed of high-level FDNY personnel who will coordinate initial FDNY actions during any type of incident or other high-profile emergency. The COOP also will provide a "succession plan" for determining successors in the chain of command in the event that primary personnel are unavailable or become casualties of the disaster incident.

---

## Organization and Leadership

The overall organization of preparedness efforts—including writing response plans, conducting risk assessments and developing exercises—is organized and managed by the FDNY Center for Terrorism and Disaster Preparedness (CTDP). The CTDP staff members work closely with other Department operational and administrative units to ensure their efforts are coordinated, comprehensive and consistent. Staff members regularly report progress to the FDNY Commissioner.

Organizational leadership is also an important focus of the FDNY. The Department has developed several advanced management and leadership education programs for FDNY Officers, including the Fire Department Officers Management Institute or FOMI (conducted by Columbia University) and the FDNY/United States Military Academy (USMA) Combating Terrorism Leadership Course (developed and conducted in collaboration with the USMA at West Point). Additionally, several FDNY Officers have attended the Naval Postgraduate School (NPS) Masters program in Security Studies. These programs provide Department leaders with the skills they need to effectively manage the FDNY's complex terrorism and disaster preparedness initiatives.

The Strategy and its prescribed overall terrorism and disaster preparedness system will serve as a useful tool for Department leaders to identify and prioritize capability goals and ensure corresponding needs are being met through future initiatives. The ability to identify and prioritize goals will be fostered through the continuing management and leadership education provided by the Columbia University, USMA and NPS educational programs.

## Equipment and Systems

Sound logistics management is needed to ensure members have the requisite equipment and supplies to execute operations. FDNY equipment and systems will continue to be developed to support operational enhancements. The Department is working to build a stronger Marine firefighting and response fleet, procure the needed cache of search and rescue apparatus and equipment within each of the City's five boroughs and acquire specialized rail tunnel firefighting and response vehicles. The Department also is working on the development of new chemical, biological, radiological and nuclear (CBRN) bunker gear that will allow Firefighters to immediately enter a hazardous material environment to rescue victims—without the necessity of putting on additional chemical protective clothing—and a portable water supply system.

The FDNY will continue to explore and test new pieces of equipment and apparatus that could assist responders in their operations and enhance their safety. The development and implementation of a new Personal Safety System for all Firefighters is a recent example of an important safety achievement.

The Department also will continue to leverage technological opportunities to improve operations and safety. Under devel-

opment are enhancements for the FDNY's wireless Electronic Command Boards, as well as a Personnel Radio Frequency ID System, 3-D in-building tracking system, Personal Data Assistant-based data collection system for weapons of mass destruction (WMD) monitoring and a patient-tracking system.

An important system enhancement in the past five years—thanks in part to improved technology—involves the FDNY's communications capabilities. Central among interoperable communications equipment enhancements is the deployment of improved radios as part of an effective, three-component fire-ground communications system. Deploying a portable radio system to work within New York City's complex urban environment has been a critical challenge.

The Department will continue to work with the New York City Department of Information Technology & Telecommunications (DOITT) to develop a new radio infrastructure to allow for more powerful and reliable communications. The FDNY also will work with DOITT in the development of a new City-wide wireless system that will enable real-time sharing of voice, video, data and geospatial information across City, State and Federal agencies.

While the FDNY continues to enhance available equipment and systems, it is also necessary to protect existing physical resources. Target hardening of Department resources will include enhancing security measures at several of the Department's facilities, including training academies, administrative offices and apparatus storage sites. The infiltration of any of these sites could create serious threats to the Department's ability to function.

## Training

FDNY training initiatives focus on enhancing core capabilities and strengthening specialized skills within fire operations, haz mat, search and rescue, emergency medical services and other specialized areas. Training standards for the Department are incredibly high and, in most cases, exceed national standards of performance.





---

During the past several years, the FDNY has developed an Incident Management curriculum to fully integrate the Incident Command System and the National Incident Management System into FDNY operations. The Department also has dedicated resources toward ensuring that all FDNY personnel are able to safely operate at a haz-mat incident. All FDNY fire personnel are trained at least to the HazMat Operations level and soon all emergency medical service personnel also will have that level of training at a minimum.

The Department has institutionalized counterterrorism training into the standard emergency response curriculum for all personnel. Such training enhances members' ability to maintain a high level of situational awareness for secondary dangers during the conduct of standard operations. This training will continue with the content evolving, based on new credible threats. Refresher training and Department-wide bulletins also will conform to the changing threat environment to keep members abreast of new dangers and guard against complacency in the absence of new incidents.

Providing all members with the appropriate firefighting, medical care, search and rescue, counterterrorism, incident management and haz-mat training will continue to be a top priority. Additional training initiatives to enhance specific capabilities also will continue to be pursued, including baseline and advanced haz-mat training for Fire and EMS members; technical rescue and Paramedic training for several units; and a Captain's Command course to provide Captains with strategic management techniques for responding to terrorist incidents.

Just as important as providing members with the requisite training is ensuring they sustain and hone their knowledge and skills. This will be accomplished through continued refresher training via the deployment of Competency Units--special units tasked with testing the skills of field personnel to ensure they are able to appropriately execute the tasks they have been assigned.

## **Exercises, Evaluations and Corrective Actions**

Training efforts are reinforced and operational skills are tested in a realistic, simulated environment through frequent table-top, functional and full-scale exercises. These exercises are designed following Department of Homeland Security guidelines.

The FDNY has created an Exercise Design Team comprised of 40 members who successfully completed the Federal Emergency Management Agency's three-week Master Exercise Practitioner (MEP) course at the National Fire Academy in Emmitsburg, Maryland. Following the MEP exercise design model has led to great success in enabling FDNY leaders to rigorously test Department capabilities within complex response conditions. The in-house exercise design model also has proved highly cost-effective, enabling the Department to conduct numerous exercises at a fraction of the cost required by outside consultants.

Many of the exercises designed and conducted by the FDNY are developed in collaboration with other local agencies

and the private sector. The Department also contributes to the development of inter-departmental exercises involving multiple City, regional, State and national responder partners. Participation in exercises with other responders and property owners/operators outside the FDNY helps to build valuable relationships, provides a forum for sharing best practices and fosters coordinated efforts among different agencies and organizations.

After an exercise has been conducted or an actual major incident has occurred, the FDNY performs an after-action review to identify the lessons learned and actions that can be taken to enhance preparedness for future events. The after-action review results in the creation of a written After Action Report (AAR) to evaluate the effectiveness of and adherence to standard operating procedures.

Based on an analysis of the AAR findings, an Improvement Plan is written, which incorporates and expands upon AAR recommendations and conclusions. FDNY procedures and protocols are researched and alternative courses of action are explored as a part of the improvement plan development. The final improvement plan includes recommendations on training, equipment or procedural changes; recommendations that address what could have been done better; identification of circumstances not covered or anticipated in the Department's strategies and tactics; and finally, a detailed work plan regarding how to implement the lessons learned and ensure that these lessons are properly communicated to the field.

