COMPLEX COORDINATED TERRORIST ATTACKS AND ACTIVE ATTACKS:

After Action Review Recommendations and Best Practices - Functional Areas

2nd Edition

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The Borders, Trade, and Immigration Institute
A Department Of Homeland Security Center Of Excellence

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EXECUTIVE SUMMARY

Funded by the Department of Homeland Security's 2016 Complex Coordinated Terrorist Attack Grant, the Borders, Trade, and Immigration Institute, a Department of Homeland Security (DHS) Center of Excellence, conducted a comprehensive review to create the enclosed compilation of recommendations and best practices found in the After Action Reports (AAR) of Complex Coordinated Terrorist Attacks (CCTA) and significant Active Shooter incidents, both in the United States and around the world.

Its purpose is to provide community leaders and first responders ready access to lessons learned from acts of terrorism and criminal attacks. It is hoped that the listed recommendations will assist the communities in efforts to prepare and enact a Unified Regional Response to Complex Coordinated Terrorist Attacks.

This document organizes the recommendations and best practices by functional area (i.e., operational communications, intelligence, tactical response, medical response, public information, victim services), and is sequenced by specific incident in a separate document. These documents have been prepared to discern recurring recommendations and significant issues facing our community leaders, homeland security agencies, and first responders. In the development of a Unified Regional Response Plan to a Complex Coordinated Terrorist Attack, these recommendations are used to enhance and provide detail to the region's Response Plan, associated Action Plan, Synchronization Matrix, and resulting drills, exercises, improvement plans and agency training programs.

Often, the merit and number of these recommendations are dependent upon the quality of the AARs and the availability of such reports to Homeland Security personnel and first responders outside the host organization.

The recommendations have been edited and collated by functional area. There are a select few with which the BTI Institute's project team takes issue – those that contradict DHS and/or Department of Justice doctrine. While these are included as recommendations, they are printed in red, with an explanation in Appendix A.

This remains an active document, labelled with an "As of" date. Regrettably, it is anticipated that recommendations will be added over time as more attacks take place and as terrorists' tactics change and first responders continue to adapt.

Electronic copies of this document may be obtained by contacting the Borders, Trade, and Immigration Institute (BTI Institute) at BTI@uh.edu.

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The following recommendations are developed from analysis of after action reports of complex coordinated terrorist attacks and/or active shooter incidents (see Annex of References). These recommendations have been organized below by nine (9) functional areas.

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PUBLIC INFORMATION

Organization

1. **Establish an at-incident PIO with available translators.** Develop a Joint Information Center (JIC) plan (currently in process). The plan should include specific information regarding the role of a Public Information Officer (PIO) which should be discussed at the Public Officials Conference. Provisions should be made for an at-incident PIO to handle media queries and to contain public confusion. Emergency public information is currently being developed for Broome County in 17 languages. Review and update SOPs on police action during officer-involved shootings to include contacting the hospital's Public Information Officer (PIO), discussing hospital security, and intercepting media, as appropriate. Review and update SOPs as appropriate to establish a line of direct and consistent communication between the PIO on scene (in this case, APD PIO) and the City's Communications Director to encourage effective communications coordination. Local emergency response partners should account for having a roster of appropriate translators for their community. PIO released accurate and timely information to the numerous media outlets. PIO was able to convey information without compromising the investigation, and at the same time honoring the privacy of the impacted families. PIO should further consider preparing operational plans for similar mass media events and anticipate the various equipment and personnel needs that may arise.
(*Broome County NY Shooting AAR,* Area 11, *Orlando AAR*, p. 26, *Henry Pratt AAR p. 16, 18, El Paso AAR, Newtown AAR p. 73*)

2. **Public Information Command Post.** Establish a Public Information Command Post remote from the crime scene in a major incident. Reporters want access to a "talking head" and the ability to video something for the electronic media. Establishing a press command post that provides regular briefings and the ability to photograph police activities from a distance usually satisfies that need. PIOs had set up inside the police primary command post, but this interfered with command and control operations. They should have been relocated and left the vehicle for its primary purpose of police incident command. Consider designating a specific individual responsible for conducting a continuous situational assessment to confirm/deny misinformation.
(*Aurora AAR*, p. 98, *El Paso AAR*)

3. **Establish a Joint Information Center for large-scale incidents to ensure coordinated public messaging.** Utilize a Joint Information Center (JIC) or Joint

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Information System (JIS) concept to manage large incidents to ensure that all public messages, including those disseminated through social media, are coordinated and validated. A JIC would have primary responsibilities of coordinating messages across and between agencies and jurisdictions and managing the media. This could include providing periodic briefings between press conferences to satisfy the media's need for the mots updated information. A JIC/JIS could also provide a mechanism to coordinate messages shared with traditional media and on social media platforms. The involvement of staff responsible for the release of information to the public in executive level strategy meetings provide critical in deciding which information should be released while allowing for a unified message to be relayed from multiple agencies and platforms. The Communications Director could have used more assistance to coordinate with the media and update social media. Consider developing a protocol between the Police PIO and City Communications Director for exchange of information and updates. The City of Aurora and surrounding area should address coordinated emergency communications, including lockdown notifications. Establish the JIC at LVMPD Headquarters in a physically separate location from LVMPD's DOC during significant incidents where LVMPD is the lead police agency. Develop a cadre of internal personnel (prior public information officers) who can assist the PIO with administrative functions during significant incidents including documenting requests for information. Activate the cadre when needed during significant incidents and/or MCI. Include local law enforcement partners such as North Las Vegas and Henderson Police Departments and City of Las Vegas and Clark County PIOs in tabletop exercises related to significant events and/or MCI. Develop a process to identify and operationalize a JIC point of contact for news media and sources. Familiarize and train JIC responders with existing EOC, public information and crisis communications plans. (*Boston Marathon AAR,* p. 107, 121, *Paris Attacks AAR*, *County NY Shooting AAR*, Area 11, *Aurora AAR*, p. 99, *San Bernardino AAR*, p. 117, *Orlando AAR*, p. 25, *Henry Pratt AAR, p. 18, 20, Las Vegas AAR p. 52, 64, El Paso AAR*)

4. **Political Official Liaison.** When possible, identify a liaison to work directly with and coordinate the involvement of elected officials. Liaisons should be at the scene, not in the office, as this is where many politicians will likely be located. The liaison can help officials stay focused on predesignated duties and responsibilities rather than being involved in scene or on camera when such involvement is outside the scope of the officials' jurisdictions or duties. (*San Bernardino AAR*, p. 117)

