

National Preparedness Assessment Division Grant Effectiveness Case Studies



Preparedness Grant Effectiveness Case Study: New York City

March 2021





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I. Overview

In 2019, the Federal Emergency Management Agency (FEMA) conducted a grant effectiveness case study in New York City, NY to understand how the city uses preparedness funds to increase its ability to prepare for and respond to terrorist attacks. FEMA also examined New York City's grant allocation and prioritization processes and, throughout the case study, solicited feedback from local officials to inform future improvements to the grant programs.

The case study found that terrorist events and the evolving, persistent threat of terrorism over the past two decades have shaped the missions and priorities of New York City's public safety institutions. Specifically, the Fire Department of New York (FDNY) and the New York Police Department (NYPD) have become anti-terror agencies in addition to maintaining their traditional first responder roles. This expansion of scope for the Departments is rare across the Nation and reflects the leading role New York City plays in combatting terrorist marketing and ideology. In addition, the case study found that FEMA preparedness funding through the Urban Areas Security Initiative (UASI), the State Homeland Security Grant Program (SHSP), the Port Security Grant Program (PSGP), and the Transportation Security Grant Program (TSGP) played an important part in enabling New York City to adapt to these changing threats by investing in building capability to prevent and protect against terrorist attacks and complex emergencies.

FEMA collected information for the case study through interviews conducted via email, telephone, and a site visit in November 2019 with representatives from:

- New York City Police Department (NYPD)
 - Counterterrorism Bureau
 - Grants and Budget Division
- Fire Department City of New York (FDNY)

- FDNY Center for Terrorism and Disaster Preparedness (CTDP)
- FDNY Bureau of Training
- FDNY Grants Development Office
- Mayor's Office of Management and Budget (OMB)

II. About New York City

New York City is home to more than 8 million residents and operates as a global center for business, finance, media, international diplomacy, and culture.¹ With more than 200,000 businesses, 5.6 million daily commuters, and over 1.7 billion annual subway trips, New York City is the largest and most densely populated urban area in the Nation. These attributes make New York City a top target for terrorists around the world. Since the terrorist attacks on September 11, 2001, New York City has been the target of over 35 terrorist plots, at least 17 of which occurred from 2015 to 2019.² In response, New York City's most vital public safety and emergency response institutions have adapted their missions and capabilities to match the growing and pervasive threat of terrorism.

¹ <u>https://www.census.gov/quickfacts/newyorkcitynewyork</u>

² New York City Police Department, Interview Conducted November 2019



New York City shapes its homeland security priorities, investments, and practices based on this context and the following regional characteristics:

- New York City is a top global tourist destination, with an estimated 67.2 million visitors in 2019³;
- New York City's transportation infrastructure is made up of hundreds of bridges and a
 public rail and bus transit system that operates non-stop;
- New York City airports include three of the busiest airports in the Nation, serving nearly 130 million passengers each year; and
- New York City is one of the most densely populated cities in the world, and this increases the potential consequences of an attack or major incident.
- New York City is home to the third-largest port and largest ferry commuter base in the country.⁴

Assessing Risks and Capabilities

To understand how New York City assesses risk, FEMA analyzed the processes the city employs to measure risk and capabilities. Following Department of Homeland Security (DHS) Homeland Security Grant Program (HSGP) Notice of Funding Opportunity (NOFO) guidance, New York City has completed the Threat and Hazard Identification and Risk Assessment (THIRA) every year since 2012. Through the THIRA, New York City assesses its risks and sets targets for the capabilities needed to address those risks. New York City's participating agencies meet with their regional partners while completing the THIRA, capturing a holistic view of the challenges New York City faces.

In 2018, New York City completed the Stakeholder Preparedness Review (SPR) for the first time using the revised THIRA/SPR methodology as part of the Fiscal Year (FY) 2018 NOFO requirement. The SPR is a comprehensive assessment of a communities' current capabilities that grant recipients complete annually. The SPR allows New York City to measure how close it is to meeting its THIRA targets, identify gaps, and develop approaches for closing those gaps.

In addition to the THIRA process, New York City participates in the Countywide Emergency Preparedness Assessment (CEPA). The New York State Division of Homeland Security and Emergency Services (DHSES) developed the CEPA to facilitate in-person meetings between state and local subject matter experts (SME) to discuss and analyze local hazard and capability information and potential resource gaps. All counties in the state complete the CEPA. CEPA sessions typically last one day, during which participants:

- Validate key demographics of the jurisdiction;
- Conduct a hazard assessment based on a standardized methodology (likelihood multiplied by consequence);
- Conduct a capability assessment using a standardized methodology to measure Planning, Organization, Equipment, Training, and Exercise (POETE) components of New York City's capabilities;

³ <u>https://www1.nyc.gov/assets/omb/downloads/pdf/ec08-19.pdf</u>

⁴ <u>https://www.aapa-ports.org/unifying/content.aspx?ItemNumber=21048</u>



- Determine the time frame for which the jurisdiction can sustain their response capabilities;
- Identify key response resources within the jurisdiction; and
- Capture best practices and areas for improvement from previous incidents.⁵

Working with its first responder community, DHSES developed a list of 28 critical capabilities that guide discussions during the CEPA sessions. Although these critical capabilities largely mirror FEMA's core capabilities, they provide greater focus on and flexibility to address the distinct threats and hazards that New York jurisdictions face. CEPA participants use the results of the working session to prioritize grant investments, including HSGP grants.

III. Grant Allocation Strategy

Over the past 10 years, New York City received approximately \$2 billion in UASI, SHSP, PSGP, and TSGP⁶ funding. The funds supported the building and sustainment of capabilities that contribute significantly to New York City's ability to prevent, prepare for and respond to terrorist attacks. The Homeland Security Grants Unit (HSGU) within the Mayor's Office of Management and Budget manages New York City's UASI funding. After receiving the funds from FEMA, HSGU and OMB award the funds to city agencies to carry out the provisions of the annual award.

Grant	Award Amounts Rounded (in millions)											
Program	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	Total
UASI	\$115	\$116	\$121	\$121	\$121	\$137	\$140	\$141	\$140	\$139	\$140	\$1,431
SHSP	\$45	\$72	\$73	\$57	\$36	\$42	\$49	\$49	\$49	\$49	\$49	\$570
PSGP	\$25	\$34	\$11	\$10	\$9	\$9	\$10	\$15	\$10	\$17	\$17	\$167
Total	\$185	\$222	\$205	\$188	\$166	\$188	\$199	\$205	\$199	\$205	\$206	\$2,168

Table 1: New York City Urban Area Preparedness Grant Funds, FY 2008–FY 2018

Funding Strategy

Setting Priorities

Before selecting which projects receive HSGP funding, the Mayor's OMB reaches out to the city agencies that consistently apply for HSGP funding and sends them information to help guide them through the application process. Agencies then set their own priorities and identify

4 - Not For Distribution/For Internal Use Only

⁵ <u>http://www.dhses.ny.gov/planning/cepa/faq.cfm</u>

⁶ The NYPD is a sub-recipient for TSGP and submits all applications via the Metropolitan Transit Authority.



investments to meet their needs, drawing from the most recent THIRA and CEPA risk assessments. Generally, the Mayor's OMB advises agencies to request grant funding within the awarded amounts they previously received. After setting their needs, New York City agencies work with their corresponding OMB task force to make recommendations based on their priorities and the given performance period. Historically, final funding decisions have been made between the OMB Task Forces, OMB Senior & Executive Management, and finally City Hall.

