

Boston One Year Later: DHS's Lessons Learned

Introduction and Summary

On April 15, 2013, two improvised explosive devices detonated near the finish line of the Boston Marathon, killing three bystanders and wounding over 260 others. With no identified suspects, Federal, State and local law enforcement undertook a massive investigation, led by the Federal Bureau of Investigation (FBI), culminating on April 18 in a public announcement identifying two possible suspects. Later that evening, two suspects matching the FBI's description reportedly killed a Massachusetts Institute of Technology police officer and engaged in a confrontation with law enforcement, resulting in the death of one of the suspects, later identified as Tamerlan Tsarnaev. The other suspect, later identified as Tamerlan's younger brother, Dzhokhar Tsarnaev, eluded authorities, prompting a massive manhunt that went on for more than 12 hours. The suspect was eventually located, taken into custody, and charged with the use of a weapon of mass destruction and malicious destruction of property resulting in death.

Following the bombings at the Boston Marathon, then-Secretary of Homeland Security Janet Napolitano directed a "Hot Wash" of the event in order to identify key lessons learned for the Department. What follows are some of the lessons learned by DHS from the Boston experience, based on discussions with DHS leadership and component officials from both headquarters and the field. These lessons focus on the Department's preparedness efforts, its response to the incident itself, and communications between the Department and its various stakeholders.

DHS works with first responders, law enforcement, individuals, and communities across the country to reduce vulnerabilities and enhance preparedness while strengthening emergency response capabilities at the Federal, State, local, tribal and territorial levels. While America is stronger and more resilient as a result of efforts over the past decade to build robust national capabilities, the Boston Marathon bombings serve as a reminder that threats from terrorism persist and continue to evolve.

Goals & Objectives

The Department has sought to identify key lessons learned from the event and its aftermath. These findings and lessons learned serve as a basis for longer-term planning and implementation efforts and recommendations to improve the Department's capacity to support local efforts and coordinate the Federal response to evolving threats.

In the wake of this terrorist event, the Department conducted hours of discussions with DHS component leadership, as well as Boston area field personnel from component agencies. These discussions focused on a range of topics, including preparedness activities, actions taken immediately following the attack, support for law enforcement and the investigative process as well as information sharing with law enforcement and other stakeholders in the Boston area and across the country. Additionally, the discussions touched on DHS's longtime partnerships and work in the Boston region, which include training activities, exercises, grants and engagement with State and local law enforcement, first responders and other Federal partners.

Themes

DHS identified several themes throughout the planning and preparedness activities that were undertaken in cooperation with the City of Boston and the Commonwealth of Massachusetts prior to the Boston Marathon, immediately following the attack in Boston, and in ongoing communication with stakeholders. Among the most significant themes identified were:

Early, Sustained Engagement and the Relationship to Preparedness: DHS grants, training and workshops as well as drills and exercises throughout the Northeast region, and specifically in Boston and the Commonwealth of Massachusetts, built preparedness capabilities to enhance responses to complex, catastrophic attacks. Participants credited these investments for the coordinated and effective response to the bombings by law enforcement, medical, and other public safety personnel.

Interoperable Communications: DHS components stressed the need for interoperable communications among Federal, State, and local partners. During the incident, State and local public safety officials reported that they were able to achieve interoperability across the various radio systems used to coordinate Fire, Emergency Medical Services (EMS), and law enforcement responses to the bombings as well as during the search for the second suspect on April 18 and 19, 2013. However, some DHS components, specifically U.S. Immigration and Customs Enforcement (ICE) and United States Secret Service (USSS), reported discrete episodes of commercial wireless network saturation and incompatibility of certain radio communications between law enforcement organizations and State and local responders.

Need for a Focal Point for Field and Headquarters (HQ) Response Coordination: In the wake of the attacks, DHS mounted a significant response effort in Boston, in Massachusetts, throughout the Northeast region and across the country. Field offices, HQ elements and component officials stressed the value of a single coordination point for their operations.

Strong Appetite for Information Sharing and Communications: Both internally and externally, DHS components raised the need to balance responding to requests for information quickly with the importance of relaying confirmed, official and actionable information. Multiple interagency equities, coupled with requests for information from around the country, added a further layer of complexity, as did the importance of preserving the integrity of the investigation. At the same time, feedback from external partners on communications throughout the immediate response and ongoing investigation was positive. DHS, in coordination with the FBI, released Joint Intelligence Bulletins highlighting protective measures and details of the device used in the attacks, which were well received by state and local law enforcement. Similarly, DHS, in coordination with the FBI, utilized regular stakeholder calls to share information with fusion centers and state and local officials.

DHS Law Enforcement Support: Following the bombings, DHS offered broad support for the FBI-led investigation in terms of law enforcement agents and officers assigned to the Joint Terrorism Task Force (JTTF), DHS personnel supporting the response and investigation, and unique authorities, expertise and resources.

Partnerships with Federal, State, Local and International Authorities are Vital: DHS components emphasized the importance of prior relationships with local, state, regional and international partners as critical to effective communication during and after an incident.

Boston Marathon Bombings Preparedness and Response Activities

Boston Marathon Event Posture

Prior to the Boston Marathon, DHS components supported and advised event planners. Within DHS, USSS, the Federal Emergency Management Agency (FEMA), Domestic Nuclear Detection Office (DNDO), Office of Operations Coordination and Planning (OPS), Science & Technology Directorate (S&T), Office of Intelligence & Analysis (I&A), National Protection and Programs Directorate (NPPD) Office of Infrastructure Protection (IP), and the National Cybersecurity and Communications Integration Center (NCCIC) were actively monitoring the event and ready to provide support as requested.

While intelligence reporting indicated no credible threat to the event, its designation as a Special Events Assessment Rating (SEAR) 2 by the Special Events Working Group meant there were Federal, State, and local security and logistical support resources on hand.¹ A long, open air venue, as well as the iconic nature of the event as the world's oldest annual marathon, contributed to the Boston Marathon's rating. In 2013, the Boston Marathon was the seventh highest rated overall SEAR event in the Nation. The FBI was designated the event's lead federal law enforcement agency and the Massachusetts State Police was the designated lead local law enforcement and public safety organization. The Massachusetts Emergency Operations Center (EOC) was the designated operations center for the event.