Policy, Plans, and Procedures

5. **Develop strong PA guidance on eligibility of activities for Acts of Terrorism.** FEMA, in coordination with MEMA, should proactively develop strong guidance for sub- applicants on eligible activities, costs and documentation requirements associated with the PA Program for acts of terrorism. Establish clear use of public information tools, such as NY ALERT, jurisdiction sites, 311, and/or specific hotlines. (*Boston Marathon AAR,* p. 128, *Broome County NY Shooting AAR,* Area 11)

6. **Institutionalize Practices.** The processes that the city used to manage and provide public information should be institutionalized in its major incident response plans. This should include the manner in which volunteers with requisite skill sets and experience were identified and used to support public information surge operations. (*Aurora AAR*, p. 98)

7. **Public Notifications.** Law enforcement officials should clearly indicate that all official information regarding the incident will come from Incident Command or through the JIC/formal public information channels. Be prepared to answer questions arising from unofficial death notifications. Determine if a dedicated phone number for incident questions can be added to notifications. Continue expanding usage of the mass notification system and building out accompanying SOPs. Compile and release accurate, timely facts and maintain a running chronology of information released (e.g., a fact sheet) with the newest information at the beginning. LVMPD's PIOs should only rely on vetted and confirmed information. Create policy, procedures and protocols that mandate information briefed to the public is well vetted and speaking points include specific verbiage such as "sequence of events" and "preliminary details" to ensure accuracy while maintaining a commitment to transparency. Continue to investigate additional avenues to contact affected organizations and community groups other than through the originating 9-1-1 center. This can include both PIO staff and the city EOC. Prioritize prompt public notification messages at the start of the incident and once it has been contained. Develop IPAWS message templates for different scenarios and a standardized template for basic messages. OEM should consider reviewing the policy on disseminating information to the public to for issuing and lifting the shelter in place restrictions. Currently Communications and OEM can issue IPAWS notifications for public safety. Provide detailed information to the public on needed materials to retrieve their vehicles. In an emergency, immediate messages must be sent to the campus community that provide clear information on the nature of the emergency

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and actions to be taken The initial messages should be followed by update messages as more information becomes known. All key facts should be included in an alerting message, and it should be disseminated as quickly as possible, with explicit information. Recipients of emergency messages should be urged to inform others. (*Washington Navy Yard AAR*, p. 81, *Orlando AAR*, p. 25, *Henry Pratt AAR, p. 20, Las Vegas AAR, p. 65, El Paso AAR, VA Tech AAR p. 19, 87*)

8. **Ensure that all CBRNE results information are widely communicated to the Public Safety, Public Health and Healthcare Communities during a Mass Casualty incident**. All CBRNE monitoring results – negative and positive – must be rapidly reported to all public safety, public health, and healthcare partners as soon as possible. (*Boston Marathon AAR,* p. 98)

9. **Local Media Priority.** Local media should be allowed to do interviews first, before the national media is accommodated. The information is more important to get out locally, and the local media has more of a vested interest and will be covering the story for a long time after the national media leaves the area. Ensure that all heads of partnering agencies are available and visible at press conferences and other press engagements. The JIC and EOC should consider clear communication with media about official locations from vigils/memorials and that the public should stay away from the crime scene.
(*Aurora AAR*, p. 99, *Las Vegas AAR. p. 67, El Paso AAR*)

10. **Hospital/JIC Integration.** Establish formal protocols for ensuring the appropriate representatives from the hospitals are integrated into the JIC. (*Washington Navy Yard AAR*, p. 81)

11. **Public Records Investigation Requests.** Florida Department of Law Enforcement (FDLE) should only withhold investigative information from public records requests. (*Orlando AAR*, p. 26)

12. **Public Recognition of Others.** Publicly demonstrate and recognize the collaboration and support from others. (*San Bernardino AAR*, p. 113)

13. **Coordination of Plans.** Decisions or planned information actions should be well coordinated in advance with other affected city departments, as they were for almost all information actions. Revise public information and crisis communications plans to ensure pre-developed messages for active shooter

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incidents are available. Revise plans to establish current available channels of communication with vulnerable populations. (*Aurora AAR*, p. 99, *El Paso AAR*)

14. **Roles of Elected Officials.** Predetermine roles and responsibilities of elected officials in managing critical incidents and include them in critical incident training and exercises. (*San Bernardino AAR*, p. 113)

15. **A JIS Plan be developed**. A system of how people will operate. The thought that people will come together in today's world is very challenging. It is easier to operate remotely with the use of technology. For example, if a conference call had been established (JIS) to get all the key players on the same page, this would have saved time and redundancy. Getting those people in one room would have been a challenge. (*Henry Pratt AAR, p. 19*)

Technology and Equipment

16. **Public Hotline Infrastructure Establishment.** When establishing any type of public hotline, the infrastructure and staffing must be in place before a public announcement is made. (*San Bernardino AAR*, p. 118)

17. **Automatic Email Response.** Establish an automatic email response during significant events when resources are overwhelmed that replies immediately to the public and/or requests from the media. A telephone message reflecting the same message should also be created and activated during significant incidents and/or MCI. (*Las Vegas AAR, p. 64*)

18. **Media Staging Area.** Designate an alternate media staging area that is large enough and equipped to accommodate media press conferences and media personnel during large events. (*Las Vegas AAR, p. 69*)

Training and Exercises

19. **Training and Exercises.** Conduct training and exercises and include all Public Information and Affairs personnel from all relevant agencies to ensure they are aware of the roles and responsibilities of the JIC. Public affairs units should be included in all training, whether it is conducted as a tabletop or a live exercise. Also, creating a system to classify multiple levels of response to different sorts of events for public affairs units will only improve the ability to respond quickly and effectively. Include local law enforcement partners such as North Las Vegas and Henderson Police Departments and City of Las Vegas and Clark County PIOs in

tabletop exercises related to significant events and/or MCI. Consider conducting additional training and exercises for training members and PIOs to enhance communication exchange collaboration between PIOs from multiple agencies. Ensure unified public messaging is incorporated in active shooter incident training and tabletop exercises.
(*Washington Navy Yard AAR*, p. 80, *San Bernardino AAR*, p. 117, *Las Vegas AAR, p. 63, El Paso AAR*)

20. **ICT/IMT Training.** Ensure the appropriate public information officers and affairs personnel are ICT/IMT trained. The lead of the JIC should be identified early on during the establishment of the JIC. It is prudent that the individual serving as lead should possess prior ICS/IMT training in order to ensure all JIC responsibilities are properly managed. (*Washington Navy Yard AAR*, p. 80)

21. **JIC/Public Communications Training.** Conduct comprehensive training for all members in the JIC and other public communications functions. (*Washington Navy Yard AAR*, p. 81)

22. **Ensure cross-training on use of notification tools and social media**. Agencies should ensure that more than one person within the agency can access notification tools and official social media accounts. (*Boston Marathon AAR,* p. 122)