## **Personnel**

The DHS definition of personnel is "staff who meet relevant qualifications and standards necessary to perform assigned missions and tasks."<sup>24</sup> Personnel quality will matter as never before as emergency responders confront a variety of missions and are called to adapt to new threats. The high skill level and dedication of the Fire Department's 15,000+ member work force sets a new level of excellence in qualifications and standards.

During the past five years, FDNY members have had to recover from great losses and rebuild. Through great strength, determination and selfless dedication to protecting the safety of others, they have continued to exhibit the Department's core values of service, bravery and honor, and rebuilt a Department on which New York City can depend and exhibit pride.

Guarding the safety and health of FDNY and other emergency response personnel before, during and after major operations is imperative to enabling the FDNY to perform all of its core capabilities, fulfill its mission of life safety and contribute to the success of incident management and mitigation. At the scene of an incident or during a high-profile special event, the safety and security of FDNY and all responding personnel are enhanced by the work of the FDNY Bureau of Fire Investigation. BFI Fire Marshals assist local law enforcement in providing perimeter security and protecting emergency responders from secondary attacks, as well as enhancing situational awareness for Incident Commanders through keen observation from a security perspective.



During a major incident, a dedicated FDNY unit--Safety Battalion 1--responds to the incident scene and monitors operations for safety concerns. The FDNY Chief of Safety is responsible for supervising and coordinating all safety and health investigations required by Department regulations and/or applicable City, State or Federal law. The Chief of Safety also is charged with instituting, implementing and monitoring safety and accident prevention programs for the uniformed and civilian work force, as well as the development and implementation of a Risk Management Plan for the Department.

The FDNY Bureau of Health Services (BHS) oversees the health and wellness of the uniformed members of the Department. The BHS has played a key role in the evaluation and care of members after disasters. In the aftermath of 9/11, the BHS and the Department's Counseling Services Unit provided numerous medical evaluations and treatment programs to help maintain the health of FDNY members. In response to the FDNY's major deployment to assist with Hurricane Katrina response operations, the BHS ensured that members were prepared with required immunizations. Risk factors were reviewed and, upon their return, members were given follow-up exams.

The BHS tracks all instances of exposure and disease appearing in emergency responder personnel to ensure appropriate preventive or curative countermeasures are implemented. This enables members to continue performing their life safety duties without jeopardizing their own personal health. In the case of an incident involving a biological agent, FDNY members will require a rapid receipt of countermeasures to protect their health and safety.

To address this need, the Department has developed a BioPod (biological points of distribution) program to ensure the necessary protocols are in place and the equipment and supplies are available for an FDNY-wide distribution of prophylactic medications/vaccines after a biological exposure. A similar smallpox program also has been developed in conjunction with the Centers for Disease Control, New York City Department of Health and Mental Hygiene and other local agencies. With the threat of a pandemic, such as the avian flu, the initiative will be expanded to include the ability to mass-inoculate responders for any type of exposure or outbreak that may jeopardize their personal health and ability to perform their operations.





## IV. COORDINATION AND EVALUATION

To ensure FDNY terrorism and disaster preparedness efforts meet the Department's needs and that preparedness initiatives produce desired outcomes, the Department has created a system of analysis, planning and evaluation for terrorism and disaster preparedness activities.

### Coordination

This system--referred to as the Strategy Cycle--began with the creation of this Terrorism & Disaster Preparedness Strategy and will continue with a regular iteration of each remaining step in the Strategy Cycle, including Risk Assessment; Response Assessment; Resource Inventory; Needs Analysis; Goal Prioritization; Objective Development; Implementation; and Evaluation. The Strategy Cycle process will be managed by the FDNY's Center for Terrorism & Disaster Preparedness.

The first regular activity in the Cycle is an ongoing *Risk Assessment* to collect and categorize information on possible incident scenarios and the threat level, or likelihood, of those scenarios occurring. The Risk Assessment also includes the identification of actions that could be taken to reduce the consequences of an incident and the detection of hazards that could exacerbate

incident consequences, hinder Department operations and/or create unusual responder safety concerns.

Following the Risk Assessment is a *Response Assessment*--an identification of the resources required to achieve operational readiness for responding to general and site-specific incident scenarios (resource typing). Resource requirements for the performance of each capability are stated in terms of capacity level (quantified), proficiency level (qualified) and deployment time for each capability.

Next, the resources the Department currently has are measured, again in terms of capacity level, proficiency level and deployment time, to produce a written *Resource Inventory* for the Department. The Resource Inventory is organized in two ways. First, a general inventory is conducted to create a catalog of the collective resources of the Department, delineated by capability. Then, resources from the general catalog are aligned to correspond with the scenarios identified in the Risk Assessment and Response Assessment. The Resource Inventory accounts for all of the elements needed to comprise each capability<sup>25</sup>: Planning; Organization and Leadership; Equipment and Systems; Training; Exercises, Evaluations and Corrective Actions; and Personnel.



The results of the Response Assessment then are compared against the Asset Inventory to produce a *Gap Analysis*--an identification of the gaps that must be filled to reach the previously determined optimal level of preparedness. This analysis also may reveal current resource redundancies that can be eliminated to create greater efficiency.

Collectively, the information generated and organized during these steps provides decision-makers with the tools to comprehensively evaluate the Department's preparedness needs. Decision-makers then can guide appropriate financial and administrative allocations by ranking Department needs according to importance through *Goal Prioritization*.

Prioritized preparedness goals then are further organized through *Objective Development* to identify strategic objectives in support of the goals and specific implementation elements required to achieve those objectives. After the objectives have been broken down into appropriate implementation elements (or

tasks), plans for the *Implementation* of these objectives are developed and resources are assigned to manage initial task completion and maintain corresponding capability enhancements.