OMB acts as the City's chief financial manager under the Mayor's Office and coordinates the preparation of the Mayor's Preliminary and Executive Budgets. In addition, OMB advises the Mayor on the City's overall fiscal health by monitoring and assessing City services and programs. OMB provides this monitoring, coordination, and advisement through the tracking of all City revenue, expenditures, and tax policies.

OMB is headed by the New York City Budget Director with assistance from Deputy Directors and Assistant Directors in the oversight and management of the City budgets. OMB's main role involves budget preparation, implementation, and monitoring. These activities are primarily performed through the Expense and Capital Budget Divisions, both of which play major roles in the budget process (with support from ancillary units within OMB). In order to perform their duties efficiently, these divisions are further divided into Task Forces that have specific areas of focus and are overseen by an Assistant Director.

OMB is responsible for the administration of HSGP funding awarded to the City of New York. The Homeland Security Grant Monitoring Unit (HSGU) within OMB works with FEMA, DHSES, and City agencies to administer the program from the pre-application phase to the grant close-out.

Urban Area Security Initiative (UASI)

The New York Homeland Senior Advisory Committee is the formal decision-making body for all UASI investments. To determine how New York City will invest its UASI grant funds, the HSAC first releases guidance on the priorities it expects the new HSGP NOFO will name based on prior years' priorities. The HSAC then reaches out to agencies that consistently apply for UASI funding to solicit new proposals that align to the New York State Strategic Document Plan. Once submitted, proposals are split up by investment area and reviewed by the HSAC. The HSAC then meets to review and select which projects will receive HSGP funding based on how well the proposed project addresses the stated priorities.

Port Security Grant Program (PSGP)

The objective of the Port Security Grant Program is to provide funding to port authorities, facility operators, and State and local agencies for activities associated with implementing the Area Maritime Security Plans (AMSPs), facility security plans and other port-wide risk management efforts. The NYPD is a member of the Area Maritime Security Committee Board of Directors and field review sub-committee and plays a significant role in delivering layered protection to the Port Authority of New York and New Jersey (PANYNJ). The NYPD employs a "Defense in Depth" strategy in delivering layered protection. Patrol units, Special Operations Division, and Counterterrorism Bureau all have vital roles in the protection of the PANYNJ and New York City as a whole. The NYPD's Counterterrorism Division (CTD) deploys multiple vessels with the express purpose of protecting against, detecting, or interdicting a terrorist attack that originated from the City's shoreline or required navigation of the City's waterways. CTD



deploys three vessels that are in daily use, equipped with RSI radiological-nuclear detection systems to scan the entire shoreline and navigable waterways of the City for radiological anomalies. In 2019 the NYPD was awarded \$8.3 million in funding under the Port Security Grant Program. Bureaus within the NYPD collaborate with the office of the Deputy Commissioner of Management and Budget in preparation of all PSGP projects. All FDNY projects are reviewed by a local committee of Port partners, which is chaired by the United States Coast Guard (USCG). Each project is reviewed and scored by the local committee. After the local review, each application is then reviewed and scored by FEMA. For the FY 2007- FY 2011 PSGP awards, the PANYNJ acted as the Fiduciary Agent for the Port of New York and New Jersey, using PSGP funds to develop a prioritized spend plan. The spend plan helped identify 200 critical PSGP-funded projects that addressed resiliency, recovery, and capability gaps in the port area. These projects were vetted by the U.S. Coast Guard Sector New York/New Jersey through a committee of local partners known as the Area Maritime Security Committee (AMSC).

IV. Adverse Threats and the Use of Capability Investments

The September 11 attacks significantly impacted how New York City and the Nation manage terror-related risks and fundamentally redefined how federal, state, and local public safety institutions approach homeland security. As described earlier, the threats to New York City have not abated. Figure 2 displays a map of just some of the realized adversarial incidents that have occurred since September 11.





Following are additional detail on these incidents:

- On May 1, 2010, a crowded Saturday evening, NYPD personnel were alerted to the scent of gunpowder emanating from an SUV parked in the heart of Times Square. NYPD personnel determined the vehicle contained incendiary materials and a timing device. The scene was cleared safely, resulting in no loss of life or injuries, and the NYPD later arrested the man responsible. First responders from Engine 54 and Ladder 4 of the FDNY recognized the smoking vehicle as a potential threat. Members from both companies had been trained on Terrorism Awareness (an 8-hour course) with HSGP funds.
- On September 17, 2016, a man placed three pressure-cooker bombs in locations around New York City (Jersey Shore, Chelsea, and Manhattan). Two of these bombs detonated and injured 30 individuals. The third bomb failed to explode and was located and neutralized by the NYPD, who arrested the man responsible.
- In March 2017, an African American man was stabbed to death in Manhattan by a man who was racially motivated by violent extremist narratives. The assailant intentionally traveled to New York City to conduct his attack believing he would receive more media attention for the incident.
- On June 30, 2017, a former employee entered Bronx Lebanon Hospital with a semiautomatic, AR-15 type assault rifle and opened fire, killing one person and wounding six others. During the attack, the gunman also tried to set a fire in the hospital. The FDNY's Counter-Terrorism Task Force responded to the incident to provide patient triage, medical treatment, and patient care.
- On October 31, 2017, a man drove a rented pickup truck into cyclists and runners for about one mile on the Hudson River Park's bike path, killing eight people and injuring eleven others. After crashing the truck, the driver then exited with two guns (a paintball gun and pellet gun) and was shot in the abdomen and arrested. The NYPD used multiple UASI and PSGP-funded capabilities in the response, including concrete barriers, Harbor Unit vessels, Aviation Unit rescue helicopter and crew gear, and the Emergency Services Unit, which used PSGP-funded mass casualty kits and medical bags to treat victims.
- On December 11, 2017, at the height of morning rush hour in New York City, a man was carrying a homemade pipe bomb which partially detonated in Times Square (adjoining to a **Port Authority bus terminal**). The impact of the detonation was limited to four individuals with minor injuries, including the man responsible, and resulted in no significant structural damages. Subway service in New York City was severely delayed for multiple hours following detonation. The FDNY's Counter-Terrorism Task Force was activated and responded to the incident.

One of the most important outcomes of the continued adversarial threats, both realized and interdicted, to New York City is that the NYPD and FDNY transformed themselves from traditional first responder agencies into counterterrorism agencies. Specifically, the NYPD and FDNY have built robust capabilities in the prevention and protection mission areas. Indeed, the major findings of this case study center on the development and implementation of that transformation using HSGP funded investments. Investments that highlight this transformation include the use of overtime to deploy the Counterterrorism Officer Program (CTO) and the coverage of overtime related to the NYPD's Critical Response Command (CRC); the salaries of the Intelligence Research Specialists and the FDNY's Center for Terrorism and Disaster



Preparedness (CTDP); and creating programs that cross-train steady-state first responders in counterterrorism skillsets that they can use to improve reporting of suspicious activity on the job, like the NYPD's Advanced Law Enforcement Rapid Response Training (ALERRT) and the FDNY's Emergency Response Plan drills. The case study highlights these and other investments, which illustrate the significant impact that these funds have had on increasing New York City's preparedness to face its own evolving threat landscape and that of the Nation. The following narratives describe how FEMA grant programs have played a critical role in supporting and maintaining this transformation.

The descriptions below highlight investments in counterterrorism preparedness capabilities, with each investment's primary funding source listed in brackets. **Appendix A: Project Narratives** contains more detailed descriptions of these investments.