23. **Social Media Monitoring.** Monitor media outlets and social media in order to quickly correct mistaken or inaccurate information that is reported. There may also be investigative benefits, such as identifying potential witnesses (Navy Yard workers were posting information on their Twitter accounts.) Using social media such as Twitter, Facebook, YouTube, Instagram, Periscope, Flickr, NextDorr.com, and others has become critical for releasing timely and accurate information both to the public and to the traditional media. By being active on social media leading up to critical incidents, law enforcement agencies can better inform the public. Create policy, procedures, and protocols specifically outlining how information will be released internally and to the public via social media during significant incidents and/or MCI. Create a designated workstation in the DOC for Public Information Office personnel to promote efficient and timely updates, release information, and monitor online media. Research the costs and benefits of purchasing a media monitoring service to assist the PIOs in determining the needs of the community during and after significant events and/or MCI. Assign a PIO to monitor and collate information of concern that

various news outlets and social media platforms report on a significant incident and/or MCI. Evaluate the need for a staffing study to potentially increase staffing within the Public Information Office, specifically civilian personnel assigned to manage LVMPD's website and social media platforms. (*Washington Navy Yard AAR*, p. 81, *San Bernardino AAR*, p. 117, *Las Vegas AAR p. 63, 65, 68*)

Other Considerations

24. **Community Protection and Incident Management.** After an incident occurs that could negatively impact a specific community, law enforcement should take added steps to protect them from potential retribution and advise them how to handle possible threats. (*San Bernardino AAR*, p. 118)

25. **Faith Leader Outreach.** Law enforcement should establish and build upon relationships with communities of faith and faith leaders. These relationships need to be established over time and with proactive efforts prior to any sort of major incident. (*San Bernardino AAR*, p. 117)

26. **Private Property Owners and Media Management.** Law enforcement agencies must keep in mind the need to work with and prepare community members who own property that is involved in high profile crimes for the national and possibly international attention it will draw from the media. (*San Bernardino AAR*, p. 118)

27. **Citywide Traffic.** Remain mindful of the impact the incident may have on citywide traffic. Street and road closures are inevitable, however, ensure an official is tasked with monitoring citywide traffic and providing the public and media with regular updates as to the street and road closures resulting from the emergency response. (*Washington Navy Yard AAR*, p. 77)

28. **Media Demands of Key Leaders/Daily Operational Management.** The intense media coverage associated with a high-profile event is overwhelming and will place additional demands on leaders that may take them away from daily operations. These demands will continue long after the conclusion of the incident, requiring leaders to constantly assess the effects the increased attention and notoriety bring on themselves and the organization. (*San Bernardino AAR*, p. 113)

29. **Listing of Schools.** Develop an updated listing of all schools, including day-care facilities, for future planning purposes. (*Henry Pratt AAR, p. 20*)

30. **Media Helicopters Concern.** While the news helicopters were prevented from getting too close, they were still close enough to get high quality footage that could have hampered police tactical operations if there were more offenders launching a coordinated attack. Police should determine how to coordinate with the FAA and news agencies to balance the need to share information with the public with tactical operations. (*Henry Pratt AAR, p. 36-37*)

31. **Vigils and Memorials.** Consider establishing a clear protocol when developing messages to the public about vigils and memorials. (*El Paso AAR*)

32. **University Notification.** Campus police as well as administration officials should have the authority and capability to send an emergency message. Schools without a police department or senior security official must designate someone able to make a quick decision without convening a committee. (*VA Tech AAR, p. 19*)

COMMUNICATIONS

Organization

1. **Management Support Teams.** FDLE required the assistance of a management support team to handle logistical, planning, and financial/administrative needs of the event. Recommend creating and maintaining redundant FDLE Management Support Teams (FMST) in each region and Headquarters. (*Orlando AAR*, p. 6)

2. **Face-to-Face Command Communication.** As recommended in other chapters, establish a unified police, fire and EMS command, or at least face-to-face communications at a command center, as early as possible in a mass casualty incident, to reduce reliance on radio communications. (*Aurora AAR*, p. 89)

3. **Scribes.** Assign a scribe to follow command staff to ensure all information is recorded and activities and decisions do not go undocumented. (*Orlando AAR*, p. 17)

4. **Knowledge of Incident Location.** Incident Command should ensure that a representative with knowledge of the incident location – including buildings, security measures, and protocols – is identified early on and made available to provide background information. Police and other emergency response agencies should develop pre-incident relationships with the security directors and facility directors of large complexes, both public and private, that are located within their jurisdictions. (*Washington Navy Yard AAR*, p. 79)

5. **Develop Pre-Existing Relationships.** Critical incident management is greatly enhanced when there are pre-existing relationships between leaders and field supervisors from all potential first responder agencies. (*San Bernardino AAR*, p. 117)

6. **External IT Support.** Consider deploying Information Technology Services members from outside the region to assist with connectivity issues. (*Orlando AAR*, p. 15)

7. **Dedicated Tactical Dispatcher.** Because dispatch systems can quickly become overwhelmed in a mass casualty, active shooter, or other critical incident, agencies should develop a tactical dispatcher system that provides a dedicated dispatcher responsible for the operational needs of the incident and tactical

commander. Ensure dispatch is vetting information before redistributing. Recommend assigning personnel to monitor IFERN in the event a patch is not possible. (*San Bernardino AAR*, p. 115, *Henry Pratt AAR, p. 23, 24*)

8. **Liaison.** Having a liaison for Command Staff to work with the Incident Command Post through. Some agencies reported not receiving updates, and without having Aurora communications, they couldn't stay informed. (*Henry Pratt AAR, p. 14*)

9. **List of Contacts.** Consider developing a roster of telecommunications contacts so that the appropriate personnel can be notified to ramp up power levels at radio tower networks for when the radio system is being overloaded. (*El Paso AAR*)

Policy, Plans, and Procedures

10. **Create a check-in and controlled access policy.** Incident Command should establish a resource staging location and share this location with responding agencies, so they can check in and be appropriately tracked. The location should be well-marked and clearly visible to all responding agencies. All law enforcement and emergency response agencies should have clear policies and training that directs responding personnel to seek out and check in at the designated staging location. (*Broome County, NY, Shooting AAR*, Area 2, *Washington Navy Yard AAR*, p. 81)

11. **Incident Command Check In.** All responding agencies should have policies and training that direct the first responding member of an agency to check in with the IC to become the IC liaison so critical directions and information can be effectively shared with that agency. (*Washington Navy Yard AAR*, p. 75).