Leading up to the event, the DHS Massachusetts Protective Security Advisor (PSA) as well as representatives from FEMA, and NPPD's Federal Protective Service (FPS) participated in Boston Marathon Security Coordination meetings alongside the Boston Athletic Association, the Massachusetts Homeland Security Advisor, the Commonwealth Fusion Center/Massachusetts State Police Counter-Intelligence Unit, the Boston Regional Intelligence Center, and the FBI/JTTF. The Massachusetts PSA worked directly with owners and operators of critical infrastructure to identify facilities in proximity to the event. Engagement included documenting protective measures, reviewing past assessments, providing State and local partners with map books of all critical infrastructure and chemical facilities in close proximity to the marathon route, and monitoring infrastructure for changes in posture on a real-time basis.

In addition to collaboration with the interagency, as well as State and local partners, DHS field offices in Boston have longstanding relationships with one another, helping to foster a "One DHS" culture. This ensured that roles and responsibilities were clearly delineated and understood, resulting in a coordinated response to the attack in Boston. For example, DHS components worked together on port security, at Boston Logan International Airport and through the Boston JTTF. DHS law enforcement agencies also regularly participate in forums designed to foster strong relationships and collaboration among Federal law enforcement in the Boston

¹ An Integrated Federal Support Overview was created for the Boston Marathon which included the roles of the 16 federal participants and personnel deployment information for the nearly 200 personnel on call.

area and in Massachusetts such as quarterly Special Agents in Charge (SAC) meetings, chaired by the USSS Boston SAC, and issue-specific boards.

Immediate Response

The role of bystanders immediately after an incident can make a critical difference in managing injuries and saving lives. As a major athletic event, the Boston Marathon attracted a number of individuals with medical backgrounds or training, including event medical personnel staged near the bombing sites. In addition, bystanders acted on good instincts, working to control bleeding and rapidly moving the wounded to hospitals, which saved lives. The Boston attack also highlighted a potential paradigm shift in EMS protocols during a mass casualty event. Under widely used protocols, EMS is generally instructed to wait until a scene is safe and secure before entering to treat victims. However, because EMS members and medical staff were pre-staged and on scene for the Marathon, they were able to attend to victims immediately following the bombings. FEMA personnel noted that the EMS success in Boston is leading the first responder community to rethink the utility of securing a perimeter before EMS can enter and instead move to a system in which they can begin treating victims immediately.

Likewise, the City of Boston was well positioned to respond to emergency situations given the significant planning, exercises and training focused on similar, large-scale, complex events it had undertaken in recent years. Patients were treated by first responder personnel, as well as bystanders, and evacuated to local hospitals for further care. This immediate response, along with careful planning by first responders to distribute patients throughout area hospitals instead of only one facility, worked well.

Following the bombings and initial response, FEMA activated its Regional Response Coordination Center in Boston to monitor response operations in the event that federal assistance became necessary, and contacted Federal and Commonwealth emergency management partners to reiterate FEMA's support. In support of the responders in the immediate Boston area, U.S. Customs and Border Protection (CBP) worked collaboratively with the Boston Police Department and Massachusetts State Police to deploy air assets and other forms of transportation support. In addition, the Medical Intelligence Center² in Boston was used to share critical information among first responders in the wake of the attack.

The NPPD Office of Emergency Communications (OEC) also provided field support through their Regional Coordination Program (RCP). Following the bombings, NPPD/OEC's RCP coordinated the use of interoperability frequencies throughout the region to successfully ensure an interoperability channel for use by Boston officials. In addition, the National Coordinating Center for Communications under the NCCIC hosted conference calls with Federal, State, and private sector emergency communications responders to share awareness and solicit requirements. These calls confirmed that the wireless network status immediately after the bombings was congested for four hours, but neither damaged nor shutdown. Traffic demand

² The Medical Intelligence Center is a municipal organization, partially funded through DHS Urban Area Security Initiative grants, which allows Boston Emergency Medical Services, first responder agencies, including police and fire, hospitals, public health departments, community health centers, long-term care facilities, State and Federal as well as public and private partners to share information and work collaboratively in response to large scale incidents.

dropped to levels supportable by existing infrastructure within four hours and no additional network enhancement was required.

In response to Massachusetts Governor Patrick's request, President Obama issued an Emergency Declaration for Massachusetts on April 17 to "alleviate the hardship and suffering caused by the emergency on the local population, and to provide appropriate assistance for required emergency measures, authorized under Title V of the Stafford Act, to save lives and to protect property and public health and safety, and to lessen or avert the threat of a catastrophe in the counties of Middlesex, Norfolk, and Suffolk." This declaration authorized FEMA to identify, mobilize, and provide at its discretion, equipment and resources necessary to alleviate the impacts of the emergency. FEMA also authorized State and local agencies in Massachusetts to use previously awarded grant funding to support law enforcement and first responder overtime costs resulting from investigation support activities and heightened security measures, from April 15 through May 5, 2013. Additionally, FEMA granted a similar authorization for State and local agencies in other jurisdictions hosting upcoming major special events.

Law Enforcement Assistance

DHS provided support to its Federal, State, and local law enforcement partners in the investigation following the attack. This included establishing an extended perimeter to intercept potential suspects and interview witnesses, working with the FBI to develop products such as Joint Intelligence Bulletins, and providing briefings to State and local law enforcement and homeland security officials, critical infrastructure owners and operators, and faith-based organizations.

During the initial period following the attack, U.S. Immigration and Customs Enforcement (ICE)/Homeland Security Investigations (HSI) and NPPD/FPS agents were paired with FBI agents in the field in order to amplify coverage. ICE/HSI, NPPD/FPS, and USSS personnel staffed the FBI command post and immediately deployed agents to the blast site, as well as other locations to secure crime scenes and gather evidence. ICE and NPPD/FPS personnel assisted in establishing an extended perimeter in the Boston area, an initiative supported by the FBI and other agencies.