Intelligence and Information Sharing

- NYPD Intelligence Research Specialists (IRS) [UASI]—The backbone of the NYPD's intelligence program is a cadre of analysts who examine intelligence from multiple sources-ranging from investigative reporting, online research and engagement, to partner agencies, international and domestic liaison reporting, and the public via the NYC-SAFE leads hotline-to provide operational and investigative support and identify global trends and developments that may impact the local threat landscape. The IRS fall under the NYPD's Intelligence Bureau (IB)-an essential component of the Department's crime fighting, precision policing, and counterterrorism efforts-and contribute to the collection and dissemination of vital intelligence related to violent extremism and terrorism, criminal activity, and cyber-crime/cyber threats. In 2018, the NYPD used \$7.7 million in UASI funds to support these analysts. The Intelligence Research Specialists provide both written and verbal intelligence briefings such as the Police Commissioner's Daily Intel and CT Brief (PCDB), Strategic and Tactical Assessments, Special Event Threat Assessments, daily, weekly, or bi-weekly roll-call briefings for Counterterrorism Bureau commands, and tailored briefings for other Bureaus/Units in the NYPD as well as national and international public and private sector partners on standing and as-needed bases. These and other IRS product lines and briefings inform a global audience, from all levels of personnel on NYPD's force to international intelligence stakeholders, via internal messaging platforms, DHS Homeland Security Intelligence Network (HSIN), NYPD Operation Sentry, and NYPD Shield. The IRS' analytical efforts ensure the NYPD stays ahead of crime and national security trends, and through robust analytic briefings and presentations for a network of international and domestic law enforcement, government, and private sector partners, contribute to the shared efforts of all partners in the counterterrorism, criminal, and cyber mission spaces.
- Domain Awareness System (DAS) [UASI]—The DAS is a crime-fighting and counterterrorism tool that integrates data from a network of cameras, license plate readers, gunshot detectors, and radiological sensors into a geographic information systems (GIS)-based user interface. The DAS allows users to query information from sensor feeds and crime databases by address and geocoded location. All 36,000 members of the NYPD have access to the DAS on their smartphone through a mobile application, providing real-time situational awareness to interdict and respond to threats. In one example, during the October 31, 2017 truck-ramming attack, NYPD officers used the



DAS to track the truck in real time to support law enforcement's response to the incident. Since the beginning of the program, the NYPD has invested \$90.5 million in SHSP funds and another \$398.3 million in UASI funds to support and maintain the DAS. The DAS also receives funding through PSGP and TSGP programs.

• **FDNY Center for Terrorism and Disaster Preparedness (CTDP)** [UASI]—The FDNY established the CTDP as the Department's preparedness focal point. Much like a formal fusion center, the CTDP shares information and intelligence products with fire,

law enforcement, intelligence, and other first responder agencies. An example of this is the weekly *Watchline* bulletin, an intelligence product distributed to local, regional, and international intelligence and first responder departments. UASI grant funds supported investments in other products related to topics such as building collapses, technical rescues such as high-rises and confined

"Our intelligence products go to an estimated 20 countries. They leave a global footprint."

—Tom Currao, Chief of Counterterrorism and Emergency Preparedness, FDNY

spaces, chemical/biological/radiological/nuclear (CBRN), disease outbreaks, and mass casualty incidents. The CTDP also conducts joint full-scale exercises between the FDNY and the NYPD. FDNY created the CTDP as a direct result of post-9/11 AAR recommendations.

Special Event Security

• **Counterterrorism Officer (CTO) Program** [UASI]—The CTO Program allows NYPD patrol officers to deploy on overtime to counterterrorism-related events and receive specialized training from the counterterrorism bureau. After the program, CTOs return to

"The CTO Program is one of the best programs I have ever seen."

—Joe Gallucci, Deputy Chief, NYPD

their active patrol assignments, where they use their new experience and training to increase the scope and reach of the Counterterrorism bureau. The CTO program has trained and deployed approximately 800 existing NYPD patrol officers as specialized CTOs. Officers deploy to specific intelligence-driven locations to perform counterterrorism operations at events such as foreign dignitary visits, presidential visits, major parades and other sensitive locations in their geographic areas of assignment. Since the program's inception in 2012, the NYPD has invested \$61.6 million in UASI funds to support the CTO Program. The CTO Program's primary impact is that it creates a longterm, flexible and responsive counterterrorism capability and increases counterterrorism initiatives throughout New York City.

• **Concrete Barriers** [UASI]—Transportable concrete blocks establish a temporary vehicle boundary around an event perimeter and allow for designated checkpoints. Following the 2017 terrorist truck-ramming attack on a crowded bike path, the NYPD placed concrete barriers at intersections along the Hudson River Park bikeway as a preventative measure against future terror attacks. The NYPD also uses the concrete barriers to protect soft targets at large events, such as the New Year's Eve celebration and the New York City



Marathon. To date, NYPD has received a total of \$764,000 of UASI funds for the concrete barriers.

- FDNY Counter-Terrorism Task Force: The FDNY established the Counter-Terrorism Task Force (CTTF) to enhance public safety during such high-profile events as the New Year's Eve celebration in Times Square and the New York City Marathon. Both events, and others that take place throughout the year, bring many thousands of people together in dense urban areas, making each event a target of opportunity for terrorists and extremists. Members of the Task Force are assigned to these high-profile events, providing increased security and enhanced public safety. Each member of the team is outfitted with Ballistic Protective Equipment (BPE). In the event of an Active Shooter Incident (ASI) or Mass Casualty Incident (MCI), the Task Force works with the NYPD to respond, operating in a 'warm zone' to support the rapid triage, treatment, packaging and extrication of the wounded. The goal is to stop the bleeding and save lives. UASI funds have supported operational overtime during high-profile special events.
- Vapor Wake Detection Canine [UASI]— Explosive Odor Trailing Canines (EOT) consist of Vapor Wake and Explosive Odor Pursuit Canine (EOP) teams. EOT canines are specifically trained to trail the explosive odor to source, such as on a potential suicide bomber or while being transported. Teams are designed to work both in designated check points, as well as in large crowds and open areas. EOT Canines also can perform the function of traditional Explosive Odor Detection (EDC) Canines and can detect potential threats at greater distances. Canines are deployed daily throughout the New York City in mass transit locations, and for major sporting events, parades, New Year's Eve, July 4th and other events. During these deployments, all spectators are screened and open areas are searched by EOT canines.

Critical Incident Management

- Counter-Terrorism Task Force [UASI]—The FDNY (CTTF) program, previously described under Special Events above, creates teams of FDNY and NYPD personnel to reach victims in the immediate aftermath of an active shooter incident. Task Force teams comprise firefighters, emergency medical technicians (EMT), and emergency medical service (EMS) officers equipped with ballistic vests and helmets with police officers standing guard. Since its creation in 2016, the FDNY CTTF has responded to three nonotice incidents described earlier: the Chelsea Bombing, the Port Authority Bus Terminal bombing, and the Bronx Lebanon Hospital shooting. Triage is a critical component of any mass casualty response, and the Rescue Task Force Medical Committee worked with first responders and the larger medical community in NYC to create new triage protocols that have been approved by the State of New York and may be adopted by other jurisdictions. FDNY has used roughly 10 million in UASI funds to support the team, covering preparedness training, ballistic protective equipment, MCI bags and pouches, and drills.
- Tactical Hoods [UASI]—NYPD officers use tactical hoods to safely breathe during emergency situations. The hoods are equipped with a breathing filter apparatus, allowing NYPD officers to enter and disrupt dangerous emergencies while responding to potential terrorist or other assailant threats. X Under the FY18 program, 1,202 new recruits received tactical hoods for emergency situations, and another 1,829 received them in 2019.