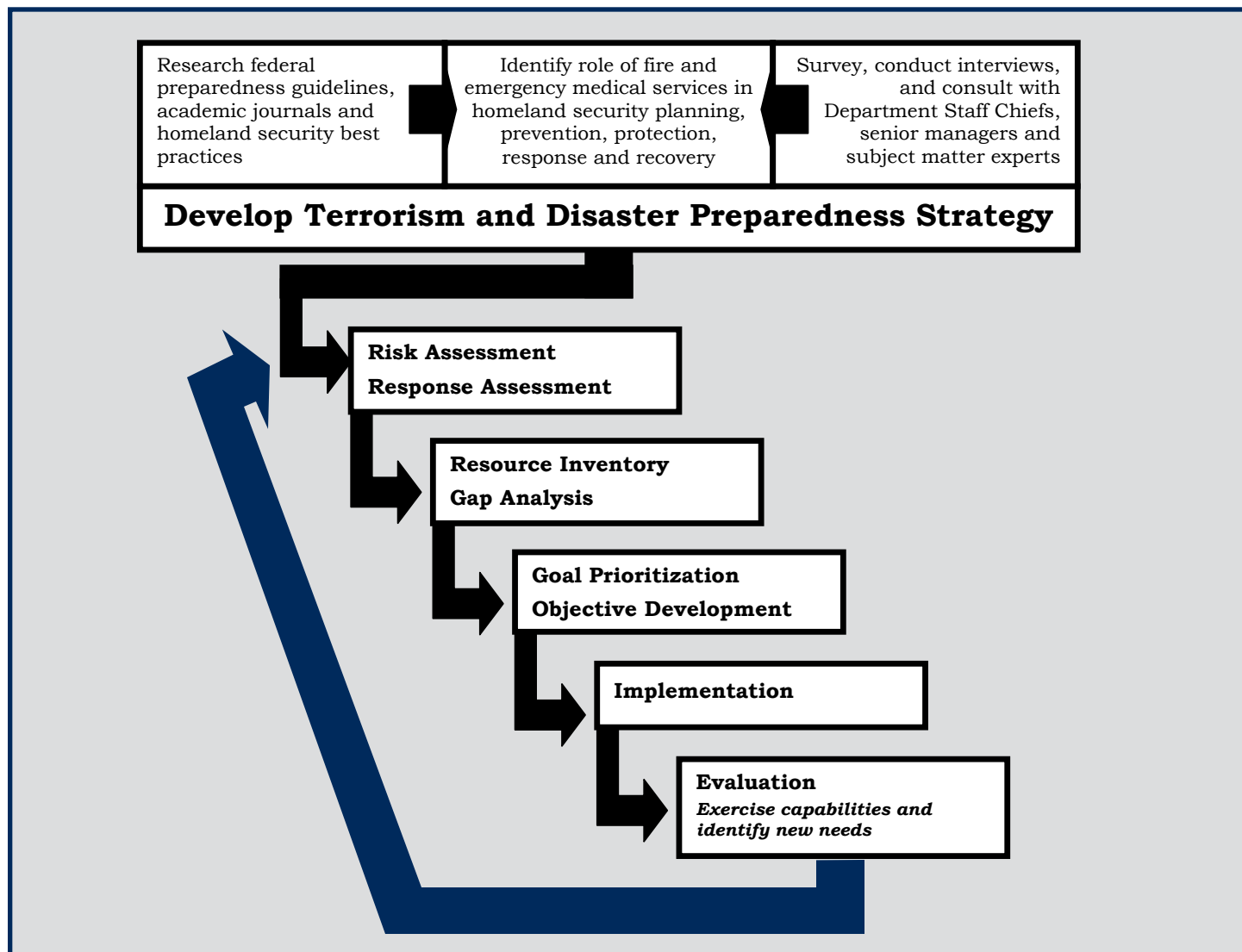
## Evaluation

The final activity prescribed by the Strategy Cycle is a measurable, meaningful and actionable *Evaluation* of outcomes for each objective.

The use of *outcomes* to measure progress--rather than *outputs*--is an important distinction to make. Outcome measures provide an assessment of the results of a program activity compared to its intended purpose. In contrast, output measures simply provide a quantified list of actions that have been taken (e.g., equipment purchased) without a true determination of how those actions impacted one's state of preparedness.

A report by the Congressional Research Service, titled *Combating Terrorism: The Challenge of Measuring*

## FDNY Terrorism and Disaster Preparedness Strategy Cycle





## FDNY Terrorism and Disaster Preparedness Evaluation Plan

<i>Activity in the Strategy Cycle</i>	<i>Frequency</i>	<i>Responsibility</i>	<i>Corresponding Evaluation Point</i>
<b>Risk Assessment</b> Identification of probable incident scenarios, actions to reduce incident consequences, detection of potential hazards and identification of responder safety concerns	Ongoing; data reviewed and updated annually and/or as new threats emerge	Risk Assessment and Target Hazards (RATH) Unit/CTDP staff	Provides data for setting appropriate operational goals
<b>Response Needs Assessment</b> Identification of resources needed to respond to incident scenarios, stated in terms of capacity level (quantified), proficiency level (qualified) and deployment time for each capability element (POETEP)	Ongoing; data reviewed and updated annually or as new needs emerge	Operations/CTDP Advisory Committee	<b>Operational Goals</b> Describe the level of operations to be performed (and the corresponding operational environments within which they need to be performed) in order to fulfill the responsibilities of core capabilities
<b>Resource Inventory</b> Evaluation of appropriate capabilities the Department currently has, in terms of capacity level (quantified), proficiency level (qualified) and deployment time for each capability element (POETEP)	Updated annually	Operations/Logistics	<b>Baselines</b> Starting point of capability from which gains are measured and targets are set, in terms of capacity level (quantified), proficiency level (qualified) and deployment time
<b>Gap Analysis</b> Identification of the gaps FDNY must fill in order to reach the previously determined optimal level of preparedness, in terms of capacity level (quantified), proficiency level (qualified) and deployment time	Updated semi-annually following asset inventory	CTDP Advisory Committee/CTDP Staff	<b>Target Performance Goals</b> Qualified and quantified; long-term; target levels of performance against which actual achievements can be compared; defined for each task required within an Operational Goal
<b>Goal Prioritization</b> Comprehensive evaluation of the Department's preparedness needs; guide appropriate financial and administrative allocations by ranking needs	Annually	CTDP Advisory Committee/Terrorism Task Force	<b>Annual Performance Goals</b> Short-term; should be accomplishable (all or a defined part) within one year; tied to a Target Performance Goal
<b>Objective Development</b> Identification of objectives in support of annual performance goals and specific implementation elements required to achieve those objectives	Annually	CTDP working groups/CTDP staff	<b>Strategic Objectives</b> Qualified and quantified; short-term and time limited; well-defined and specific; describe the intended result of carrying out an activity or group of activities required to achieve each Annual Performance Goal
<b>Implementation</b> Identification of and planning for the implementation steps that need to be taken in order to achieve the objectives	Ongoing; progress reviewed monthly	CTDP working groups/CTDP staff	<b>Implementation Steps</b> Qualified and quantified; categorized as capability elements (POETEP); describe the individual tasks that will be performed in order to achieve each Strategic Objective
<b>Evaluation</b>	Ongoing; reviewed quarterly; annual report	CTDP working groups/CTDP staff	<b>Performance Report</b>

---

*Effectiveness*, cautioned against the use of only output measures, stating: “A common pitfall of governments seeking to demonstrate success in anti-terrorist measures is over-reliance on quantitative indicators, particularly those which may correlate with progress but not accurately measure it, such as the amount of money spent on anti-terror efforts.”<sup>26</sup>

While outputs still must be tracked as part of an overall evaluation plan, they only have value if they are linked to meaningful outcomes and if those outcomes are further shown to be consistent with the desired results.