Immediately after the incident, CBP's National Targeting Center (NTC) re-vetted all flights that had departed earlier in the day from Boston, New York and Newark to identify any potential subjects of interest linked to the bombing. CBP also began enhanced vetting of all outbound flights departing from these three cities and initiated heightened outbound operations, supported by ICE/HSI and the Transportation Security Administration (TSA), which included interviewing potential witnesses at the airport to gather information for the investigation, complementing interviews with witnesses at the bomb site. Along the Northern Border, CBP collaborated with Federal, State, local and Canadian authorities to conduct enhanced outbound operations.

In support of the response effort, TSA heightened security throughout the Northeast region airports with increased explosive trace detection, canine deployment, gate checks and behavior detection activities. The week of April 15, 2013, TSA conducted Visible Intermodal Prevention and Response (VIPR) operations at multiple mass transit, passenger rail, and aviation locations

in the Boston metropolitan area. Nationwide, TSA increased the operational tempo of its VIPR teams by approximately 90 percent, focusing on the Northeast and on mass transit locations³.

As a precautionary measure after the bombings, NPPD/FPS raised its Operational Condition at all Facility Security Level IV federal facilities nationwide. NPPD/FPS's increased security posture included reducing entrances to facilities, rescreening occupants, and increasing canine sweeps. NPPD/Office for Bombing Prevention (OBP) supported the National Explosives Task Force sharing the most up-to-date intelligence and investigative information. Resources and products included a Quick Look Report, Boston Marathon Response Toolkit, and a U.S. Government Counter-IED Resource List and Usage Guide that were made available to stakeholders through TRIPwire and the Homeland Security Information Network (HSIN).⁴

After reports of an explosion⁵ at the John F. Kennedy Presidential Library and Museum, situated in Boston Harbor, the U.S. Coast Guard (USCG) Captain of the Port (COTP) Boston raised the Maritime Security (MARSEC) level to MARSEC 2, increasing all vessel and facility security measures across the port in accordance with their individual security plans and the Maritime Transportation Security Act. In support of the response effort, USSS deployed a hazardous materials specialist and agents to secure and assess the scene. After it was determined that the incident was unrelated to the Marathon attack, MARSEC 2 was modified to focus on passenger ferries to safeguard the largest concentrations of the public within the maritime transportation system.

In addition to the measures taken by industry, the USCG immediately raised and coordinated its on-water security presence with increased patrols 24/7 in the inner harbor and along ferry routes, and deployed security teams supplemented by Coast Guard Investigative Service (CGIS) agents on passenger ferries and in ferry terminals. On the evening of April 18, 2013, the Commandant directed COTP Boston to resume MARSEC Level 1 in the port of Boston. Although the MARSEC Level implemented by vessels and facilities was lowered, the USCG extended and maintained its heightened security posture (boat escorts, ferry ride-alongs, shore-side harbor patrols, and airborne use of force helicopter patrols) through April 20 consistent with the security posture of the Massachusetts Bay Transit Authority.

During the search for the second suspect on April 19, ICE/HSI Boston special agents and NPPD/FPS agents assisted with the evacuation of residents, clearing the area of any suspected IEDs, and containing the suspect while USSS deployed personnel to provide staffing for the perimeter in Watertown, MA.

³ Operations involved personnel from the Office of Law Enforcement/Federal Air Marshal Service and the Office of Security Operations (Transportation Security Inspectors, Transportation Security Officers, Behavior Detection Officers, Transportation Security Specialists, and Explosives Detection Canine Teams).

⁴ The Homeland Security Information Network (HSIN) is a national secure and trusted web-based portal for information sharing and collaboration between Federal, State, local, tribal, territorial, private sector, and international partners engaged in the homeland security mission.

⁵ The John F. Kennedy Presidential Library and Museum incident was initially of an unknown origin and out of an abundance of caution was presumed to be a crime scene. It was determined later that the fire was mechanical in nature and not a deliberate act.

Investigative Support

DHS components including ICE, USSS, CBP, TSA, USCG, NPPD, I&A and U.S. Citizenship and Immigration Services (USCIS) provided investigative support to the JTTF in Boston, including evidence collection, media exploitation, pursuing investigative leads, and supporting the search for the second suspect. During steady state operations, three ICE/HSI special agents are assigned to the JTTF, with two at the field office and one at the Logan International Airport annex. After the bombings, ICE surged over 50 agents to support the JTTF. CBP's representatives at the JTTF, both at the field office and at the Logan annex, also contributed to the investigation. There were three USSS agents assigned to the Boston JTTF as well and a USCIS officer detailed there on a part time basis.

In addition, the USSS leveraged its private sector partnerships and expertise to identify suspect financial transactions. The USSS utilized its New England Electronic Crimes Task Force to collect and review business surveillance videos in proximity to the bombing site for evidence related to investigation. After the FBI released video and photos of the two bombing suspects, CBP, NPPD, USCIS and ICE assisted the FBI in investigating leads through multiple DHS owned and operated databases.

Based on a fingerprint of the first subject taken at the hospital, law enforcement was able to identify the suspects as Tamerlan and Dzhokhar Tsarnaev. Upon confirmation of their identities, CBP and USCIS began providing data on the suspects to the FBI investigation while I&A facilitated information sharing with the broader Intelligence Community and fusion center network as well as state and local homeland security officials. Over the course of the week, CBP produced 24 Special Research Reports, which were shared with the FBI. USCIS and ICE/HSI also provided subject matter expertise to law enforcement agencies on immigration issues in the Boston investigations while leveraging their unique immigration authorities to assist the investigation. Throughout the investigation, CBP, TSA, and USCG referred potential leads to the FBI.