- Belt Trauma Kits [UASI]—The belt-worn trauma kit provided to uniformed NYPD officers contains life-saving equipment for pre-hospital treatment of numerous types of injuries following an incident. Each kit contains a tourniquet, mini compression bandages, QuickClot Combat Gauze®, and a pair of gloves. Immediate, effective treatment of medical emergencies (e.g., extreme bleeding, obstructed airways) significantly increases a victim's chances of survival. Since introducing the kits in the police academy, police officers have used 210 kits, potentially saving the lives of the injured. The NYPD trains officers on how to use the kits during the police academy and during Advanced Law Enforcement Rapid Response Training (ALERRT) courses. To date, the NYPD has been awarded \$3.3 million in UASI funds to replenish and grow its supply of the belt-worn trauma kits.
- Critical Response Command [UASI]—In November 2015, the NYPD created the Critical Response Command (CRC) with \$2.5 million in FY2014 SHSP funding to establish a permanent cadre of hand-selected police officers trained in counterterrorism response. Deployed throughout the city, these officers remain ready to respond at a moment's notice to complex coordinated attacks similar to the November 2008 complex coordinated terrorist attack in Mumbai or the January 2015 attacks in Paris. The CRC conducts daily counterterrorism deployments to high-profile critical infrastructure sites, Iconic Locations, Special and Sporting Events, and Mass Transportation to deter terrorist planning and hostile surveillance operations. NYPD allocated \$8 million in FY2018 UASI funds to support CRC officers' overtime.

Training and Exercise Programs

• Emergency Response Plan Drill [UASI]— The FDNY's Emergency Response Plans (ERP) provide guidance and detailed tactical direction for incidents. FDNY updates its ERPs annually with consideration to emerging threats and hazards, input from 20 intelligence streams, and a worldwide threat assessment. FDNY uses UASI funds to support its ERP drills, training all 11,000 firefighters in the department annually. Examples of the drills include using a mock explosive and chemical lab to train fire and EMS crews on how to identify suspicious activities and remain safe in those dangerous environments. Other ERP drill examples include chemical attacks in subways and collapse and rescue incidents.

In coordination with the ERP drills, FDNY trains all its firefighters and EMS crews to complete Suspicious Activity Reports (SAR). SARs provide FDNY members a platform to report any suspicious activity they notice during a response, such as unauthorized chemicals or bomb-making supplies. Each year, FDNY receives 12 to 15 SARs, all of which are treated as leads and often result in counterterrorism investigations.

- Subway Simulator [UASI]—In 2005, the City of New York and FDNY constructed an exact model of a New York City subway tunnel for use in training simulations. Located on Randall's Island, the Subway Simulator provides firefighters and other first responders with the type of response environment they would experience during a real-world, terrorist event without disrupting regular subway traffic. Since 2005, thousands of personnel have received training in the subway simulator, and it remains a critical component of FDNY preparedness efforts.
- Advanced Law Enforcement Rapid Response Training (ALERRT) [UASI]— ALERRT provides officers with the baseline tactics needed to immediately respond to



and mitigate an active shooter incident. Officers train together to interdict the active threat and then provide life-saving treatment to victims of an incident using Belt-worn Trauma Kits. UASI grants fund the overtime of the officers that receive the training, as well as the facility that houses ALERRT courses. In 2018, the Counterterrorism Division training section trained 3,335 members of the NYPD in active shooter response training. A total of 13,706 members of the NYPD have been trained in active shooter response since 2016 through 2019 utilizing UASI funding. Since 2013, the NYPD has used \$26.5 million in UASI funding to support this program. FDNY Marine Response and Mitigation Training [PSGP] – The FDNY has conducted hundreds of hours of training to prepare members for the dynamic needs of the Port community. The trainings include Harbor Incident Response Training (HIRT), Swift Water Rescue Training, and NIMS Boat Operator Training. The FDNY also runs the Regional Shipboard Fire-fighting Simulator at the Fire Academy on Randall's Island. The Shipboard Fire-fighting Simulator is a four-story, 132-foot-long ship designed to reproduce the conditions first responders face while fighting fires aboard a vessel. The Shipboard Fire-fighting Simulator is a USCG approved training resource, providing training for firefighters, first responders, and emergency medical personnel from City, State, and Federal agencies. Since the opening of the simulator in August 2014, over 5,976 students from outside the City have come and trained with the FDNY on the simulator's evolutions, getting handson training in real-world shipboard environments, including a galley area, engine room, spill area, and confined space area. The list of outside agencies and partners that have come through the simulator include: FBI, USCG, New Jersey Fire Departments, U.S. Secret Service, DEP, SUNY Maritime, and Hofstra University medical personnel. The FDNY will be assisting the City of Albany to build a replica of the simulator to train local fire departments near Albany.

Tiered-Response Systems

Marine Operations Equipment [PSGP] – In the aftermath of 9/11, FDNY Marine Operations adopted the Tiered Response System – a preparedness system in which capabilities can be scaled and adapted to ensure the right mix of resources and expertise, depending on the type of incident or emergency. The Tiered Response System also ensures speed, giving the FDNY the capability to rapidly mobilize and respond to incidents within the City and throughout the region. PSGP funds have been instrumental for implementing the Tiered Response System within Marine Operations and for building preparedness capabilities to respond to emergencies within the Port.

Within Marine Operation's Tiered Response System, the FDNY can deploy a mix of rapid response fireboats (33-foot rapid response boats, 31-foot medical response boats, and a 33-foot scuba boat). These boats support the FDNY's 140- (for large-scale disasters) and 65-foot fireboats, and the Department's flood rescue, cold water, and surf rescue boats. Through the Port Security Grant Program, the FDNY invested in specialized marine response and mitigation equipment. This includes a cache of equipment ranging from radios for the Special Operations Command to replacement engines and parts for Marine Vessels.

 Bio-Terrorism Response [PSGP] – FDNY uses the Tiered-Response System framework to respond to and mitigate Bio-Terrorism threats. In 2014, the FDNY responded to the Ebola Virus Disease (EVD) outbreak by working with city, state and regional partners to



prepare for and safely respond to potential cases of EVD. ⁷ FDNY used PSGP funds to support specialized training and drills, protective equipment, and resources for responding to biohazards. These specialized trainings were important in building and sustaining the HazTac and HazMat Units, which played a key role in responding to the outbreak. The funds also helped purchase additional personal protective equipment (PPE) to manage cases of EVD, and specialized resources for providing medical treatment, transport, and patient care.

V. Grant Recipient Program Feedback

Throughout the case study, FEMA solicited feedback from New York City stakeholders on FEMA grant programs and possible federal-level improvements to support grant recipients. Recommendations from these discussions are presented below.

- **Grants Rules and Period of Performance:** Stakeholders report the difficulty in implementing new requirements within the NOFO without providing templates or working group sessions to allow for the understanding and preparation of these deliverables.
- Approval Process: New York City stakeholders note that their grants processes and planning would benefit from a quicker approval process from FEMA. For projects that require additional approval (from FEMA), the process is lengthy and expenses are not guaranteed to be allowable for the applicable period of performance (POP) but instead only from the approval date through the remainder of the POP which can cause budgetary restraints. The environmental planning and historic preservation approval processes can be very lengthy and difficult at times, especially when having to receive approval from local State Historic Preservation Office and government entities. Specifically, at locations where the property is being leased or loaned.
- Intelligence Analyst Apprenticeship: Case study participants noted the likelihood of intelligence analysis only increasing in importance for fire and law enforcement around the country. Intelligence analysis is not intuitive and benefits from rigorous coursework as well as structured best practices. FEMA could fill that role for first responders through the creation of an emergency management intelligence analysis apprenticeship program. The program could be held at existing FEMA training centers or on-site if a jurisdiction has large number of students.