To facilitate evaluating the outcomes of FDNY terrorism and disaster preparedness initiatives, a series of Evaluation Points have been developed to provide a picture of the Department’s actual state of preparedness versus its optimal state. Evaluation Points include Operational Goals, Baselines, Target Performance Goals, Annual Performance Goals, Strategic Objectives and Implementation Steps.

Each Evaluation Point requires a collection and reporting of data, which are provided through the completion of its corresponding step in the Strategy Cycle. The data collected connect together in a way that enables the Department to trace how each

initiative taken supports FDNY’s core capabilities. Collectively, the Evaluation Points provide the Department with both the output and outcome information needed to measure and monitor progress toward optimal terrorism and disaster preparedness levels.

To ensure the Department-wide involvement in completing the Strategy Cycle, the Department has created a CTDPA Advisory Committee, consisting of representatives from Fire Operations, EMS Operations, Special Operations Command, Safety, Training, Communications, Fire Prevention and Fire Investigations. The Advisory Committee is charged with setting the FDNY’s long-term strategy goals and prioritizing annual performance goals.

Background information and recommendations for selection and development of the FDNY’s long-term and annual goals will be provided to the Advisory Committee by working groups comprised of Department personnel who have completed the Naval Postgraduate School (NPS) Center for Homeland Defense and Security Master’s Degree Program, the FDNY Officers Management Institute and/or the FDNY/USMA Combating Terrorism Leadership Course, as well as other subject matter experts from within and outside the Department.





## Conclusion

The FDNY's preparedness goals will continue to be realized through concentrated efforts to adapt to changes in the threat environment, reinforcing core competencies, maintaining a steady state of operational readiness, reducing the risks to the City and working in concert with homeland security partners.

The Department of Homeland Security Office for Domestic Preparedness (now incorporated under the Office of Grants and Training) Program Management Handbook describes an integrated approach to homeland security as one that provides sound management of programs and initiatives by:

- applying the principles of unified command and adopting a systems-based approach to preparedness
- strengthening the network and collaborative efforts among key individuals, emergency responders and other stakeholders who impact or are affected by homeland security, including the private sector
- organizing an effort to ensure the sustainability of homeland

security programs in the long-term and

- embracing a proactive approach for measuring homeland security program management efforts.<sup>27</sup>

The organizational framework presented within the FDNY's Strategy follows a systems-based, Department-wide approach to preparedness and establishes a meaningful system for measuring the outcome of FDNY's efforts. The program management objectives of integration and sustainability are achieved by concentrating FDNY preparedness efforts on reinforcing the Department's core capabilities, while efficiently building response capacity, skill proficiency and resource deployment following the tiered response model. The principles of unified command and collaboration are stressed throughout the Strategy and are built into all of the FDNY's preparedness efforts.

The specific prescriptions outlined in the Strategy will be updated to adapt to changes in the threat landscape and national priorities and tools for executing the Strategy Cycle Steps.



---

Evaluation Points will continue to be developed and refined so the Strategy can be fully implemented.

The purpose of the Strategy is encapsulated in a message that was delivered to FDNY personnel by Fire Commissioner Nicholas Scoppetta on the second anniversary of the 9/11 attacks:

“For September 11th, 2001, that terrible day is also a day that changed us. It changed our nation: never again would Americans look at the world the same way. It changed our Department, too: never again could we do things the same way. And so we have

begun the long, hard process of reconstruction to equip the FDNY for complexities we could not have imagined two years ago, much less a decade or a century ago. The Department has begun to assess the kinds of emergencies we may have to face, the kinds of training we will need, the equipment we’ll require, the technologies, the strategies, the procedures. We have begun to shape the premier fire department for the 21st century. If we are going to honor the memory of those we lost on September 11th, 2001, we can do no less.”<sup>28</sup>





## APPENDICES

<b>Appendix A--FDNY Role in</b>	
<b>National Target Capabilities</b>	A-1 to A-3
Common Capabilities	
Prevent Mission	
Protect Mission	
Respond Mission	
Recover Mission	

<b>Appendix B--Acronyms</b>	B-1
-----------------------------	-----

<b>Appendix C--Glossary</b>	C-1 to C-2
-----------------------------	------------

<b>Appendix D--Endnotes</b>	D-1 to D-2
-----------------------------	------------

<b>Appendix E--References</b>	E-1
-------------------------------	-----



## APPENDIX A--FDNY Role in National Target Capabilities

Within the four mission areas (prevent, protect, respond and recover), DHS has identified 36 capabilities--known as the National Target Capabilities--that are required of the emergency response network for complete disaster mitigation. The FDNY has a function within nearly each of these capabilities; sometimes as a leader and other times in a support role. Collectively, the FDNY functions serve the Department's life safety mission and support the activities of other agencies across the City, region, State and nation.

<i>National Target Capability</i>	<i>FDNY Role</i>
<b><i>COMMON Capabilities (Across All Mission Areas)</i></b>	
<b>Planning</b>	<ul style="list-style-type: none"> <li>• Terrorism and Disaster Preparedness Strategy</li> <li>• Strategic plan</li> <li>• Emergency operations plans</li> <li>• Incident action plans</li> <li>• Mitigation/recovery plan</li> <li>• Continuity of operations plan</li> <li>• Leadership/management succession plan</li> <li>• POETEP Assessment</li> <li>• Mutual aid</li> <li>• Resource management</li> <li>• Supporting technology</li> </ul>
<b>Interoperable Communications</b>	<ul style="list-style-type: none"> <li>• Internal communications plans</li> <li>• Electronic Command Boards, Mobile Command Center, Fire Department Operations Center</li> <li>• Field Communications System</li> <li>• Inter-agency communications protocols</li> <li>• New communication infrastructure to enhance Department communications</li> </ul>
<b>Risk Management</b>	<ul style="list-style-type: none"> <li>• Threat analysis and site surveys</li> <li>• Vulnerability assessment, consequence analysis and risk profiles of critical assets and key resources</li> </ul>
<b>Citizen Preparedness &amp; Participation</b>	<ul style="list-style-type: none"> <li>• Public education for prevention, preparedness, response and recovery/public training (CERT)</li> <li>• Private sector training</li> <li>• Protocols for volunteers at disasters</li> <li>• Civilian pre-hospital care training (CPR)</li> <li>• Fire safety education</li> </ul>
<b><i>PREVENT Mission</i></b>	
<b>Information Gathering and Recognition of Indicators and Warnings</b>	<ul style="list-style-type: none"> <li>• Bureau of Fire Investigation</li> <li>• Building inspections</li> <li>• Inter-departmental liaisons</li> <li>• Syndromic surveillance</li> </ul>
<b>Intelligence Analysis and Production</b>	<ul style="list-style-type: none"> <li>• Coordination with DHS Office of Intelligence &amp; Analysis</li> <li>• Bureau of Fire Investigations</li> </ul>
<b>Intelligence/Information-Sharing and Dissemination</b>	<ul style="list-style-type: none"> <li>• Joint Terrorism Task Force</li> <li>• Fusion Center</li> <li>• Inter-agency coordination (city, State, Federal, international)</li> <li>• Telecommunications and information technology</li> </ul>
<b>Law Enforcement Investigation and Operations</b>	<ul style="list-style-type: none"> <li>• Bureau of Fire Investigations</li> <li>• Code enforcement</li> </ul>
<b>Chemical, Biological, Radiological, Nuclear and/or Explosive Detection</b>	<ul style="list-style-type: none"> <li>• Routine field monitoring</li> <li>• Data collection and analysis</li> <li>• Syndromic surveillance</li> </ul>
<b><i>PROTECT Mission</i></b>	
<b>Critical Infrastructure Protection</b>	<ul style="list-style-type: none"> <li>• Vulnerability assessment and planning</li> <li>• Consequence assessment and planning</li> <li>• Adopt and enforce building codes/standards that address safety and structural integrity</li> <li>• Maintain plans and records of critical infrastructure, high-profile buildings and other potential targets</li> </ul>