Stakeholder Engagement and Information Sharing

Following an incident requiring a coordinated federal response, whether a natural disaster or act of terrorism, the DHS Office of Public Affairs (OPA) has responsibility for leading Federal communications coordination under Homeland Security Presidential Directive-5. The DHS National Joint Information Center⁶ serves as the Federal incident communications coordination center. DHS components involved in information sharing and external affairs efforts, including OPA, the Office of Legislative Affairs (OLA), the Office of Intergovernmental Affairs (IGA), NPPD, and I&A, work to strike the balance of sharing information quickly while working with interagency partners to confirm its accuracy.

⁶ The NJIC is staffed by incident communications response personnel and can rapidly mobilize and coordinate the Federal external communications effort. The "virtual" Federal interagency team and National Incident Communications Conference Line (NICCL) are controlled at the NJIC. The NJIC coordinates with and supports the Secretary, NOC, Crisis Action Team (CAT), FEMA National Response Coordination Center, National Infrastructure Coordination Center, Federal Coordinating Officer, Unified Coordination staff, and Emergency Support Function #15 staff as needed.

Information Sharing

As with many incidents, in the wake of the bombings, a large information void existed. Nothing was known about the attackers, their methods, possible co-conspirators, affiliations or potential follow-on attacks. OPS and I&A, together with other DHS components, immediately began working on what was known in order to keep DHS officials, stakeholders, law enforcement, and the wider public informed.

The DHS National Operations Center (NOC) began immediate notification and communications support to the Office of the Secretary and DHS Leadership, activated the DHS Crisis Action Team and initiated National Level Reporting which was displayed and shared on the DHS Common Operating Picture⁷. These resources were used to share information with Federal, State, local, tribal, and territorial partners. The NOC facilitated a communication request between the Boston Mayor's office and several DHS components during the first hour of the event and leveraged its close working relationship with the Boston Police Department, which had a representative assigned to the NOC, during the initial information sharing phase.

In addition to engaging in a two-way information exchange directly with the fusion centers, including the Boston Regional Intelligence Center and the Commonwealth Fusion Center, the National Network of Fusion Centers utilized a portal on HSIN for posting and discussing information concerning the incident with its partners, both in the region and around the country. This portal provided information related to the incident as well as other relevant information such as protective measures to law enforcement and security professionals.

I&A activated the Intelligence Crisis Action Team (ICAT), to analyze and confirm information regarding the incident. Later, the ICAT expanded to a DHS Threat Task Force to include representatives from CBP, FEMA, ICE, NPPD, OPS, TSA, USCG, USCIS and USSS, continuing to share information internally and externally, while assuming other law enforcement and Intelligence Community support responsibilities. The Task Force published a twice-daily common intelligence picture of vetted all-source reporting and actions for internal dissemination within DHS and to inform external engagements.

In the days following the attack, I&A and FBI published three unclassified Joint Intelligence Bulletins for use by law enforcement, covering confirmed aspects of the investigation, including details about the explosive devices and protective measures for use by law enforcement. These products, distributed via HSIN and other means, received strong, positive reviews by recipients.

Additionally, NCCIC noticed an increase in suspicious cyber activity, which prompted NCCIC to create an alert that was disseminated to Federal, State, local, tribal, territorial and private sector partners. Following the creation of this product, US-CERT posted a similar warning to its website for public consumption. The National Infrastructure Coordinating Center (NICC) provided situational awareness messages and situation reports to DHS leadership and critical

⁷ The DHS Common Operating Picture (COP) is shared with fusion centers, interagency partners, State and local law enforcement and DHS operation centers. The COP is also available via HSIN.

infrastructure partners. In addition, the NPPD/IP PSA assisted the Security Directors at Fenway Park and TD Garden with security planning and preparation for the first Red Sox and Bruins home games following the bombings.

Public Affairs

Immediately following the Boston Marathon attack, communicating official, accurate information to DHS's various stakeholders was critical. DHS OPA mobilized to coordinate Federal, State, local, and private sector communications in the NJIC using proven systems like the National Incident Communications Conference Line (NICCL), the State Incident Communications Conference Line (SICCL) and the Private Sector Incident Communications Conference Line (PICCL) as per the Domestic Incident Communications Strategy (DCS)⁸. These calls—which supported a network of 1,100 communicators including representatives from the Department of Defense, NORTHCOM, DHS, the Department of Justice (DOJ), FBI, Alcohol Tobacco and Firearms, the DHS Counter Terrorism Advisory Board (CTAB) and the National Counterterrorism Center (NCTC)—enabled relevant interagency partners to connect with field personnel in Boston and ensure the dissemination of information (both internally and externally) was closely coordinated. NICCL calls were held April 15 through 17 and summaries were distributed following each call to ensure message visibility.

While DHS assumed responsibility for coordination of federal communications, White House Communications maintained the lead for Federal strategic communications direction. The FBI and DOJ were leads for communication related to the Federal law enforcement investigation. To support the response and investigation, DHS continued to promote “If You See Something, Say Something™” messaging to engage the public and key frontline employees to identify and report suspicious activity as well as indicators of terrorism, crime and other threats to the proper law enforcement authorities.

Intergovernmental Outreach

Immediately following the attack, IGA reached out to senior officials in Massachusetts, including Governor Patrick and Boston Mayor Menino's offices as well as the Massachusetts Homeland Security Advisor and Director of Boston Emergency Management. While each of these calls confirmed that there were no unmet needs in the Boston area, during an April 16, 2013 call with former Secretary Napolitano, former Boston Police Commissioner Ed Davis asked DHS to provide additional video analysis support and continue heightened USCG security in the surrounding maritime environment.

In addition to activities in the Boston region, IGA also conducted outreach to state and local jurisdictions nationwide. Immediately following the attack, IGA reached out to major cities including Los Angeles, Philadelphia, Houston, Chicago, the District of Columbia, New York, and San Francisco. During each of these discussions, IGA informed stakeholders of the DHS response and encouraged stakeholders to reach out in the event their city needed DHS support. In addition, IGA and FEMA conducted outreach to States and local jurisdictions regarding FEMA's

⁸ The DCS is a public information strategy that outlines Federal incident communications options that can be implemented in conjunction with a major terrorist incident in the United States.

authorization to allow Massachusetts, Boston and other State and local jurisdictions the ability to use grant funding for operational overtime for enhanced security measures.