12. **Sign-in Forms.** Create a sign-in form that is available to all ROCs for future events and stored on a shared drive. (*Orlando AAR*, p. 18)

13. **Empower Dispatchers**. Dispatchers should be empowered and encouraged to, with tact, recommend or suggest and, if needed, direct Incident Commanders to undertake actions in support of the management of an operation. In the theater shooting, it would have been appropriate to suggest that the fire IC call for additional chief-level support, or even to initiate it themselves, but the dispatcher was uncertain about the appropriateness of this. Dispatchers should also have the ability to solicit critical information from the Incident Commander (i.e., incident

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status, personnel accountability reports, etc.). Develop active shooter/mass incident template or run card for dispatchers. (*Aurora AAR*, p. 90, *El Paso AAR*)

14. **Intelligence Collection.** Review and update policies and procedures to ensure 911 operators follow-up with all callers to obtain any potentially valuable information. Callers may be able to provide first responders with additional real-time intelligence or details of the incident. Information provided by callers may also be pertinent to the subsequent investigation of the incident. Call takers and dispatchers must be active participants in active shooter training. (*Washington Navy Yard AAR*, p. 71)

15. **Utilization of Non-Traditional/Basic Communication Methods.** When responding to a major incident, officers may find that radio communications and cell phone service are not available. First responders should be prepared for the possibility of having to relay information through non-traditional modes of communication, such as utilizing runners or hand signals. (*Washington Navy Yard AAR*, p. 78)

16. **CCTV Camera Coordination and Training.** The various units or entities responsible for CCTV cameras and security personnel at given locations (military installations, government facilities, transportation hubs, etc.) should regularly coordinate and train with one another to ensure all personnel are aware of camera locations, access protocols, and information sharing procedures in the event of an incident. This is especially important for locations that may have multiple or different units responsible for various portions or sections of a large facility or installation. (*Washington Navy Yard AAR*, p. 79)

17. **Non-Emergency Calls.** Develop a system and protocols for diverting nonemergency calls elsewhere as well as establishing protocols to handle calls from family, friends, and media. (*San Bernardino AAR*, p. 115)

18. **Primary/Alternate Frequency Selection (Part 1).** Review and update the policies regarding when officers should switch to an alternate radio channel during a large scale, critical incident. The current policy governing when officers should switch channels is based on the more common scenarios of pursuits or barricades, but it does not take into account the unique dangers of a critical incident like an active shooter. At the Navy Yard, the initial responding officers, the ones who entered the building to search for the shooter, were on the First District (or "1D") radio channel, but they were asked to switch to an alternate

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channel during the search. In critical incidents, like active shooter, the responding officers should remain on the original channel. Due to the nature of the ongoing threat and sensory overload, officers involved in the search for active shooter will often not hear requests to switch to an alternate channel. Additionally, all officers inside the "hot zone" should be communicating on the same designated channel. There are obvious safety risks if, for example, some of the officers are operating on one channel and other officers, such as ERT, are operating on their own ERT channel. (*Washington Navy Yard AAR*, p. 73)

19. **Primary/Alternate Frequency Selection (Part 2).** MPD is exploring the establishment of secure multi-jurisdictional tactical channel and separate support channel and developing the appropriate policies and ensure officers know how and when to use those channels. These policies must be consistent with the previous recommendation, which outlines the updates to the policies related to switching channels during large tactical response operations such as an active shooter. Again, the initial tactical operations should remain on the original radio channel. The communications for all other activities and functions should be moved to another channel. Due to the nature of the incident and sensory overload, officers involved in the search for an active shooter will often not hear requests to switch channels. The switch could potentially be life-threatening. Consider SOPs that outline when and how EPPD and 911 Communications patch channels and establish additional channel(s) during a large-scale incident. Establish policy for non-involved units to switch to alternate channel and tactical teams continue using their own channels.
(*Washington Navy Yard AAR*, p. 78, *El Paso AAR*)

20. **Call-taking in MCI.** Empower telecommunications to use their judgment in a large-scale event, and to suspend the usual protocols when they are inefficient or troublesome. Do not waste time requesting the same information again from the same event. Once the nature and size of the incident is realized, it should suffice to say something like "Are you at the theater? Are you safe? Area you hurt?" Even inexperienced call takers should be told they may suspend the usual full protocols for such situations. Continue to implement new policy that grants Communications the authority to automatically upgrade an incident once reports of an ongoing mass casual incident (MCI) are received. Develop policy and trainings for dispatch and call takers specifically for active shooters. (*Aurora AAR*, p. 88, *El Paso AAR*)

21. **Callback Guidelines.** Clear definitions must be established for all public safety staff (including police, fire and communications) as to what situations required a

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request for immediate call backs to which personnel must respond, versus a non-urgent request for which personnel decide voluntarily. Guidelines on callbacks need to specify when to call, whom to call, what text to use to convey a sense of urgency, and how acknowledgement is to be obtained from the person notifies. (*Aurora AAR*, p. 88)

22. **Prepare for Second Surge.** In a mass casualty incident, there is likely to be a second surge of calls from family, friends and media following the initial emergency call surge. This extra workload will hit an already fatigued work staff. Procedures should be established early in the incident to temporarily divert non-emergency calls elsewhere, as was done in this incident. The calls could be sent to the city EOC, PIOs or a special office set up for that purpose. (*Aurora AAR*, p. 88)

23. **Plan and provide adequate relief for responders**. Designate a Logistics Section Chief, especially for larger incidents, to ensure officers in the field are provided an opportunity for relief, even if it is only for a short period of time. Additionally, when staffing a large operation, Command should plan for a second shift to limit officer fatigue and maintain officer/responder safety. The Communications Department has an Everbridge Interactive Communications and Mass Notification System that can be programmed to do callbacks efficiently using group notifications. This can save Communications Department staff and field commanders' time in the midst of an emergency. The lead or shift supervisor should have responsibility for deciding when to initiate callbacks of communications staff. A set of notifications should be pre-planned and stored in the system. Consider SOPs on how staff will be distributed to absorb and redistribute volume of calls coming in on non-primary channels. (*Boston Marathon AAR,* p. 119, *Aurora AAR*, p. 88, *Orlando AAR*, p. 15)

24. **HSEMA/Floor Plan Sharing.** A connection must be made with HSEMA to ensure that floor plans and other important information related to the location are relayed to Unified Command and all necessary tactical units. (*Washington Navy Yard AAR*, p. 79)

25. **Witness Management Plan.** Develop a mass witness management plan or operating procedure, outlining the process by which a large number of witnesses can be quickly evacuated, triaged, and interviewed. The plan would also include an appropriate checklist or form document that can be used by detectives to

quickly process large numbers of potential witnesses. Ensure all members are trained in executing the plan. (*Washington Navy Yard AAR*, p. 80)