<b>National Target Capability</b>	<b>FDNY Role</b>
<b>Food and Agriculture Safety and Defense</b>	<ul style="list-style-type: none"> <li>• Syndromic surveillance</li> </ul>
<b>RESPOND Mission</b>	
<b>On-site Incident Management</b>	<ul style="list-style-type: none"> <li>• Incident Management Team (IMT)</li> <li>• Electronic Command Boards (ECBs)</li> <li>• Mobile Command Center (MCC)</li> <li>• Planning Vehicle</li> <li>• Fire Department Operations Center (FDOC)</li> <li>• Dispatch</li> <li>• Personnel qualifications and certifications for NIMS specified roles</li> <li>• Incident health and safety plan</li> <li>• Procedures for immediate incident scene</li> <li>• Incident Command System/Unified Command</li> </ul>
<b>Emergency Operations Center Management</b>	<ul style="list-style-type: none"> <li>• Establish and implement order of command succession</li> <li>• Identify potential hazards and threats (situational awareness)</li> <li>• Coordinate with other organizations</li> <li>• Activate/coordinate mutual-aid and recall procedures</li> <li>• Fire Department Operations Center (FDOC)</li> </ul>
<b>Critical Resource Logistics and Distribution</b>	<ul style="list-style-type: none"> <li>• Resource management plans</li> <li>• Identify, type and inventory resources</li> <li>• Inventory facilities, equipment, personnel and systems available to support emergency operations</li> <li>• Allocate, mobilize and manage resources</li> <li>• Fire Department Operations Center (FDOC)</li> <li>• Electronic Command Boards (ECBs)</li> <li>• Incident Management Team (IMT)</li> </ul>
<b>Volunteer Management and Donations</b>	<ul style="list-style-type: none"> <li>• CERT</li> <li>• DART</li> </ul>
<b>Responder Safety and Health</b>	<ul style="list-style-type: none"> <li>• Force protection requirements</li> <li>• Response communications systems</li> <li>• Plans and procedures for worker health and safety</li> <li>• Incident health and safety plan</li> <li>• Provide PPE</li> <li>• Identify assets required for decontamination</li> <li>• Triage and treat patients at the decontamination site</li> <li>• Crisis counseling with mental health, substance abuse and behavioral health support</li> <li>• Stress management programs and crisis response team</li> <li>• Responder patient tracking (Notifications Desk)</li> </ul>
<b>Public Safety and Security</b>	<ul style="list-style-type: none"> <li>• Incident perimeter and zones</li> </ul>
<b>Environmental Health and Vector Control</b>	<ul style="list-style-type: none"> <li>• EMS personnel; ability to recall</li> <li>• Fire personnel with CFR-D</li> </ul>
<b>Explosive Device Response Operations</b>	<ul style="list-style-type: none"> <li>• Plans, policies and procedures for explosive device response operations</li> </ul>
<b>Firefighting Operations/ Support</b>	<ul style="list-style-type: none"> <li>• Firefighting response and mitigation</li> <li>• Fire code/building inspections</li> <li>• Fire investigations</li> <li>• Plans, procedures and equipment guidelines for response operations</li> <li>• Dispatch</li> </ul>
<b>WMD/Hazardous Materials Response and Decontamination</b>	<ul style="list-style-type: none"> <li>• Containment and mitigation by tiered response</li> <li>• Decontamination</li> <li>• Life hazard assessment</li> <li>• Contamination site safety plan</li> <li>• Plans, programs, agreements and requirements for haz-mat response</li> <li>• Establish perimeter and hazardous materials zones</li> <li>• Provide required PPE</li> <li>• Monitor responders for exposure to hazardous materials</li> <li>• Coordinate with law enforcement to ensure site security</li> </ul>

<b><i>National Target Capability</i></b>	<b><i>FDNY Role</i></b>
<b>Citizen Protection: Evacuation and/or In-Place Protection</b>	<ul style="list-style-type: none"> <li>• Designation of safe areas</li> <li>• Resources to assist in evacuation</li> <li>• Assessment and monitoring for safe re-entry</li> </ul>
<b>Isolation and Quarantine</b>	<ul style="list-style-type: none"> <li>• Initial isolation of immediately affected population</li> <li>• Initial decontamination</li> </ul>
<b>Urban Search &amp; Rescue (US&amp;R)</b>	<ul style="list-style-type: none"> <li>• Coordinate urban search and rescue (USAR) teams</li> <li>• FDNY search and rescue units</li> </ul>
<b>Emergency Public Information and Warning</b>	<ul style="list-style-type: none"> <li>• Plans, procedures and policies for coordinating and disseminating public information to first responders and their families</li> <li>• Provide public health and medical information to responders</li> </ul>
<b>Triage and Pre-Hospital Treatment</b>	<ul style="list-style-type: none"> <li>• Coordinate care and transport of patients</li> <li>• Office of Medical Affairs</li> <li>• Identify specialized hospitals for burns and other injuries</li> <li>• Plans for patient triage and treatment at screening and decontamination sites</li> <li>• Treatment criteria consistent with EMS exposure protocols</li> </ul>
<b>Medical Surge</b>	<ul style="list-style-type: none"> <li>• EMS personnel; ability to recall</li> <li>• Fire personnel with CFR-D</li> <li>• Special protocols to prevent spread</li> </ul>
<b>Medical Supplies Management and Distribution</b>	<ul style="list-style-type: none"> <li>• Procedures for patients with special needs</li> <li>• Procedures for transport at MCIs</li> <li>• Coordinate EMS supplies</li> <li>• Health care workers and volunteer call systems</li> <li>• Counseling and family support services</li> <li>• Provide for member crisis counseling and mental health support</li> </ul>
<b>Mass Prophylaxis</b>	<ul style="list-style-type: none"> <li>• Provide medical equipment and supplies for immediate medical response operations and restocking supplies</li> <li>• Distribution of countermeasures to FDNY responders</li> </ul>
<b>Mass Care (Sheltering, Feeding and Related Services)</b>	<ul style="list-style-type: none"> <li>• Family information call center</li> <li>• Disseminate health and safety information to responders and their families</li> <li>• Coordinate dissemination of mass therapeutics and vaccines to first responders and their families</li> </ul>
<b>Fatality Management</b>	<ul style="list-style-type: none"> <li>• Tag victims</li> </ul>
<b><i>RECOVER Mission</i></b>	
<b>Structural Damage and Mitigation Assessment</b>	<ul style="list-style-type: none"> <li>• Participate in post-incident assessments of structures, public works and infrastructure to help determine critical needs</li> <li>• Continued hazard mitigation activities</li> <li>• Support incident response operations</li> </ul>
<b>Restoration of Lifelines</b>	<ul style="list-style-type: none"> <li>• FDNY Continuity of Operations Plan</li> </ul>
<b>Economic and Community Recovery</b>	<ul style="list-style-type: none"> <li>• FDNY Continuity of Operations Plan</li> <li>• Family Assistance Unit</li> </ul>