VI. Conclusion

Since the events of September 11, 2001, New York City has been the target of over 33 terrorist plots, at least 17 of which have occurred in just the last five years. In response, both the NYPD and the FDNY have fundamentally transformed into terrorism prevention, protection, and response agencies. The adversarial events that followed the attacks of September 11 and described earlier in this report illustrate the continued terrorist threat environment that New York

⁷ <u>https://www1.nyc.gov/assets/fdny/downloads/pdf/FDNY_marine_operations_strategy.pdf</u>



City still faces. These incidents continue to influence the way emergency response agencies think about their missions and their evolution from traditional first responder agencies into counterterrorism agencies.

The findings from this case study illustrate the significant impacts of preparedness grant dollars used by New York City to improve its preparedness and response for acts of terror. Local stakeholders credit grant-funded investments for the trainings, equipment, and tools needed to advance the preparedness capabilities of their respective workforces, to save lives, and to protect the people of New York City.

FEMA will use the results from this and other case studies to enhance preparedness programs, develop tailored technical assistance, socialize best practices to other SLTT stakeholders, and to better communicate the impacts of preparedness grant programs to federal stakeholders, including Congress, state governments, local jurisdictions, and tribal governments.



VII. Appendix A: Project Narratives

This appendix presents more detailed descriptions of select investments that New York City completed to increase terrorism-related capabilities. The appendix presents investments across four categories: Intelligence and Information Sharing, Special Event Security, Critical Incident Management, and Training and Exercise Programs.

Intelligence and Information Sharing

Intelligence Research Specialists [UASI]

The backbone of the NYPD's intelligence program is the cadre of Intelligence Research Specialists (IRS) who examine information from multiple sources—ranging from investigative reporting, online research, and financial intelligence to partner agency information, international and domestic liaison reporting, and the public via the NYC-SAFE leads hotline—to provide operational and investigative support in a wide array of investigations and identify trends and global developments that may impact the local threat landscape. The IRS fall under the NYPD's Intelligence Bureau (IB)—an essential component of the Department's crime fighting, precision policing, and counterterrorism efforts—and contribute to the collection and dissemination of vital intelligence related to violent extremism and terrorism, criminal activity, and cybercrime/cyber threats.

IRS employ critical thinking and analytical and research skills to mitigate threats to the New York City community and provide tactical and strategic analytic support for IB investigations. The IRS work hand in glove with investigators and international and domestic liaison officers on terrorism and criminal cases, leads investigations, and cyber threat intelligence. Using multiple social media, open source, and cryptocurrency analysis and alerting tools, as well as proprietary intelligence reporting, analysts identify the threats of most concern and develop intelligence products to inform investigative partners and strategic decision makers. Analysts regularly develop leads, identify opportunities for additional collection, and highlight intelligence gaps for further investigation. In 2018, the NYPD used \$7.7 million in UASI funds to support these analysts and their products.

The IB's Intelligence Analysis Unit (IAU) divides the IRS into six teams, each linked with an investigative or liaison unit. The investigative analytic teams work closely with their detectives, running database checks, creating source directed requirements, developing new leads, and other investigative tasks. The investigative analytic products are used to inform operational decision making and provide NYPD senior executives with a clear and concise understanding of the current threat landscape in New York City. The strategic team works closely with the liaison unit to monitor global events, run database checks in support of international and domestic liaison partners, and produce strategic and tactical assessments on significant incidents and special events. For every major event, such as New Year's Eve and the New York City Marathon, analysts provide an event assessment to decision-makers on the current global threat environment, tactical trends, and any potential mobilizing factors that may impact security.

Through a range of finished intelligence products, regular briefings, and presentations, the analysts in IAU share actionable and finished intelligence with relevant partners within and outside the Department, while informing NYPD leadership on emerging threats, strategic issues,



special events, significant incidents, and extremist groups that may affect the threat environment in New York City. The IRS produce the Police Commissioners Daily Intel and CT Brief-a daily compilation of significant terrorism and criminal case developments, CT leads, and global incidents and relevant policy discussions-to update and inform NYPD executive leadership across the Department. IAU further disseminates finished strategic and tactical intelligence products to Department executive leadership, NYPD Members of the Service via internal messaging platforms, international, federal, and state and local partners via Operation Sentry and HSIN-Intel, and over 20,000 private sector partners via the public-private partnership NYPD Shield. IAU produces finished intelligence products in coordination with federal agencies across the United States Intelligence Community (USIC) and is responsible for formal tactical intelligence sharing with USIC partners via the Joint Terrorism Task Force. Along with these product lines, the IRS provide regular briefings to other bureaus and units within the NYPD to include daily, weekly, or bi-weekly roll-call briefs for the Counterterrorism Bureau's Lower Manhattan Security Initiative, Critical Response Command, World Trade Center Command, and Counterterrorism Division. Every month, analysts brief the NYPD's Command Level Training for training sergeants in every Bureau, Patrol Borough, and Precinct on terrorism and violent extremist activity in New York City and across the world.

The IRS' analytical efforts ensure the NYPD stays ahead of crime and national security trends, and through robust analytic briefings and presentations for a network of international and domestic law enforcement, government, and private sector partners, contribute to the shared efforts of all partners in the counterterrorism, criminal, and cyber mission spaces.

Domain Awareness System (DAS) [UASI]

The DAS is a crime-fighting and counterterrorism tool, jointly developed by the NYPD and Microsoft, that integrates data from a network of cameras, gunshot detection, license plate readers, and radiological sensors into a geographic information systems (GIS)-based user interface. Since the beginning of the program, the NYPD received \$90.4 million in State Homeland Security Program funds and another \$398.4 million in UASI funds to support and maintain the DAS, as well as PSGP and TSGP funding. Compiling police databases and technology into one centralized system, the DAS's mission is to provide officers and other users with access to real-time information and situational awareness. Currently, the DAS integrates data from 23,000 cameras, 7,500 of which are owned by the NYPD. The remaining cameras incorporated in the DAS come from the Metropolitan Transportation Authority (MTA) and public/private partnerships with other stakeholders. By the end of 2020, the NYPD plans to incorporate an additional 27,000 cameras.

Public and private partnerships are critical to the DAS's success. As a joint venture with Microsoft, NYPD working groups outfitted the DAS to meet the needs of all its users. Many of New York City's large and small businesses provide security footage for use in the DAS, and, in return, the NYPD provides all its stakeholders unclassified briefings and trend analyses of DAS intelligence to increase transparency and improve security across the city.