Coincidentally, former FEMA Deputy Administrator Rich Serino was in Boston to attend the Marathon and connected with key local first responders on the ground quickly after the blast. The Deputy Administrator was able to liaise with city and State officials and served as a high-level conduit for DHS outreach, while also directing requests back to the Department.

On April 16, former Secretary Napolitano spoke with Governor Patrick, Mayor Menino, and Commissioner Davis. Throughout the day, IGA engaged with its myriad stakeholder groups to offer both updates on the investigation and DHS's security posture and support. IGA, in conjunction with I&A, also organized three joint DHS/FBI conference calls to provide information to State homeland security advisors, fusion center directors, major cities intelligence commanders, and others. Each call attracted more than 300 participants from across the country. The initial call on April 16 included a briefing on the response, type of IED used in the bombing, Joint Intelligence Bulletin, and an update from the Commonwealth of Massachusetts and Boston fusion center. The second call on April 19 focused on the ongoing investigation and pursuit of the remaining suspect. The third call, which occurred following the apprehension of the suspect, served to close out the events for DHS stakeholders. In addition, the DHS Homeland Security Advisory Council convened a call with the Faith Based Advisory Council, while the DHS Office for Civil Rights and Civil Liberties held an Incident Community Coordination Call with community members, including representatives of the Muslim-American community, to discuss potential impacts of the Boston Marathon bombing on these groups.

Legislative Outreach

As the situation in Boston unfolded, OLA reached out to key Members of Congress including the chairs of the Department's authorizing committees as well as the Massachusetts delegation. The majority of Member inquiries and requests related to stories and facts being reported in the media. From April 23-25, briefings were convened for members of the Senate Select Committee on Intelligence, House Permanent Select Committee on Intelligence and all interested members of the House of Representatives and Senate. These engagements with senior officials continue in order to keep Members and others providing oversight apprised of the Department's activities.

Preparedness Activities

Over the past several years, DHS has greatly enhanced and expanded its collaboration with State and local officials as well as first responders to prepare for, respond to, recover from, and mitigate the effects of disasters and other threats while supporting efforts across the homeland security enterprise to build nationwide capabilities. Many of these DHS supported activities, including grant funding, training and workshops as well as drills and exercises enhanced preparedness and response capabilities in Boston and served to prepare the city for complex, mass casualty scenarios.

Grant Funding

DHS provides resources to its State and local partners to train and prepare for complex attacks and mass casualty shootings primarily through the Urban Area Security Initiative (UASI) and the Homeland Security Grant Program (HSGP). Since 2002, the Commonwealth of Massachusetts

has received more than \$943 million through 22 DHS grant programs, including nearly \$370 million for the Boston urban area. This funding has been used to equip and train tactical and specialized response teams specifically in IED detection, prevention, response, and recovery, including SWAT teams and Explosive Ordinance Disposal canine detection teams among other local law enforcement units.

In 2012, Boston completed a Threat and Hazard Identification and Risk Assessment (THIRA), a comprehensive process for assessing regional capability gaps required annually by each State and urban area designed to prioritize investments in key deployable capabilities. Fifty-six states and urban areas, including Boston, identified complex attacks as one of their top threats/hazards in their 2012 THIRAs. These assessments assist States and urban areas planning and preparation for various scenarios, prioritizing the development of capabilities to address known and evolving threats.

Training, Exercises and Drills

DHS grant funding also supports increased coordination and capacity building, particularly with respect to joint exercises, drills and trainings, including more than a dozen exercises involving the City of Boston over the past several years. During the review, multiple component officials and field personnel credited these activities for preparing the coordinated response to Boston, including the following:

Joint Counterterrorism Awareness Workshop (JCTAWS)

Through Joint Counterterrorism Awareness Workshops (JCTAWS), FEMA, NCTC, and the FBI bring together stakeholders from law enforcement, incident management, and the private sector in cities across the country to engage in scenario-based reviews of their complex-attack prevention and response capabilities. These workshops revolve around a 24-hour scenario in which multiple, coordinated assaults occur, similar to the November 2008 terrorist attacks in Mumbai, India. Throughout the exercise, participants jointly evaluate whether the city's existing plans, procedures, and capabilities are adequate to manage a coordinated, multi-site complex-attack and identify existing programs or resources they can use to close any gaps.

In March 2011, a JCTAWS was held in Boston involving more than 200 stakeholders from law enforcement, incident management, and the private sector focused on the integrated response to a complex attack in the Boston metropolitan area. The Boston Police Department incorporated several key lessons learned into their policies and operations.

Counter-IED Training and Planning

In recent years, NPPD/OBP has worked with authorities in the greater Boston area on surveillance detection and counter-IED training in support of multiple special events including the Boston 4th of July Celebrations, Bi-Centennial of the War of 1812, Boston New Year's Eve, and the 2013 Boston Marathon. In addition, in 2009, OBP worked with State and local security partners to conduct a Multi-Jurisdiction Improvised Explosive Device Security Planning (MJIEDSP) workshop in Boston to assist with the development of an IED security plan integrating assets and capabilities from multiple areas and

emergency service sectors. Participants included representatives from the Massachusetts State Police, FBI, Boston Police Department, Boston Fire Department, Boston Emergency Management Agency, and the Massachusetts Bay Transportation Authority.

First Responder Training

Since 2000, more than 5,500 Boston area first responders have received training through the National Domestic Preparedness Consortium and Continuing Training Grants, including courses on casualty response and recovery, explosive devices, medical response, hospital incident command systems, crime scene management, hazardous evidence collection, and law enforcement response to bombing incidents.

Boston Marathon Tactical Communications Assessment

In 2010, NPPD/OEC worked with Metro Boston Homeland Security Region jurisdictions to assess emergency communications used for the Boston Marathon as part of implementing the Nation Emergency Communication Plan. In the 2010 After Action Report, NPPD/OEC recommended that the Boston area conduct more inclusive communications planning with all response disciplines. Boston public safety officials adopted OEC's recommendations for the 2013 radio communications plan for the Marathon. As a result of the 2010 NPPD/OEC assessment, Boston officials requested NPPD/OEC technical assistance training for All-Hazards Communications Unit Leaders (COML) and a trained COML was used to coordinate communications during the 2013 Marathon and response to the bombings.