---

## APPENDIX B--Acronyms

---

AAR	After Action Report
BFI	FDNY Bureau of Fire Investigation
BFP	FDNY Bureau of Fire Prevention
BHS	FDNY Bureau of Health Services
CBRN	Chemical, Biological, Radiological and Nuclear
CERT	Community Emergency Response Team
CFR-D	Certified First Responder-Defibrillation
COOP	Continuity of Operations Plan
CPR	Cardiopulmonary Resuscitation
CTDP	FDNY Center for Terrorism and Disaster Preparedness
DHS	U.S. Department of Homeland Security
DOITT	New York City Department of Information Technology & Telecommunications
EAP	Emergency Action Plan
EMT	Emergency Medical Technician
ERP	Emergency Response Plan
FBI	Federal Bureau of Investigations
FDNY	Fire Department of the City of New York
FDOC	FDNY Fire Department Operations Center
FEMA	Federal Emergency Management Agency
FOMI	FDNY Officers Management Institute
Haz Mat	Hazardous Materials
HazTac	EMS Hazardous Materials Tactical Unit
HVAC	Heating, Ventilating and Cooling System
ICS	Incident Command System
IED	Improvised Explosive Device
IID	Improvised Incendiary Device
IMT	Incident Management Team
JTTF	Joint Terrorism Task Force
MCI	Mass Casualty Incident
MEP	Master Exercise Practitioner
NIMS	National Incident Management System
NPS	Naval Postgraduate School
NRP	National Response Plan
NYPD	New York City Police Department
NYTF-1	New York Task Force 1
OEM	New York City Office of Emergency Management
OMA	FDNY Office of Medical Affairs
POETEP	Planning; Organization and Leadership; Equipment and Systems; Training; Exercises, Evaluations and Corrective Actions; and Personnel
RATH	FDNY Risk Assessment and Target Hazards
SOC	FDNY Special Operations Command
SOP	Standard Operating Procedures
USAR	Urban Search and Rescue
USMA	United States Military Academy
VBIED	Vehicle Borne Improvised Explosive Device
WMD	Weapon of Mass Destruction



---

## APPENDIX C--Glossary

---

**Adaptability:** the ability to adjust to a specified use or situation

**Annual performance goals:** measures and targets affected by an activity in a particular (generally near-term) year<sup>29</sup>

**Baseline:** starting point from which gains are measured and targets are set<sup>30</sup>

**Breaking point:** the point at which a person [or entity] gives way under stress<sup>31</sup>

**Capabilities-based planning:** planning, under uncertainty, to provide capabilities suitable for a wide range of challenges while working within an economic framework that necessitates prioritization and choice<sup>32</sup>

**Capability:** provides the means to achieve a measurable outcome resulting from the performance of one or more critical tasks, under specified conditions and performance standards. A capability may be delivered with any combination of properly planned, organized, equipped, trained and exercised personnel that achieves the intended outcome<sup>33</sup>

**Capability elements:** elements that are required to fully develop capabilities: Planning; Organization & Leadership; Equipment & Systems; Training; Exercises, Evaluations & Corrective Actions; and Personnel (POETEP)

**Capacity:** the maximum or optimum amount of production; how much one can do

**Critical infrastructure and key resources:** the assets, systems, networks and functions that provide vital services to the City

**Decentralization:** the dispersion or distribution of functions and powers; *specifically*, the delegation of power from a central authority to regional and local authorities

**Deployment:** the relocation and positioning of resources at an incident scene

**Implementation steps:** individual tasks that must be performed to achieve each Strategic Objective (categorized by capability elements)

**Interoperability:** the ability of two or more systems or components to exchange information and use the information that has been exchanged

**Jurisdiction:** range or sphere of authority. Public agencies have jurisdiction at an incident related to their legal responsibilities

and authority. Jurisdictional authority at an incident can be political or geographic (e.g., City, county, tribal, State or Federal boundary lines) or functional (e.g., law enforcement, public health)<sup>34</sup>

**Life safety operations:** tactical initiatives taken to preserve and protect the public; are the highest priority incident objectives and supersede other objectives during the incident; the phase of incident operations where these tactical measures are implemented in response to imminent hazards or threats to life<sup>35</sup>

**Mitigation:** activities designed to reduce or eliminate risks to persons or property or to lessen the actual or potential effects or consequences of an incident; mitigation measures may be implemented prior to, during or after an incident<sup>36</sup>

**Network-centric command:** information-sharing framework that integrates voice, video and data information from multiple internal and external sources; provides a comprehensive, real-time picture of credible threats for strategic planning and situational assessments for enhanced tactical command

**Operational goal:** describe the level of operations to be performed and the corresponding operational environments within which they need to be performed

**Outcome:** describes the intended result of carrying out an activity or group of activities

**Outcome measure:** an assessment of the results of a program activity compared to its intended purpose<sup>37</sup>

**Output:** describes the level of activity [or individual tasks] that will be provided over a period of time

**Output measure:** the tabulation, calculation or recording of activity or effort and can be expressed in a quantitative or qualitative manner<sup>38</sup>