26. **Information Sharing.** Agencies should adhere to notification and information sharing protocols outlined in the city's response plan. Review and update the plan to ensure that the notification protocols clearly outline the proper procedures for both requesting agency assistance and responding to the scene. May want to consider that in the event of a large-scale incident with multiple homicides, the request for the presence of the Medical Examiner should come from the local homicide unit (regardless of which agency is serving as the lead) since the local unit is familiar with and works with the Medical Examiner on a regular basis. (*Washington Navy Yard AAR*, p. 80)

27. **Communications Protocols for Investigative Response.** Develop the appropriate policies and conduct comprehensive training related to communications protocols for investigative response to large incidents. Detectives/investigators should receive and be well-versed in ICS, especially their position-specific IMT role. When an incident occurs and the initial tactical objectives have been achieved (and the threat neutralized), an initial briefing should be conducted with all investigators to ensure awareness, accountability, and understanding of responsibilities. The investigative chief should be the only one providing directions and instructions from Unified Command. A dedicated radio channel should be available and known by all investigative personnel to coordinate and communicate actions. (*Washington Navy Yard AAR*, p. 79-80)

28. **Review Protocols for Issuing Emergency Alert Messages and Call Taking**. Review protocols that would prompt and allow emergency personnel to issue emergency alerts during quickly unfolding incidents. Conduct a review of the scripted call-taking procedures and policies. Determined if there should be a prudent best-practice or innovative approaches ("tactical dispatching") implemented for exigent circumstances, such as an ongoing active shooter. Even If the reported details may be difficult to believe, call takers should exhibit the proper demeanor always and should avoid conveying their doubt or skepticism over the line as it may undermine the caller's confidence in the operator. Review radio communications protocols and determine where there could be improvements for an incident of this size and scope. (*Boston Marathon AAR,* p. 100, *Washington Navy Yard AAR*, p. 70, *Henry Pratt AAR, p. 21*)

29. **Establish Unified Command, Review Protocols and Develop Information Center Call Sheets for Call Center staff**. Develop ready-to-use templates including script outlines with basic responses and typical questions with answers that can be used by all call center staff during an emergency. Ensure call center staff are adequately trained in their use. Ensure protocols are in place and practiced so that department emergency operations centers and city/county emergency operations centers are ready to quickly stand up in a response to terrorist attacks. For large departments, consideration should be given to creating an operational command post out of existing centers. Establish a unified command center and staff it with all relevant players. It may be prudent for military installations, especially those located in or near a largely populated area, to review their emergency call-taking procedures and policies to ensure they include guidelines for actions in the event of a large-scale incident that will inevitably result in multiple agencies responding to the scene. Create a pre-script for communications of key information that needs to be issued during a response. Leadership can use this as both a checklist and template of what needs to be communicated out to their agencies and external responders. Incorporate ICS standardized interagency language and terminology for exchanging information regarding location and addresses. Provide regional personnel with training and quick reference cards to use these backgrounds/channels. (*Boston Marathon AAR,* p. 100, *Paris Attacks*, *Broome County, NY AAR,* Area 2, *Washington Navy Yard AAR*, p. 70, *San Bernardino AAR*, p. 113, *El Paso AAR*)

30. **Mass Notification Policies.** Develop and/or improve policies and procedures regarding both alerts and notifications are issued and who is responsible for this notification process. Continue protocol of quarterly audit to ensure personnel's contact information is accurate and running messaging tests using that information. Continue assessments with area hospitals on their communication capabilities and solicit feedback on how to improve system-wide communications system for alerts. Develop protocol that the communications mobile unit be dispatched for active shooting mass casualty incident. (*El Paso AAR*)

31. **Crime Scene Management and Access**. Access to and from the crime scene should be strictly controlled from clearly established entrance and egress points, and reserved only for authorized personnel that have a legitimate and clearly defined reason for being on scene. No personnel should be allowed within a crime scene unless there is a legitimate law enforcement purpose. Agencies should consider video streaming or other means for crime scene viewing to assist in minimizing unnecessary crime scene traffic. Clearly established crime scene

zones should be created and closely monitored with established ingress and egress points. Current policy and protocols should be reviewed to ensure that clear roles, responsibilities, and scope of authority are established for crime scene management. (*Newtown AAR, 69*)

Technology and Equipment

32. **Unified Command Location.** Regularly voice the location of Unified Command over the radio and make the location as visible as possible. Utilize a beacon or other visible marker to indicate the location and distribute vests to identify personnel and their roles. (*Washington Navy Yard AAR*, p. 75)

33. **Simplify Operation of Radio System.** The radio system needs to be reconfigured to make it simpler to use its inter-operative capabilities. Attempting to use interoperability talk groups (channels) or scanning capability is too complicated during an emergency and may result in missing critical transmissions. Consider reprogramming police radios to simplify communications. Place specialized talk groups in separate and distinct fleets and do not comingle them with a standard (universal or department-wide programming. Consider reducing the number of "fleets" (radio talk groups) to avoid operational confusion. Use identical radio "profiles" (channel configurations). (*Aurora AAR*, p. 89)

34. **Do Not Rely on Scan Feature.** The scan feature on radios is not effective during a critical incident, the radio will prioritize to the selected talk group and transmissions on non-selected talk groups will be cut off. More training on the radio system would help, but probably not suffice. (*Aurora AAR*, p. 89)

35. **Separate Command Radios.** Consider installing both police and fire radios in police and fire command vehicles. This would allow for continuous monitoring of each other's activities without switching radio systems or talk groups. This capability is especially useful while en route to an incident. Reprogramming existing radios probably would help, but not suffice, because the portable radios will not always be set to the correct talk group, they are difficult to adjust while driving, and they do not work well inside a vehicle. Further study probably will be required to determine how best to allow reliable inter-department communications using portable radios. Employ a cache of radios to responding agencies. Ensure extra radios are co-located at the staging area or another central location for

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responders to be assigned a radio that can access the appropriate channels. (*Aurora AAR*, p. 89, *Henry Pratt AAR, p. 24, El Paso AAR*)

36. **Facilitate Cell Phone Use.** A back-up inter-department communications system such as cell phone direct connect should be considered. The Communications Dispatch should maintain listings of police and fire department cellular telephone numbers. However, the radio system still should be the primary system, because cell phone structure may become overloaded and fail during emergency situations. Note: The Communications Manager believes cellular telephone numbers released to the Communications Department become public records. Even with limited cell phone service, unit and district commanders should be able to communicate through the use of a smart phone or tablet. It should be noted that the agency has begun the process of updating phone technology and should consider issuing tablets with Wi-Fi hot spot capabilities. The Agency should also review the technology capabilities for detectives within the Major Crime Units and update equipment and software as needed. Recommend consultation with legal counsel while developing plans. (*Aurora AAR*, p. 89, *VA Tech AAR*)