Planning

DHS technical assistance and funding enabled the City of Boston to codify its emergency response plans and protocols through planning support initiatives. Since 2005, FEMA has provided six technical assistance deliveries for the Boston urban area and seven for the Commonwealth of Massachusetts, including assistance with IED awareness, fusion centers, equipment, anti-terrorism training, and interoperable communications. Further, NPPD/OEC has worked closely with jurisdictions in the Metro Boston Homeland Security Region to improve coordination, training, and tactical planning for emergency communications.

As part of FEMA's Regional Catastrophic Preparedness Grant Program, the Metro Boston Homeland Security Region in 2012 exercised a Regional Catastrophic Coordination Plan designed to augment existing operations plans by facilitating communication, situational awareness, and functional area coordination across the region in a catastrophic event. The region also developed a Regional IED Annex using DHS grant funding in 2010, creating coordinated response protocols for State and local agencies to respond to a catastrophic IED incident and codified the structure of explosive ordnance teams within the region when collaborating on multiple IED scenarios.

Impact of Investments

Due to the investments DHS has made over the past ten years, the City of Boston had greater capabilities to respond to the Boston Marathon attack and had exercised its citywide response plans. The findings from the exercises described above helped the city refine its plans and procedures for responding to a complex attack and laid the groundwork for coordination and collaboration among Federal, State and local first responders and law enforcement personnel

necessary for an effective response. According to FEMA, the approach that both the City of Boston and the Commonwealth of Massachusetts have taken to utilize grant dollars and prioritize threats and corresponding capability development is considered a best practice for other States and urban areas.

These exercises and trainings helped familiarize relevant personnel and agencies with response plans while building relationships that proved critical during the response to the bombings. Numerous DHS components involved in the response to the Boston Marathon bombings indicated that these personal and pre-existing relationships on the ground were critical to ensuring an effective and efficient response to the incident. As noted by Rear Admiral Daniel Abel, U.S. Coast Guard First District Commander, relationships cannot be “surged” during crises, rather they must be a pre-existing component of interagency partnerships.

Lessons Learned

The Boston Marathon was unique in many ways due to the response assets on hand, first responder personnel on site, and longstanding personal relationships that were relied upon. However, DHS can apply key outcomes from this tragedy in order to prevent and respond to evolving threats in the future.

Importance of Partnerships

Strong partnerships among Federal, State, local, and international agencies are critical to effective communication and response during and following an incident such as this. In addition to the Department’s significant presence in the Boston area, DHS participates in regional security exercises, task forces, the Commonwealth Fusion Center, and the Boston Regional Intelligence Center. Through these activities and structures, DHS officials develop and strengthen professional relationships and build trust with partners.

While relationships between Federal, State and local personnel on the ground in Boston were strong, some DHS components stated that there was not a full appreciation for the resources their component could provide. For example, ICE described a strong familiarity with its unique capabilities and authorities among local Federal law enforcement entities, but less familiarity among surge forces deployed to Boston from elsewhere in the country. Efforts should be made to better educate the interagency about the work DHS components do and services they can offer through outreach and joint trainings or exercises.

Need for Effective and Reliable Communications for DHS Responders

In response to an attack, it is critical to have effective communications capabilities to coordinate people and resources. All land mobile radios that facilitate mission critical voice communications were operational at the time of the attack in Boston, and public safety officials said they were generally able to achieve interoperability during the response between State and local responders. The Massachusetts Statewide Interoperability Coordinator told NPPD/OEC that there was “seamless communications across major radio systems” in the Boston metro area. However, ICE/HSI as well as USSS agents reported a limited ability to transmit messages via radio to State and local law enforcement.

Over the past several years, DHS has worked to support efforts to build reliable communications systems among Federal, State, and local partners. Best practices include having an Incident Radio Communications Plan and avoiding the use of code names specific to departments or agencies. Common channel planning between Federal, State and local partners in advance of major events helps ensure that Federal, State, local and regional interoperability channels enhance communication. The Boston Marathon was a pre-planned event and common channel planning, including development of an *Incident Command System Incident Radio Communications Plan*⁹ for all jurisdictions participating, has been routine for the Boston Marathon since 2010.¹⁰

With respect to the investigation, custody of original information and documentation must also be coordinated among partners. As a practical matter, the alien files of the bombing suspects were made available digitally on the day of the request. However, in a high profile incident such as this, multiple agencies requested information pertinent to the investigation and it was not clear to whom the original file information should be transferred. It is recommended that protocols be drafted in concert with the JTTF to codify how information, such as immigration records, should be transferred in the future.

Finally, while public communications were led by the FBI and facilitated by DHS, per the aforementioned DCS, components noted the need to distribute a unified Federal Government message as soon as practically possible to field offices and stakeholders, including fusion centers, in order to respond to media and other inquiries in a timely fashion.

Review of Internal Mechanisms

Through exercises and training, DHS has developed Continuity of Operations plans for a variety of scenarios. Still, multiple components faced obstacles getting their employees to their work sites following the Boston Marathon bombings. With mass transit systems closed during the manhunt on April 19, components came up with innovative solutions including expanded free parking and transportation options so personnel could drive to their designated location. While these actions were not formalized ahead of time, DHS field offices leveraged their existing relationships to identify ways to bring the full weight of the Department's resources to bear in the response to and investigation of the incident.

DHS components also noted a continual shift in the “center of gravity” of operations coordination following the event, which led to difficulties in accessing and sharing information and confusion about the lead for activities outside the immediate investigation. The State EOC (SEOC) in Framingham, MA was activated pre-incident and remained at full activation until April 16, when it assumed partial activation. Immediately following the bombings, the Boston EOC was activated, and remained activated until April 18, when it implemented a reduced status. Components reported that the two different EOCs—the SEOC and the Boston EOC—created

⁹ Known as the ICS 205, this plan provides information on all radio frequency assignments for the event for use by incident responders.