The DAS is accessible to all NYPD uniformed personnel on a central database, as well as on their smartphones. The tool allows users to query information from all of the integrated sensor feeds as well as crime databases. On the dashboard, green icons signify active, live cameras across the city where all 36,000 members of the NYPD can access live footage. Yellow icons indicate geocoded locations for active emergency responses, where officers receive critical



information like location, threat type, and footage. Many DAS cameras include ShotSpotter technology, which detects and validates gunshots. Nearly 70% of gunshots in the city do not result in a call to 911, but with this technology, the NYPD can identify the location of gunshots and activate the 10 closest DAS cameras to watch, detect, and pursue a shooter. The DAS also processes close to 850 license plate readers (LPR), screening five million plates daily. These LPRs allow police officers to track suspicious persons leaving and entering the city, including those suspected of terrorist activity. The DAS saves these videos for 30 days. The DAS also uses Automatic Vehicle Locator, a GPS system currently installed in over 8,000 police vehicles, which provides enormous advantages in managing patrols and ensuring officer safety.

The DAS's capabilities proved vital during the response to the 2016 Chelsea bombing and the 2017 vehicle ramming on the west side of Manhattan. During the Chelsea bombing, officers used the DAS to track and follow the perpetrator's location. Using this information, the officers provided critical situational awareness to the JTTF, which allowed for the arrest of the bomber.

Similarly, during the October 31, 2017 car-ramming attack in which a car drove down a crowded bike path killing eight and injuring 11 people, NYPD officers used the DAS to track the car in real time.

FDNY Center for Terrorism and Disaster Preparedness (CTDP) [UASI]

In 2004, the FDNY created the CTDP. Serving as a focal point of the Department's strategic preparedness, the CTDP creates dynamic and practical approaches to counterterrorism, disaster

response, and consequence management. Core competencies of the Center include intelligence sharing, weapons of mass destruction and security preparedness, educational programs, ERPs, and scenario-based exercises. In many ways, the information-sharing and training activities of the CTDP are like those of a fusion center. The CTDP sees itself as being able to support response units in the field by defining problems and aligning those problems with solutions. Much of that alignment comes through intelligence and information sharing. Additionally, the CTDP maintains the continuity of operations plans for all FDNY administrative units.

Two recent examples of this engagement include working with the NYPD to develop an active shooter response plan and creating guidance on how to mitigate smoke and fire as terrorist weapons. Terrorist use of fire and smoke as a weapon rose to prominence during the 2008 Mumbai attacks and the 2012 Benghazi embassy attack. For the latter, the FDNY worked with the State Department following the attack to create a fireawareness product for the Department's security teams and



The October 31, 2019, edition of *Watchline*.

personnel stationed overseas. The CTDP also assigns Fire Marshals to the FBI JTTF, where they provide critical support to the JTTF HazMat Response unit, which investigates suspicious or unusual HazMat releases that may have a nexus to terrorism.

Another intelligence product coming out of the CTDP is *Watchline* (above), a weekly intelligence-based fire threat product distributed to NYC first responders and approximately 20 international intelligence and fire-fighting entities. FDNY analysts limit the *Watchline* to just one



page, allowing readers to glean the most important information and perspectives in just a few minutes. Over the past 10 years, the weekly briefing has never missed an edition, including holiday weeks and during disasters. The total regular readership is estimated to be more than 100,000 individuals across the globe.

One of the most important impacts of the CTDP has been building intelligence-related collaboration among the City's first responder departments. Prior to the CTDP's existence, intelligence-sharing sometimes was not prioritized. Today, the CTDP reports that FDNY and NYPD have established formal channels for information sharing and planning because both organizations have seen the benefits in shared response, primarily in the form of arriving on-site with previously agreed-upon protocols and incident management priorities. Breaking down barriers between departments is a perennial goal in emergency management, and the CTDP sees this as a critical marker of success.

This collaborative focus is strengthened not only through direct information sharing, but it also is evident in the 30 to 50 trainings and exercises hosted by CTDP each year. For example, participants in recent trainings include the Department of Health, NYPD, West Point cadets, New York State National Guard, medical transport entities, and medical facilities outside of the NYC region. Topics include active assailant, terrorism response, biocontainment, and incident management training.

Another form of information sharing managed by the CTDP is the Building Information iPad app and laminated building information cards. The app has interactive floor plans for nearly all NYC buildings that have emergency action plans. Combined with GPS technology, the app lets incident commanders see real-time positioning of trackable personnel and equipment, helping to ensure that both are stationed where they are supposed to be. This also informs decisions on when to move firefighters out of danger, for example if part of a building looks ready to collapse. The laminated cards provide a quick overview of a building, including on-site hazardous materials, a brief schematic including ventilation and stairwells, and information useful for firesuppression and rescue. All 10 of the CTDP's permanent staff are entirely grant funded, including the Center's intelligence analysts. Additionally, any detailed staff who stay longer than 30 days are then covered under the grant. The FDNY utilizes roughly \$2.0 million in grants funds to support the CTDP each year.

Special Event Security

Counterterrorism Officer (CTO) Program [UASI]

Just as New York City police officers learn to identify, detect and deter criminal activity, NYPD officers must also develop skills to identify, detect and deter terrorist activity. As a result, the New York City's CTB launched the CTO Program in 2012 to fund overtime deployments and trainings to prepare patrol officers to function as CTOs.

CTO participants, or CTOs, serve as a force multiplier that the NYPD deploys outside their scheduled patrol hours to perform counterterrorism operations at mass gatherings and other large-scale events, including dignitary visits, presidential visits, papal visits, and parades. During these special operations, CTOs work hand in hand with other CTB assets who conduct site surveys through the CTB's Threat Reduction Infrastructure Protection Sections (TRIPS),



inspecting garages with Vapor Wake canines and Explosive Detection canines. The NYPD also employs a multi-layered approach for CTO participant deployments to screen and monitor large crowds. CTOs also manage select checkpoints and screening centers. For example, during the New York City Marathon, the NYPD used 122 sand trucks and 871 police cars for traffic barricades, and those physical barriers were complemented by CTOs who screened incoming and outbound vehicles.

Rotating through each borough, CTB officials train 30 CTOs at a time for about two weeks. The CTO Program supports the overtime costs associated with these expanded trainings and currently consists of approximately 800 specialized counterterrorism officers embedded across all 77 police precincts in New York City's five boroughs. The NYPD also assigns CTB investigators to the JTTF to increase coordination between the city and the FBI.

Since the program began in 2012, NYPD has used \$61.6 million from UASI to fund the overtime pay that CTO operations require. The CTO Program creates a long-term, sustainable counterterrorism capability and increases counterterrorism initiatives throughout New York City by supporting an increase in NYPD officers' skills and knowledge. CTO deployments to critical infrastructure and strategic locations throughout New York City, saturate these areas with a uniform presence, which prevents, disrupts and deters terrorist activity.

Concrete Barriers [UASI]

Transportable concrete blocks are used for temporary vehicle boundaries along an event perimeter and allow for designated checkpoints. Following a 2017 terrorist attack in which a perpetrator drove a pickup truck down a crowded bike path, killing eight and injuring 11, the NYPD placed concrete barriers at intersections along the Hudson River Park bikeway as a preventative measure against future terror attacks.⁸ The NYPD also uses the concrete barriers to protect soft targets at large events, such as the New Year's Eve celebration and the New York City Marathon.

Vapor Wake Detection Canine [UASI]

Vapor Wake canines are trained to detect explosive materials and other illicit substances. New York City's Vapor Wake program trains canines to detect either explosives worn on a moving target or placed in illicit items, or USBs and other electronics. To date, the NYPD have been awarded \$2.7 million in UASI funds to maintain the canines' presence and help keep New Yorkers safe in densely crowded areas.