37. **Satellite Phones.** If not already available, consider purchasing a small number of satellite phones that do not rely on cell phone sites and will work at almost any location. During destruction of the explosives removed from the Paris Street apartment, ATF reported that the destruction location was so remote that cell phones did not work. Also, the cell phone system can get overloaded in an emergency. (*Aurora AAR*, p. 90)

38. **Maintain an adequate supply of or develop a streamlined process for overhauling radios and obtaining radio and cell phone chargers and batteries.** Because of the long duration of the event and incident, response partners worked far longer hours than anticipated and used their communications equipment more than anticipated. The ability to obtain fresh radio batteries and charge radio and cell phone batteries became a critical need. Create a policy statement to pre-plan radio overhaul. (*Boston Marathon AAR,* p. 97, *Broome County, NY, Shooting AAR*, Area 2)

39. **Address radio equipment gaps in interoperability.** Review radio equipment gaps in interoperability and make recommendations to address them. Enact the patch for Aurora and Naperville radios to encourage interoperable communications. If there is a delay, swap radios with neighboring jurisdictions to improve delegation/passthrough communications as necessary. This would

reduce the need for follow-on-phone calls and reduce delays in information sharing. (*Boston Marathon AAR,* p. 120, *Henry Pratt AAR, p. 24*)

40. **Obtain GETS/WPS access for key Public Safety personnel**. Evaluate the need to obtain WPS for key public safety personnel and obtain WPS access as appropriate. Obtain WPS assets and training for personnel at city and county level-enabled phone**. (***Boston Marathon AAR,* p. 96, *Broome County, NY AAR, Shooting*, Area 6)

41. **Mobile Terminals in Vehicles.** Do not rely on mobile terminals in vehicles for critical incident communications because incident commanders and supervisors often will be out of their vehicles and unable to monitor computer displays. (*Aurora AAR*, p. 90)

42. **Computer Aided Dispatch System Database (CAD).** If not already done, program into the Aurora Intergraph CAD system all Denver Fire/EMS units, private ambulances, and public medical care facilities. Consider use of the communications technology called CAD 2 CAD Data Exchange Hub (DEH) in the metro area to improve integration with surrounding jurisdiction's CAD systems and to improve unit situational awareness and real time unit availability in routine and major incidents. Explore methods and technological solutions to centralize and prioritize CAD system usage during major events. The CAD is used by most local law enforcement, fire, and medical response agencies in El Paso County. A CAD is the bridge between the call to 911 and the responder arriving to assist with a law enforcement, fire, or medical issue. El Paso County is unique in that the District provides a common CAD system for virtually all local agencies, making the County one of the most interoperable in the State. (*Aurora AAR*, p. 90, *El Paso AAR*)

43. **Street Name Updates.** Ensure all street names and addresses of internal or gated complexes are included in the city's computer aided dispatch (CAD) system. Review and update on a regularly scheduled basis. (*Washington Navy Yard AAR*, p. 70).

44. **Earpieces.** The extensive noise and sensory overload may result in officers not being able to hear all radio communications. Fire alarms complicate communications, especially for officers searching for the shooter. Earpieces allow officers to better hear communications in loud environments and keep radio

communications from potentially giving away the officers' position to a shooter. (*Washington Navy Yard AAR*, p. 73)

45. **Encrypted Radio Channels.** Agencies should consider investing in encrypted radio channels. There are clear safety benefits of utilizing encrypted channels during a tactical response to ongoing threats. MPD is spearheading an initiative that is evaluating shared encrypted tactical channels that would be available to many of the responding agencies. (*Washington Navy Yard AAR*, p. 79, *San Bernardino AAR*, p. 116, *Orlando AAR*, p. 6)

46. **Ensure interoperable channels are programmed into public safety radios**. The Massachusetts Tactical Channel Plan outlines the need to program the state interoperability channels into every radio. The agencies and SWAT Teams with these channels programmed into their radios were able to access radio patches that allowed interoperable communications between teams. Those teams that did not have the channels programmed were either unable to communicate across teams or needed to utilize a cache radio. Additionally, consider holding joint training and exercises for area SWAT teams, to identify and resolve communications and coordination issues prior to the next major incident where multiple SWAT teams need to operate together. Provide a way for mutual aid units to monitor police talk groups. It appears that adequate patching capabilities that can be used for this are now operational. Ensure tactical channels are available and communicated to the appropriate parties. Determine if there is a way for other agencies to patch into the Aurora dispatch system so they could surge support. Identify how channels are allocated for active incidents and if there is a need to reserve specific channels. (*Boston Marathon AAR,* p. 120, *Aurora AAR*, p. 90, *Henry Pratt AAR, p. 21, 22*)

47. **Repeater.** Determine if a repeater is needed to improve communications in the area. Review and update SOPs, as needed, to ensure repeaters are available and accounted for within response protocols. Purchase a mobile and/or stand-alone radio repeater to augment existing radio coverage in remote sites or during large-scale, planned, or unplanned incidents. (*Henry Pratt AAR,* p. 21, *Las Vegas AAR. p. 100*)

48. **Hardware Updates/Improvements.** Continue implementing hardware updates/improvements to simplify radio communications. Evaluate associated costs for IT hardware, software, cloud, file, and drive storage as well as expanded

Wi-Fi access needed during significant incidents and/or MCI. Create a plan for procurement in emergencies. (*Henry Pratt AAR,* p. 21, *Las Vegas AAR, p. 101*)

49. **Update MABAS box alarm cards.** (*Henry Pratt AAR, p. 24*)

50. **Quantity of Laptops.** Establish the quantity of laptops/computers necessary in key locations (DOC, area commands) for external users to access reliable Wi-Fi and network access. Purchase, stage, and have ready dedicated equipment (pre-determined number of devices) for utilization during significant incidents and/or MCI. These devices should have network access and supporting programs for investigative units. (*Las Vegas AAR. p. 101*)

Training and Exercises

51. **National Incident Management System/Obtain Redundant Communications Systems and Equipment for key leadership and create protocols for implementation.** Encourage a working knowledge and application of National Incident Management System (NIMS) and Incident Command System training to all first responders and first supporters. Evaluate the need to obtain redundant communications systems for key leaders. If obtained, develop protocols for implanting these systems. Ensure multiple communications processes are in place to avoid communications challenges that can impact first responders. Assign a communications liaison from the Command Post to the EOC. Designate a central location near site of the incident to filter information. Communications Department personnel need to understand the system when field command is setting up ICS positions, and might even prompt or query them about doing so if they forget, as was the case in this incident with the absence of a Transportation Group Coordinator. Conduct training to exercise and test demobilization plans and preparations pursuant to ICS roles and responsibilities. (*Boston Marathon AAR,* p. 96, *Paris Attacks AAR, Broome County, NY, Shooting AAR*, Area 2, *Aurora AAR*, p. 91, *Washington Navy Yard AAR*, p. 81, *San Bernardino AAR*, p. 113)