¹⁰ ICE and USSS did not participate in the advance communications planning for the marathon, but there is general planning that can be done unassociated with a particular event when Federal partners know they would be required to communicate with state/local responders and managers.

confusion about the center of gravity for response operations and the lead for coordinating response activities. Additionally, the two components of the post-incident response—the ongoing law enforcement investigation and the emergency response—also made it difficult to determine the lead agency for response operations. The FBI was the lead for the investigation with its own command center, but the lead for the emergency response operations was less defined. Components have suggested establishing clearer protocols transitioning to and sustaining a crisis EOC in the event of an incident and merging Federal protocols with local operations plans to support this transition.

In the course of discussions, DHS field offices expressed a desire for a unified regional structure for enhanced coordination and deployment of resources. There could be a benefit in identifying a singular coordination mechanism at the regional level for DHS officials in the field to coordinate amongst themselves, and then integrate into the JTTF. A number of examples have been suggested including leveraging the existing CTAB structure as well as the Multi-Agency Command utilized during National Special Security Events. This could provide better organization to general DHS response activities as well as streamlined reporting to HQ elements. This coordination mechanism could also serve as the intake point for DHS personnel deployed in the field.

A Year Later

Almost a year has passed since the attack on the Boston Marathon took the lives of three innocent bystanders, injured hundreds of others, and shattered one of the world's most iconic sporting events in one of America's greatest cities. In the tense days that followed, Massachusetts Institute of Technology (MIT) Police Officer Sean Collier was murdered and other police officers were injured or put in harm's way as the suspects sought to escape the Boston area.

The previous report, conducted in the months following the incident as part of a Department specific focus on a number of key areas, most notably DHS's department wide coordination, and support to local law enforcement, including preparedness efforts, both before and during the incident, examined DHS' actions leading up to, during, and after the 2013 Boston Marathon. Since the attack, DHS and its interagency partners, conducted numerous briefings on a wide range of issues with Congress, state and local first responders, and other stakeholders. Building on the lessons learned throughout the drafting of the report and our engagements, DHS has continued to work closely with federal, state, and local partners to combat the so-called "lone wolf" threat: independent actors living within our midst, with easy access to materials that, in the wrong hands, can become tools for mass violence. This threat may be the hardest to detect and requires even greater collaboration among law enforcement, first responders, and the communities we serve.

Since the attack, DHS has built closer relationships with partners in communities across the Nation and improved its support to them, actions that will continue to make America stronger and more resilient to terrorist attacks, and threats and hazards of all kinds. These actions have included:

Enhancing National Preparedness

DHS has continued its support to law enforcement and first responder partners to sustain and enhance national preparedness, with a particular focus on mass casualty incidents. In August 2013, DHS hosted the Boston Summit with senior leaders from the Administration as well as federal, state and local officials, law enforcement, and first responders from across the country to assist them with lessons learned from, preparation for, and response to terrorist and other threats and hazards. DHS also prioritized in its 2013 grant guidance funding for activities that directly support citizen preparedness drills and exercises that serve to strengthen state and local mass casualty planning, training, and exercises among law enforcement, fire, and emergency medical service providers. Recognizing the important role that bystanders played in the immediate response to the bombings, the 2013 grant guidance specifically included two new program priorities: Innovation and Sustained Support for the National Campaign for Preparedness, and Improve Immediate Emergency Victim Care at Mass Casualty Events. Taken together, these additions to the grant guidance encouraged states and urban areas to utilize grant funding to promote preparedness activities that empower communities and individuals; actively support citizen preparedness drills, exercises, and community days of action such as the Great Shakeout; and empower community bystanders through public education initiatives and training about life sustaining actions and how they can support survivors and providers in a mass casualty event. Additionally, these program priority areas encouraged grantees to utilize grant funding to engage in mass casualty planning, training, and exercises specifically involving law enforcement, fire service, and EMS providers to rapidly deploy into areas that have been cleared but not secured in order to initiate treatment at or near the point of injury and effect rescue of survivors.

In addition, DHS provided funding exercises for first responders and law enforcement to identify lessons learned and improve information sharing, and DHS participated in several large-scale exercises to strengthen overall preparedness for mass-casualty events.

Countering IED Threats

As evidenced by the Boston Marathon bombings, violent extremists have shown an enduring interest in improving IED materials and methods to evade security measures and conduct small arms attacks. While violent extremists' mistakes have sometimes contributed to intelligence and law enforcement successes, lone offender plots using IEDs or small arms present unique challenges as a result of being tactically simple and adaptable in both timing and location of execution, complicating discovery and disruption by authorities.

To protect soft targets, DHS is adopting approaches that are intelligence-led, analytically driven, and pursued in close cooperation between federal, state, local, tribal, territorial, and private sector partners as well as with the public. To counter the threat posed by IEDs and small arms attacks, DHS plans to expand and promote activities such as suspicious activity reporting and private sector security measures. Working with more than 75 foreign partners, DHS employs a global approach to homeland security and has expanded counter-IED efforts to address their frequent source – transnational plots originating overseas. Internationally, DHS supports multilateral efforts, such as the World Customs Organization's Program Global Shield, which shares information on the global movement of precursor chemicals used to manufacture IEDs and raise security standards. DHS will also continue researching next-generation technology solutions to stay ahead of advances in wireless technology, given the use of wireless technology in IED detonation and control mechanisms.

Across all of these efforts, DHS will place an increased emphasis on deterrence, including enhancing efforts to publicly communicate tailored descriptions of homeland security capabilities to influence the perceptions, risk calculations, and behaviors of adversaries.

Strengthening Information Sharing

Since the Boston attack, DHS, the FBI, and NCTC have expanded our ability to share information with state and local officials about potential threats. Examples of recent events where information has been shared include the 9/11 anniversary and the homeland security implications of the conflict in Syria. DHS identified ways to more effectively work with interagency partners at FBI Joint Terrorism Task Forces and sent updated guidance to officers in the field to improve such collaboration. DHS also continues to work closely with federal partners to screen and vet domestic and international travelers, visa applicants and other persons of interest to identify potential threats. After the Boston attack, DHS reviewed its name-matching capabilities, leading to improvements in its ability to detect variations of names derived from a wide range of languages.