**Performance measures:** indicators, statistics or metrics used to gauge program performance<sup>39</sup>

**Preparedness:** range of deliberate, critical tasks and activities necessary to build, sustain and improve the operational capability to prevent, protect against, respond to and recover from domestic incidents. Preparedness is a continuous process involving efforts at all levels of government and between government and private-sector and non-governmental organizations to identify threats, determine vulnerabilities and identify required resources<sup>40</sup>

---

**Prevention:** actions to avoid an incident or to intervene to stop an incident from occurring; involves actions taken to protect lives and property; involves applying intelligence and other information to a range of activities that may include such countermeasures as deterrence operations; heightened inspections; improved surveillance and security operations; investigations to determine the full nature and source of the threat; public health and agricultural surveillance and testing processes; immunizations, isolation or quarantine; and, as appropriate, specific law enforcement operations aimed at deterring, pre-empting, interdicting or disrupting illegal activity and apprehending potential perpetrators and bringing them to justice<sup>41</sup>

**Proficiency:** the state or quality of performance in a given skill, with expert correctness and facility

**Protection:** actions to reduce the vulnerability of critical infrastructure or key resources to deter, mitigate or neutralize terrorist attacks, major disasters and other emergencies; requires coordinated action on the part of Federal, State and local governments; the private sector; and concerned citizens across the country; also includes continuity of government and operations planning; awareness elevation and understanding of threats and vulnerabilities to their critical facilities, systems and functions; identification and promotion of effective sector-specific protection practices and methodologies; and expansion of voluntary security-related information-sharing among private entities within the sector, as well as between government and private entities<sup>42</sup>

**Recovery:** development, coordination and execution of service- and site-restoration plans, the reconstitution of government operations and services; individual, private-sector, non-governmental and public assistance programs to provide housing and promote restoration; long-term care and treatment of affected persons; additional measures for social, political, environmental and economic restoration; evaluation of the incident to identify lessons learned; post-incident reporting; and development of initiatives to mitigate the effects of future incidents<sup>43</sup>

**Resilience:** the ability to recover quickly from change or misfortune

**Response:** activities that address the short-term, direct effects of

an incident; includes immediate actions to save lives, protect property and meet basic human needs; also includes the execution of emergency operations plans and of mitigation activities designed to limit the loss of life, personal injury, property damage and other unfavorable outcomes; response activities include applying intelligence and other information to lessen the effects or consequences of an incident; increased security operations; continuing investigations into the nature and source of the threat; ongoing public health and agricultural surveillance and testing processes; immunizations, isolation or quarantine; and specific law enforcement operations aimed at pre-empting, interdicting or disrupting illegal activity and apprehending actual perpetrators and bringing them to justice<sup>44</sup>

**Risk assessment:** measure of potential harm that encompasses threat, vulnerability and consequence; risk is the potential for loss, damage or disruption to the nation's critical infrastructure resulting from destruction, incapacitation or exploitation during some future manmade or naturally occurring event

**Security partners:** a Federal, State, regional, territorial, local or tribal government entity, private sector owners and operators of infrastructure, academic and professional entities and certain not-for-profit and private volunteer organizations that share in the responsibility for protecting the nation<sup>45</sup>

**Situational awareness:** being aware of the conditions around oneself and having a constantly evolving picture of the state of the operational environment

**Strategic objective:** statement of aim or purpose included in a strategic plan<sup>46</sup>

**Strategic plan:** a five-year plan that includes a comprehensive mission statement; outcome-related goals and objectives for the major functions and operations; a description of how the goals and objectives are to be achieved; and other elements<sup>47</sup>

**Target performance goal:** a target level of performance expressed as a tangible, measurable objective, against which actual achievement can be compared, including a goal expressed as a quantitative standard, value or rate

---

## APPENDIX D--Endnotes

---

- 1 McKinsey & Company. McKinsey Report--Increasing FDNY's Preparedness. August 2002.
- 2 McKinsey & Company. McKinsey Report--Increasing FDNY's Preparedness. August 2002.
- 3 U.S. Office of Homeland Security. National Strategy for Homeland Security. July 2002.
- 4 U.S. Department of Homeland Security. National Preparedness Goal. December 2005.
- 5 National Counterterrorism Center (NCTC). Report on Incidents of Terrorism 2005. 11 April 2006.
- 6 Garwin, Richard L. The Technology of Megaterror. Council on Foreign Relations. Technology Review. 01 September 2002.
- 7 Naporstek, Aaron. Untitled. New York Press 18(29): 11 July 2006. Retrieved 15 September 2006.  
[http://www.nypress.com/print.cfm?content\\_id=13427](http://www.nypress.com/print.cfm?content_id=13427).
- 8 Lehigh Earth Observatory (Lehigh University). Earthquakes in New York City. Retrieved 15 September 2006.  
<http://www.leo.lehigh.edu/projects/seismic/nyquakes2.html>.
- 9 Lehigh Earth Observatory (Lehigh University). Earthquakes in New York City. Retrieved 15 September 2006.  
<http://www.leo.lehigh.edu/projects/seismic/nyquakes2.html>.
- 10 Lehigh Earth Observatory (Lehigh University). Earthquakes in New York City. Retrieved 15 September 2006.  
<http://www.leo.lehigh.edu/projects/seismic/nyquakes2.html>.
- 11 U.S. Department of Homeland Security. National Preparedness Goal. December 2005.
- 12 New York City Office of Emergency Management. Citywide Incident Management System (CIMS). 06 April 2005.
- 13 National Response Plan. October 2004.
- 14 National Response Plan. October 2004.
- 15 U.S. Federal Emergency Management Agency (FEMA). FEMA 502-1. NIMS Basic. 29 March 2006.
- 16 U.S. Federal Emergency Management Agency (FEMA). IS-100 Introduction to Incident Command System.  
<http://www.training.fema.gov/EMIWEB/IS/IS100CM/ICS01summary.htm>.
- 17 New York City Office of Emergency Management. Citywide Incident Management System (CIMS). 06 April 2005.
- 18 The New York City Urban Area Homeland Security: Initial Assessment and Strategy. Submitted as Attachment B for the 2003 Urban Area Security Initiative Grant Program. 23 August 2005.
- 19 Data from FDNY Management Indicator Reporting System (MIRS). Represents fires, medical emergencies and non-medical emergencies responded to by fire and emergency medical service (EMS) units during 2005.
- 20 U.S. Department of Homeland Security. National Infrastructure Protection Plan. January 2006.
- 21 Emporis Buildings. 25 May 2006. <http://www.emporis.com/en/wm/ci/?id=101028>.
- 22 In 2002, the Mailman School of Public Health at Columbia University and CDC initiated The World Trade Center Evacuation Study, a multi-year, qualitative and quantitative research study designed to assess factors that affected evacuation of the two WTC towers.
- 23 U.S. Centers for Disease Control and Prevention. Preliminary Results from the World Trade Center Evacuation Study--New York City, 2003. CDC Morbidity and Mortality Weekly Report. 10 September 2004.  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5335a3.htm>.
- 24 U.S. Department of Homeland Security. National Preparedness Goal. December 2005.
- 25 U.S. Department of Homeland Security. National Preparedness Goal. December 2005.
- 26 Congressional Research Service. Combating Terrorism: The Challenge of Measuring Effectiveness. The Library of Congress. 23 November 2005.
- 27 Office for Domestic Preparedness. Program Management Handbook.
- 28 Fire Department, City of New York. Supplement No. 60 to Department Order No. 81. 11 September 2003.