52. **Guidelines for Annual Training.** Regional training should include all disciplines and levels of first responders. Fire, EMS, and other potential first responders should be included in in-service active shooter training as appropriate. In-service training, regardless of the topic, should be updated on an annual basis and meet federal, state, and other appropriate certification standards. The ability to understand and apply response strategies in a high-stress environment improves

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performance. Training should attempt to create as much sensory deprivation or stimulus as possible to simulate real-world scenarios. Continue to train responders in radio communications best practices, including when it is appropriate to contact Incident Command and when it would be more appropriate to use tactical channels. Ensure hands-on training using the technology is implemented at all levels. Continue integrated training opportunities to foster effective communications and build trust across teams. Continue to provide training opportunities where possible. Include dispatchers in training (i.e., ALICE©) to ensure they have a better understanding of the information law enforcement would need when responding to an incident or, to provide callers instructions on behalf of law enforcement during an incident. Additionally, conduct rotations with the SRT teams so dispatchers can gain experience with tactical dispatching. Determine if there are any gaps in system functionality and address as appropriate. Develop ICS policies with procedures and protocols specifically for LVMPD Communications Bureau and leadership. Include Communications Bureau personnel in ICS training, tabletop, and large-scale exercises to familiarize them with key concepts and common language used during significant incidents and/or MCI. Integrate dispatchers in MCI communications planning, training, incident procedure development and exercises. Incorporate emergency communications in overall ICS communications training and planning. In response to the Hartford Distributor's active shooter incident in Manchester, CT in 2010, the department implemented mandatory training specific to active shooter incidents for all personnel during in-service. Additionally, all CSP personnel are given active shooter training at the recruit level. Numerous CSP first responders to Newtown indicated that the previous training they received provided an increased level of confidence. Future training would be beneficial to personnel, and should encompass additional response dynamics to include evacuation protocols, treatment of the injured, establishing perimeter zones, incident command and scene management, and setting up initial scene security. Active shooter training should include incorporating "stressors" to inoculate troopers to sensory overload. Troopers should also be mindful of the potential for "blue on blue" encounters and ensure muzzle discipline at all times. All levels of command should participate in integrated training exercises in mass casualty events to include the effective management of personnel, resources, technology, and command post operations. (*San Bernardino AAR*, p. 114, *Henry Pratt AAR, p. 21, 23, 28,* Las Vegas AAR, p. 107, *El Paso AAR, Newtown AAR, p. 70*)

53. **Refresher Radio Training.** Schedule refresher radio training or exercises at least once a year and conduct radio checks during line inspections. Continue

implementing new, routine training for LE on proper use of radios and frequencies, in terms of information prioritization, channels to use, and ensuring information is distributed effectively.
 (*Orlando AAR*, p. 15, *El Paso AAR*)

54. **Facilities Training for Poor Communication.** Agencies should identify facilities within their communities that pose radio transmission and reception difficulties and use those facilities to train personnel and identify ways to mitigate poor communication, so they are prepared should an incident occur. (*San Bernardino*, p. 115)

55. **Reinforce the need to maintain radio discipline.** All first responders need to be reminded of the need for good radio discipline during a large-scale event and provided with protocols outlining appropriate and inappropriate use of messaging. Recent training has emphasized officers' radio discipline to reduce unnecessary transmissions and ensure the channel is available for the most critical communications. (*Boston Marathon AAR,* p. 94, *Washington Navy Yard AAR*, p. 78, *San Bernardino*, p. 116)

56. **CAD System Testing.** CAD systems should be load tested to ensure the systems can handle a significant event lasting a long period of time. Training exercises should simulate a system slowdown or shutdown during a crisis and describe alternative communication strategies and protocols. Continue training on the CAD System. (*San Bernardino AAR*, p. 115, *Henry Pratt AAR, p. 24*)

57. **Provide training to field personnel on the capabilities of their radio systems for use in large operations.** Additional training and tactical exercises should be conducted to increase public safety personnel's experience and comfort with using interoperable systems and tactical channels. (*Boston Marathon AAR,* p. 116)

58. **Position-Specific Training.** Provide position-specific training for Incident Command System (ICS) and Incident Management Team (IMT). While all police personnel should be familiar with ICS and IMT roles and principles, most mid-to-upper-level police officials will likely serve in a specific management role during an incident response, especially in larger agencies. For these large agencies, having all sworn officers, regardless of rank, train tactically may not provide the most benefit since most command officials and managers are not required to respond in a tactical mode. They will, however, be needed to manage personnel and the

overall response to an incident. There are many good mid- to upper-level police officers who should be trained to take leadership of a portion of the operational responsibilities, rather than just waiting for an assignment. (*Washington Navy Yard AAR*, p. 72)

59. **Conduct additional training on Communications Plan and use of designated radio channels**. Ensure all disciplines are aware of the Communications Plan and how to access all designated channels. (*Boston Marathon AAR,* p. 97, *San Bernardino AAR*, p. 114)

60. **Emergency Call Center and Law Enforcement Training and Policy Coordination.** Whether the emergency call center is part of a jurisdiction's law enforcement agency or it is part of a separate agency, it is the police department's responsibility to engage them in training and work with them to jointly develop applicable policies and procedures. (*Washington Navy Yard AAR*, p. 71, *San Bernardino AAR*, p. 114)

61. **Public Safety Three-Party Team.** Foster more integration of planning and exercises among public safety communications, fire, and police. Communications personnel felt there was not enough understanding, respect, and training among the agencies, and that emergency preparedness should be considered a three-legged stool. Emergency call-takers and dispatchers from the military installations communications center should train with the local jurisdiction's emergency communications personnel. All parties should also be included in the scenario-based training exercises that are regularly conducted by emergency medical and law enforcement agencies. (*Aurora AAR*, p. 88, *Washington Navy Yard AAR*, p. 70)

62. **Communications Interoperability Drills and 911 Relationships.** The Communications Department should hold regular inter-department interoperability communications drills with all three agencies – police, fire, and public safety communications. Emergency call takers and dispatchers should establish strong relationships with their local jurisdiction's 911 services agency. Both parties should be familiar with the other's emergency procedures. They may also consider developing a process and protocol for ensuring vital information from callers is quickly relayed between call centers during an incident. This relationship may be formalized in a memorandum of understanding (MOU) that is reviewed and updated on an annual basis. Include relevant IT personnel and

contractors/vendors in planning and mass notification systems for major events. Develop checklists, access accommodations, trigger points and assignments to boost network capacity/capability for major events. (*Aurora AAR*, p. 88, *Washington Navy Yard AAR*, p. 70, *San Bernardino AAR*, p. 115, *El Paso AAR*)