The NYPD's Vapor Wake program has assisted several NYPD and FBI investigations. On one occasion, NYPD and FBI officials searched an apartment for illicit substances and electronics for hours. In just 20 minutes, one Vapor Wake canine that was trained to detect electronics detected and uncovered USBs and other devices, helping expedite the investigation and improving evidence collection. This non-terrorist-related incident demonstrates the program's broader benefits across all NYPD teams and capabilities.

⁸ <u>https://www.nytimes.com/2017/10/31/nyregion/police-shooting-lower-manhattan.html</u>



Critical Incident Management



FDNY Counter-Terrorism Task Force Protective Equipment and Emergency Medical Supplies

Counter-Terrorism Task Force (CTTF) [UASI]

Following the Paris attacks of 2015, the FDNY Commissioner tasked FDNY leadership with designing a response mechanism prepared for quick deployment to such disasters in New York City. Using \$3.1 million in UASI funding in 2018, New York City funded the CTTF, in which specially trained EMS personnel operate in conjunction with NYPD force protection in "warm zones" during active shooter events to triage and provide lifesaving care. Task Force teams are composed of firefighters, EMTs, and EMS officers all outfitted in ballistic vests and helmets with police officers standing guard. Prior

to the Rescue Task

Force structure, EMS and fire services would have to wait for law enforcement to clear an area of potential human threats before life-saving efforts could begin. With a blended unit of law enforcement and EMS and fire services, response times can be much faster.

The Rescue Task Force has been deployed in several realworld incidents. Shortly after its formation, the Rescue Task Force deployed in response to the 2016 Chelsea Bombing to triage patients and treat the wounded. In June 2017, when an ex-employee killed one person and wounded six others at the Bronx Lebanon Hospital, the Rescue Task Force entered the hospital to treat seriously wounded patients while the NYPD searched for the gunman.⁹ The Rescue Task Force also immediately deployed following the 2017 Port Authority Bus Terminal bombing.



FDNY's Counter-Terrorism Task Force Ballistic Vest

⁹ <u>https://docs.house.gov/meetings/HM/HM05/20190506/109350/HHRG-116-HM05-Wstate-CurraoT-20190506.pdf</u>

National Preparedness Assessment Division Grant Effectiveness Case Studies



The CTTF receives its training at the FDNY CTDP and works extensively with NYPD counterparts. Each year, NYPD and FDNY CTTF members attend a three-day training involving communications and movement of Task Force members, medical care and patient movement in warm zones, self and buddy aide for injured members, improvised explosive awareness, and drills around a variety of scenarios, such as a classroom shooter with a secondary device. In 2018, the FDNY and the NYPD held 120 days of joint training, and the CTTF deployed for pre-

staged events 69 times, including a two-hour joint training session at each deployment. In 2019, approximately 100 Fire/EMS members and 60 NYPD members received training each week.

The CTTF Medical Committee formed in 2018 to redesign how mass casualty triage is performed in the City. Led by CTDP staff, the Medical Committee developed a triage plan that focuses on getting trauma cases requiring surgery out of a warm or hot zone and into a hospital. The elements of this plan include new training for first responders and a marking kit for clear victim identification and classification. In just one year, the Medical



FDNY Counter-Terrorism Task Force Pre-Staged Vehicle Example

Committee created the new triage protocols and had them certified by the State of New York. Currently, the protocols are under consideration for adoption by other state and local governments, and potentially for inclusion in the next iteration of the National Fire Protection Association's Active Shooter and Hostile Response codes and standards.

Tactical Hoods [UASI]

NYPD officers use tactical hoods to safely breathe during emergency situations. The hoods are equipped with a breathing filter apparatus, allowing NYPD officers to enter and disrupt dangerous emergencies while responding to potential terrorist or other assailant threats. Under the FY2018 program, 1,202 new recruits received tactical hoods for emergency situations, and another 1,829 received them in 2019.

Belt Trauma Kits [UASI]

The belt-worn trauma kit provided to uniformed officers contains life-saving equipment for prehospital treatment of numerous types of injuries. Immediate, effective treatment of extreme bleeding and obstructed airways can significantly increase the number of lives saved, including law enforcement, first responders, and civilians alike.

With funding allocated from 2015 UASI through 2019 UASI the NYPD has expended approximately \$1.8 million in Belt Trauma Kits. In addition, the NYPD received 20,000 kits



Packaged Contents of a Belt-Worn Trauma Kit



from NYS DHSES, which were distributed throughout the Department. The NYPD's CRC possesses 201 kits for its specialized units, and belt-worn trauma kit training has become a staple of ALERRT courses, in which all members of the police force undergo kit training. Each kit contains a tourniquet, mini compression bandages, QuickClot Combat Gauze®, and a pair of gloves. Since introducing the kits into the police academy and ALERRT courses, first responders have used the kits on 210 occasions, potentially saving the lives of those injured.

Critical Response Command [UASI]

Established on November 20, 2015, the CRC serves as one of New York City's first lines of defense against a terrorist-related attack. CRC members, a permanent cadre of hand-selected police officers with a counterterrorism mission, receive training to respond swiftly and with sufficient expertise and force to highly organized and heavily armed attacks. CRC members are also trained in special weapons and long guns, explosive trace detection, radiological and nuclear awareness, and biological and chemical weapons awareness, which equip them with the skills to detect an impending attack and use the best possible response to an emerging situation.

The CRC consists of 534 police officers and 27 canines. One hundred CRC officers are activated at any given time, covering strategic locations with a uniform presence to disrupt and deter terrorist planning and hostile surveillance operations. Deployed throughout the city, CRC members remain ready to respond at a moment's notice to complex coordinated attacks similar to the November 2008 Mumbai attack or the January 2015 attacks in Paris. The NYPD used \$8 million in UASI funds to support CRC officers and their deployments in 2018.

Two examples of CRC deployment are provided here. First, following the publishing of a letter in the UK titled "Punish a Muslim Day 3rd April 2018," CRC deployed to Islamic Houses of Worship throughout New York City. With help from the NYPD Community Affairs Bureau, CRC was able to identify and work with local Mosques during that time. As a second example, CRC officers were able to quickly deploy to these same locations during the Christchurch, New Zealand Mosque attacks that left 51 dead and many others injured in March 2019.

Training and Exercise Program

Emergency Response Plan (ERP) Drills [UASI]

ERPs are a set of annual trainings that provide guidance and detailed tactical direction to FDNY firefighters and EMS technicians for a variety of incidents. FDNY updates its ERPs annually with consideration to emerging threats and hazards and conducts the drills on Randall's Island and Fort Totten. FDNY uses approximately \$2 million in UASI grant funding to pay for the training facilities and overtime expenses needed to exercise all 11,000 firefighters in the force. For the fourth iteration of the ERP drills, the FBI constructed mock explosive and chemical labs to train fire and EMS crews on how to identify suspicious activities and remain safe in those dangerous environments. Other ERP drills address a variety of areas, including HazMat, chemical attacks in subways, and collapse and rescue incidents.



In coordination with the ERP drills and the FBIconstructed labs, FDNY trains all its firefighters and EMS crews to complete suspicious activity reports (SARs). The SAR program began as a collaborative effort between the FDNY CTDP and the Bureau of Fire Investigation to provide EMS and fire response crews a platform to report any suspicious activity they may notice during a response, such as unauthorized chemicals or bomb-making supplies. On scene, the officer fills out the SAR long-form.