- 
- 29 U.S. Office of Management and Budget. Guide to the Program Assessment Rating Tool (PART). March 2006.
  - 30 U.S. Office of Management and Budget. Guide to the Program Assessment Rating Tool (PART). March 2006.
  - 31 <http://www.m-w.com/dictionary/breaking%20point>.
  - 32 U.S. Department of Homeland Security. National Preparedness Goal. December 2005.
  - 33 U.S. Department of Homeland Security. National Preparedness Goal. December 2005.
  - 34 U.S. Department of Homeland Security. National Preparedness Goal. December 2005.
  - 35 New York City Office of Emergency Management. Citywide Incident Management System (CIMS). 06 April 2005.
  - 36 National Response Plan. October 2004.
  - 37 U.S. Code of Federal Regulations, Title 31, Section 115 (31USC1115).
  - 38 U.S. Code of Federal Regulations, Title 31, Section 115 (31USC1115).
  - 39 U.S. Office of Management and Budget. Guide to the Program Assessment Rating Tool (PART). March 2006.
  - 40 U.S. Department of Homeland Security. National Preparedness Goal. December 2005.
  - 41 U.S. Department of Homeland Security. National Preparedness Goal. December 2005.
  - 42 U.S. Department of Homeland Security. National Preparedness Goal. December 2005.
  - 43 U.S. Department of Homeland Security. National Preparedness Goal. December 2005.
  - 44 U.S. Department of Homeland Security. National Preparedness Goal. December 2005.
  - 45 U.S. Department of Homeland Security. National Infrastructure Protection Plan. January 2006.
  - 46 U.S. Office of Management and Budget. Guide to the Program Assessment Rating Tool (PART). March 2006.
  - 47 U.S. Office of Management and Budget. Guide to the Program Assessment Rating Tool (PART). March 2006.

---

## APPENDIX E--References

---

- Congressional Research Services. Combating Terrorism: The Challenges of Measuring Effectiveness.
- Fire Department, City of New York. Supplement No. 60 to Department Order No. 81. 11 September 2003.
- Garwin, Richard L. The Technology of Megaterror. Council on Foreign Relations. Technology Review. 01 September 2002.
- HM Government. Countering International Terrorism: The United Kingdom's Strategy. Crown Copyright. July 2006.
- Hansen, Donald K. Can Decentralized Command and Control Doctrine Complement Network-Centric Warfare. 02 February 2004.
- Lehigh Earth Observatory (Lehigh University). Earthquakes in New York City. Retrieved 15 September 2006.  
<http://www.leo.lehigh.edu/projects/seismic/nyquakes2.html>
- McKinsey & Company. McKinsey Report--Increasing FDNY's Preparedness. August 2002.
- New York City Charter. July 2004.
- New York City Office of Emergency Management. Citywide Incident Management System (CIMS). 06 April 2005.
- New York City Urban Area Homeland Security Initial Assessment and Strategy. Submitted as Attachment B for the 2003 Urban Area Security Initiative Grant Program. 23 August 2005.
- National Counterterrorism Center (NCTC). Report on Incidents of Terrorism 2005. 11 April 2006.
- Office for Domestic Preparedness (ODP). Program Management Handbook.
- U.S. Centers for Disease Control and Prevention. Preliminary Results from the World Trade Center Evacuation Study--New York City, 2003. CDC Morbidity and Mortality Weekly Report. 10 September 2004.
- U.S. Code of Federal Regulations, Title 31, Section 115 (31USC1115).
- U.S. Department of Homeland Security. Capabilities-Based Planning Overview 12-17. DHS/SLGCP/OPIA/Policy and Planning Branch.
- U.S. Department of Homeland Security. National Infrastructure Protection Plan. January 2006.
- U.S. Department of Homeland Security. National Preparedness Goal. December 2005.
- U.S. Department of Homeland Security. State and Urban Area Homeland Security Strategy: Guidance on Aligning Strategies with the National Preparedness Goal. 22 July 2005.
- U.S. Federal Emergency Management Agency (FEMA). FEMA 502-1. NIMS Basic. 29 March 2006.
- U.S. Federal Emergency Management Agency (FEMA). IS-100 Introduction to Incident Command System.  
<http://www.training.fema.gov/EMIWEB/IS/IS100CM/ICS01summary.htm>.
- U.S. General Accounting Office. Combating Terrorism: Evaluation of Selected Characteristics in National Strategies Related to Terrorism. GAO-04-40ST. 3 February 2004.
- U.S. Joint Chiefs of Staff. Joint Vision 2010.
- U.S. Joint Chiefs of Staff. Joint Vision 2020.
- U.S. Office of Homeland Security. National Strategy for Homeland Security. July 2002.
- U.S. Office of Management and Budget. Guide to the Program Assessment Rating Tool (PART). March 2006.

The Strategy format and content closely adhere to the planning guidelines laid out in the following documents: National Response Plan; National Incident Management System; National Preparedness Goal; National Planning Scenarios; Universal Task List; Target Capabilities List; National Infrastructure Protection Plan; State and Urban Area Homeland Security Strategy: Guidance on Aligning Strategies with the National Preparedness Goal; and Homeland Security Grant Program. Several of these guidance documents are still in draft form and are being further developed by the Federal government. As the final documents are produced, the FDNY's Strategy will be amended to reflect changes in the national approach, as well as changes in the threat environment.

## FDNY CONTACT & ACKNOWLEDGMENTS

---

### *Contact:*

Deputy Assistant Chief Joseph W. Pfeifer,  
*Chief of Counterterrorism and Emergency Preparedness*

Keeley Townsend,  
*Executive Coordinator of Strategic Studies*



### **Center for Terrorism and Disaster Preparedness**

Fire Department City of New York  
9 MetroTech Center  
Brooklyn, NY 11201  
Tel.: 718-281-8453  
Fax: 718-281-8458

### *Acknowledgments:*

Numerous individuals within and outside the FDNY made key contributions to the content and editing of this document. The Department would like to thank all of those who provided their time, technical expertise and valuable insight.





**FIRE DEPARTMENT CITY OF NEW YORK**

9 MetroTech Center  
Brooklyn, New York 11201  
[www.nyc.gov/fdny](http://www.nyc.gov/fdny)