Identifying Potential Threat Indicators

Following the bombings, DHS, the FBI, and others conducted additional analysis of past mass casualty incidents, both in the U.S. and abroad, to better recognize behaviors and indicators that may provide warning of a potential attack. DHS and the FBI completed 2,037 community engagement events over the past year addressing mass-casualty attack prevention and response, including 96 school security district outreach briefings. In the aftermath of the multi-day attack on the Westgate Mall in Nairobi, Kenya in September 2013, DHS and the FBI also led guided discussions with venue operators and law enforcement partners in 56 of America's largest cities.

DHS analysis and research has been shared with state and local law enforcement officials to help them improve their ability to detect and mitigate threats, and it has been integrated into countering violent extremism (CVE) training materials for law enforcement personnel. For example, an I&A product analyzed mass casualty attacks—both those motivated by violent extremism and those that may not appear to be ideologically motivated—which upon release to state and local partners, may provide these homeland security stakeholders with insight regarding the common characteristics associated with attack methodology and pre-attack preparations. Additionally, S&T-sponsored research related to lone actors, geospatial patterns of violent extremism, and the characteristics of communities where violent extremism occurs was shared with these audiences in 2013.

These materials are posted on a joint DHS-FBI CVE Training Resources and Active Shooter Webportal, which was launched in August 2012 through the Homeland Security Information Network for Law Enforcement training practitioners and first responders. The Webportal was the culmination of numerous CVE workshops for frontline State and Local Law Enforcement that were held across the country. The Webportal contains over 500 accurate and appropriate CVE training resources, including guidelines and best practices for CVE training development, case studies on multiple types of violent extremism, reports on terrorism trends, community oriented policing best practices, training frameworks, training videos and other tools that trainers can incorporate into their training development efforts. Further in partnership with the FBI, DHS

has developed a series of webinars and DVDs for local law enforcement on violent Sovereign Citizens, Violent White Supremacists, and responding to a mass casualty shooting also posted on the Webportal.

Countering Violent Extremism

The Department's CVE efforts illuminate the risk posed by other violent extremist groups and individuals within the Homeland inspired by various other religious, political, or other ideological beliefs. Accordingly, DHS has and will continue to prioritize CVE efforts to address the threat from violent extremists inspired by Al-Qa'ida and its affiliates, but has also designed a CVE approach that applies to all forms of violent extremism, regardless of ideology and that focuses not on radical thought or speech but instead on preventing violent attacks. DHS CVE efforts are based on the understanding that this issue requires a whole of government, multi-pronged approach, where efforts are tailored to specifically address the needs and responsibilities of the various stakeholders involved.

The Department's efforts are categorized into three broad objectives, listed below:

1. Understanding Violent Extremism. Support and coordinate efforts to better understand the phenomenon of violent extremism, including assessing the threat it poses to the nation as a whole and within specific communities;
2. Supporting Local Communities. Bolster efforts to catalyze and support non-governmental, community-based programs, and strengthen relationships with communities that may be targeted for recruitment by violent extremists; and
3. Supporting Local Law Enforcement. Disrupt and deter recruitment or individual mobilization through support for local law enforcement programs, including information-driven, community-oriented policing efforts that for decades have proven effective in preventing violent crime.

Supporting Community Engagement

DHS has continued to study and share information with state and local law enforcement and community partners regarding violent extremism, including the factors that may influence extremist activities as well as potential indicators. As part of this effort, the DHS Office for Civil Rights and Civil Liberties has been involved in multiple roundtable exercises with communities, including a table-top exercise designed to improve communication on countering potential violent extremism. DHS and NCTC completed a pilot of this program in Washington, D.C. in June 2013, and implemented the first exercise in the Chicago area in December 2013. In 2014, DHS and NCTC will work with local partners to implement this exercise in cities across the United States, with planning discussions scheduled for Boston, Columbus, and Raleigh/Durham. Over the past few years, DHS Civil Rights and Civil Liberties (CRCL) has held more than 70 community engagement events and more than 75 training events on cultural awareness and how to best engage with communities for state and local law enforcement and fusion center personnel.

In an effort to mitigate threats, and to counter violent extremism on a broader scale, CRCL has developed an "enhanced" community engagement initiative, one that builds upon the existing CRCL community engagement structure. The purpose of this enhanced engagement is to:

- Conduct more focused, topic-specific engagement, particularly on issues relating to CVE;

- Learn about the community's efforts in countering violent extremism, particularly in the wake of the Boston Marathon attacks;
- Disseminate best practices and strategies to empower these communities to better counter violent extremism in their constituencies; and
- Target non-traditional partners, community organizers, and religious leaders.

DHS also continues to work with the International Association of Chiefs of Police to develop a DHS-funded national training program to raise awareness on different types of violent extremism; promote community policing and community-based solutions to prevent violent extremism; and address radicalization to violence online.

Our overall challenge within the Department of Homeland Security, and within the enterprise of Federal, State and local governments, is to learn from and adapt to the changing character of the evolving threats we face, including threats from those who self-radicalize to violence or may be inspired by radical, violent ideology to do harm to Americans. The attack in Boston, and the response to it, highlighted the critical importance of close coordination among law enforcement, first responders and hospitals, partners at every level of government, and the general public.

Conclusion

The lessons of the Boston Marathon bombings continue to serve as a basis for longer-term planning and implementation efforts that will improve the Department's capacity to prevent and respond to similar attacks and threats in the future.

The events in Boston have highlighted how close coordination among Federal, State, and local officials is critical in the immediate aftermath and response to terrorist attacks and reinforces the principle and value of whole community contributions, including from the general public. Both the work leading up to the Boston Marathon and the quick action following the event demonstrate the significant progress that has been made over the past eleven years.