Subject Information	Location Information				
Gender		Incident Borough			
- None - the second process of	~	- None -			
Race		Incident Box Number			
- None -					
Age		Building Type			
- None -		- None -			

Digital Image of an FDNY Suspicious Activity Reporting Form

Upon returning to headquarters, the officer completes the SAR digitally, uploading the information into a central database. Once uploaded, the SAR becomes available to CTDP and the Bureau of Fire Investigation for further analysis. After CTDP and the Bureau of Fire Investigations vet the information, the Commanding Chief forwards the intelligence on to the JTTF, where the investigation enters the FBI's domain. On average, FDNY officials complete between 12 and 15 SARs annually.

Subway Simulator [UASI]

In 2005, the City of New York and FDNY constructed an exact model of a New York City subway tunnel for use in training simulations. Located on Randall's Island, the Subway Simulator provides firefighters and first responders with the type of response environment they would experience during a real-world, terrorist event. The simulator is outfitted with two full-size train cars, a passenger platform, column structures, and a third rail to mimic actual underground conditions. During exercises and drills, the simulator fills with artificial smoke and a soundtrack of distressed passenger noises, impairing the firefighters' visual and auditory



"Terror on the Tracks" Emergency Response Plan Drill

senses. Typically, Subway Simulator trainings occur at night with two firefighting companies trained in each session. The Subway Simulator allows the firefighters to train in a real-world environment without disrupting one of the city's 472 stations or the daily flow of two million passengers.

Using intelligence gathered from FDNY's CTDP, exercise designers develop and modify the Subway Simulator trainings to reflect the emerging terrorist threats. For example, CTDP officials identified potential train derailment tactics as particularly threatening for New York City transit systems. As such, exercise designers and instructors train firefighters and EMS crews on the risks associated with train derailments, including potential terrorist activity. During one training, firefighters responded to a train derailment in which one of the victims was wearing a fake bomb vest. Firefighter crews identified and isolated the additional threat, while safely evacuating the other victims to safety.



Advanced Law Enforcement Rapid Response Training (ALERRT) [UASI]

ALERRT provides police officers across the country with the baseline tactics needed to immediately act and mitigate an active shooter incident. Adopting ALERRT and modifying the program to meet its standards, the NYPD's Counterterrorism Division Training Section has trained more than 17,000 police officers in active shooter and post-engagement strategy since 2013. Officers train together to interdict the active threat and then provide life-saving treatment to the victims of the incident, including using belt-worn trauma kits if needed.

UASI grants fund both the overtime salaries of the officers that receive the training as well as the lease on the facility where the ALERRT classes occur. In 2018, the NYPD used \$6.1 million in UASI funds to support the facilities and pay for the officers' trainings. The NYPD holds 12 classes each month. Classes include lectures, trainings, and live-action mock incidents in which officers track down the perpetrator, stop the





killing, and administer life-saving treatment to the survivors. The grant-funded facility includes a lecture room, a miniature shooting range for short-range weapons, and a variety of rooms that simulate a diverse set of response environments. ALERRT training designers identified that 58% of active shooter incidents occur in a business environment. As such, the training facility includes several rooms filled with cubicles and offices, as well as hospital and school rooms.

NYPD ALERRT courses even reach an international audience, training [#] delegations in active shooter response and post-engagement strategy.¹⁰

FDNY Marine Response and Mitigation Training [PSGP]

The FDNY has conducted hundreds of hours of training, preparing members for the dynamic needs of the Port community. FDNY has created a Shipboard Simulator on Randall's Island that delivers USCG-approved marine-based response and mitigation training for members of the FDNY and regional partners. FDNY invested PSGP funds in the following marine response and mitigation trainings:

¹⁰ https://www1.nyc.gov/assets/nypd/downloads/pdf/counterterrorism/active-shooter-analysis2016.pdf

National Preparedness Assessment Division Grant Effectiveness Case Studies



- Harbor Incident Response Training (HIRT)
- Swift Water Rescue Training
- NIMS Boat Operator Training
- Shipboard Firefighting Simulator Exercises
- Shipboard Firefighting Symposium in Virginia
- United States Coast Guard Licensing: Master, 100 Tons and Operator of Uninspected Passenger Vessels (OUPV)
- Blue Force Tracker Intro and Resiliency
- Zodiac Boat Operators Class
- Water Rescue Drills
- Liquefied Natural Gas Spill Control and Fire Suppression Course
- NFPA Flammable Liquids Bulk Storage Specialty Course
- Shipboard Damage Control Awareness Training
- Yamaha Engine Operator and Maintenance Course
- Equipment Rigging and Certification
- MTU Electronics Course

Marine Operations Tiered Response [PSGP]



FDNY Marine HazMat Technician Course and Regional Shipboard Simulator



Rapid Response Fireboat

In the aftermath of 9/11, FDNY Marine Operations adopted the Tiered Response System—a preparedness system in which capabilities can be scaled and adapted to ensure the right mix of resources and expertise, depending on the type of incident or emergency. Resources in a tiered-response scale up from least to most specialized, and dispatch and incident commanders are trained to deploy varying configurations of those resources depending on the type of incident. ¹¹

The Tiered Response System also ensures speed, giving the FDNY the capability to rapidly mobilize and respond to

incidents within the City and throughout the region. FDNY used PSGP funds to update its fleet with new high-performing fireboats to better protect New York City waterways.

¹¹ https://www1.nyc.gov/assets/fdny/downloads/pdf/FDNY_marine_operations_strategy.pdf



Within Marine Operation's Tiered Response System, the FDNY has improved its strategy of protection and response for New York waterways by acquiring vessels that protect firefighters

and bring improved medical care to victims. FDNY used PSGP funds to upgrade its fleet of rapid response fireboats, including 33foot rapid response boats, 31-foot medical response boats, and a 33-foot scuba boat. These boats support the FDNY's 140-foot fireboats for large-scale disasters, 65-foot fireboats, and the Department's flood rescue, cold water and surf rescue boats. These high-performance fireboats have the capacity to respond to complex and challenging water-born disasters. The fireboats also include filtrations systems that allow responders to safely enter areas contaminated with hazardous materials.

Through PSGP, the FDNY acquired replacement equipment that includes:

- HazMat equipment and PPE for the Marine HazMat Unit
- Mounted camera systems
- Yamaha engine parts
- Replacement engines
- Tools used in maintenance shops
- Raised generators for Marine Support Facilities
- CBRNE handheld sensors and detectors
- Air compressors for dive and scuba teams

Bio-Terrorism Response

FDNY expanded its Tiered Response System to respond to and mitigate threats from hazardous materials, including infectious pathogens. FDNY utilizes the framework to combine trainings, equipment, and protective equipment needed to contain contamination during an outbreak. ¹² In 2014, the FDNY responded to the Ebola Virus Disease (EVD) outbreak by working with city, state and regional partners to prepare for and safely respond to potential cases of EVD. PSGP funds supported the building and sustaining of the FDNY HazMat and HazTac Units. The units include EMTs and paramedics and received specialized training to administer

care to contaminated patients in all levels of protective gear.



FDNY Marine Operations and Port Security



FDNY's HazMat and HazTac Teams

The FDNY also increased its supply of PPE and conducted training for units to safely put on the protective gear.

¹² <u>https://www1.nyc.gov/assets/fdny/downloads/pdf/FDNY_marine_operations_strategy.pdf</u>



The FDNY's Center for Terrorism and Disaster Preparedness (CTDP) also developed an EBV simulation exercise to improve protocols and determine its level of preparedness. On November 5, 2015, a full-scale exercise with FDNY HazTac and HazMat units, hospital staff, and other city and state staff was held to simulate moving a suspected Ebola patient between hospitals. The units and other participants wore full PPE during the exercise.