63. **Testing of Mass Notification (Everbridge, WebEOC).** Conduct frequent testing and use of the new Everbridge notification system that includes whole community partners. Continue reaching out to local stakeholders and adding user groups to the Everbridge notifications, including private and parochial schools, businesses, hospitals, and other critical infrastructure stakeholders. Continue expanding usage of the mass notification system and building out accompanying SOPs. Everbridge messages should not be issued unless vetted by the Communications Supervisor, Incident Commander (IC) or EOC. Issue an additional Everbridge to notify responding officers of the staging area to report to upon arrival. Incorporate Everbridge and WebEOC use in the EOC exercises and trainings. Conduct further trainings and exercises for EOC members on how to use WebEOC and input injects in real-time. Reinforce alert and notification policy, procedures, training, and job aids to improve and standardize lines of authority/responsibility, message content, and establish trigger points for notifications. Issue an additional Everbridge to notify responding officers of the staging area to report to upon arrival. Update Department Operations Center (DOC) Protocol to include assignment of WebEOC updates and EOC communication. Create a stream dedicated to DOC operations within WebEOC. Update Department Operations Center (DOC) Protocol to include assignment of WebEOC updates and EOC communication. (*Henry Pratt AAR, p. 20, 23, El Paso AAR*)

64. **Interagency Training.** Continue to establish, maintain, and expand upon interpersonal and interagency relationships through joint planning, training, and exercise to improve trust, communications, and coordination. Continue cross-training for existing dispatchers between EPFD and EPPD. Continue to cross-train volunteers across functions for communications personnel to stay updated on workflows/process in different functions. Continuous radio updates were critical for personnel responding to Newtown. If an outside agency is provided a radio, ensure team leaders are advised accordingly. Use plain talk when communicating between agencies and attempt to increase effective communication between agencies. Ensure radio protocols account for external agency personnel interoperability channels to reduce radio traffic and dispatch burden. Ensure Communications training and communication focuses on providing ICS specific addresses and location markers for external responders. Integrated Tactical

Response: The FBI and the CSP responded in an integrated, tactical manner, which was influenced by prior training and pre-established professional working relationships. Local, state, and federal tactical teams should train together on joint problem solving scenarios to ensure success during future integrated operations. (*El Paso AAR, VA Tech AAR, Newtown AAR, p. 71*)

65. **College/University Training**. The head of campus police should be a member of a threat assessment team as well as the emergency response team for the university. In some cases where there is a security department but not a police department, the security head may be appropriate. Campus police must train for active shooters (as did the Virginia Tech Police Department). Experience has shown that waiting for a SWAT team often takes too long. The best chance to save lives is often an immediate assault by first responders. The mission statement of campus police should give primacy to their law enforcement and crime prevention role. They also must to be designated as having a function in education so as to be able to review records of students brought to the attention of the university as potential threats. The lack of emphasis on safety as the first responsibility of the police department may create the wrong mindset, with the police yielding to academic considerations when it comes time to make decisions on, say, whether to send out an alert to the students that may disrupt classes. On the other hand, it is useful to identify the police as being involved in the education role in order for them to gain access to records under educational privacy act provisions. Specific findings and recommendations on police actions taken on April 16 are addressed in the later chapters. Schools should check the hardware on exterior doors to ensure that they are not subject to being chained shut. Take bomb threats seriously. Students and staff should report them immediately, even if most do turn out to be false alarms. (*VA Tech AAR, p. 99*)

Other Considerations

66. **Limit Self-Deployment.** It must be part of police training throughout the state that in complex, large incidents, or multiple incidents, an officer does not respond unless requested by an official with the authority to make such a request. Only police units assigned by incident command should respond. If an officer who does not have an assignment happens to be near the location where the suspect is reported to be, that officer should report availability to respond, rather than responding directly to the incident. (*Boston Marathon AAR,* p. 118)

67. **Self-Dispatch.** First response agencies should develop policies for when an officer initiates self-dispatch. A staging area should be created for such officers given the inability to control self-dispatch. (*Broome County, NY, Shooting AAR, Area 2*)

68. **Utilization and integration of the Broome County mobile communications vehicle. (SEE APPENDIX A)** Use of the Mobile Command vehicle will alleviate transfer communications and multiple radio frequencies issues. Assign a BPD representative to the EOC or deploy the mobile command vehicle on scene. (*Broome County, NY, Shooting AAR*, Area 3)

69. **Crime Scene Awareness.** All first responder agencies must recognize that not all mass casualty incidents are crime scenes (for example, natural disasters are not crime scenes) but all terrorist events are. All responders to a potential terrorist incident should understand the importance of evidence preservation, documentation, and collection. (*San Bernardino AAR*, p. 117)

70. **Critical Incident Stress Management.** CISM needs to be available to tele communicators and their managers as well as to first responders. When CISM counselors are used, they need to be informed on what tele communicators do. (*Aurora AAR*, p. 91)

71. **After Action Debriefing.** A debriefing for Communications Department personnel should be conducted soon after a major event. One purpose is to dispel any lingering rumors. (*Aurora AAR*, p. 91)

72. **Campus Communication.** Campus emergency communications systems must have multiple means of sharing information. Universities should have multiple communication systems, including some not dependent on high technology. Do not assume that 21st century communications may survive an attack or natural disaster or power failure. Dispatchers should be cautious when giving advice or instructions by phone to people in a shooting or facing other threats without knowing the situation. This is a broad recommendation that stems from reviewing other U.S. shooting incidents as well, such as the Columbine High School shootings. For instance, telling someone to stay still when they should flee or flee when they should stay still can result in unnecessary deaths. When in doubt, dispatchers should just be reassuring. They should be careful when asking people to talk into the phone when they may be overheard by a gunman. Also, local law

enforcement dispatchers should become familiar with the major campus buildings of colleges and universities in their area. (*VA Tech AAR*)

INTELLIGENCE

Organization

1. **Direct Incident Location Intelligence.** Incident Command should ensure that a representative with knowledge of the incident location – including buildings, security measures, and protocols – is identified early on and made available to provide background information. Police and other emergency response agencies should develop pre-incident relationships with the security directors and facility directors of large complexes, both public and private, that are located within their jurisdictions. Send pictures or maps of the area – building layouts, parking lots, streets – to dispatch and vehicle mobile data terminals (MDT). As available, employ helicopters, unmanned aircraft systems (UAS), or pre-existing cameras to produce information in real time. Joint fire and police department pre-plan inspections could also assist response teams with familiarization of local building layouts. Work with local government and Local Emergency Planning Committees (LEPCs) and community government to pass ordinances requiring businesses to register critical information for first responders (i.e., blueprints, floorplans, door numbering policies, additional information on layouts, workflow and traffic patterns, etc.) with responding agencies. Ordinances requiring that building plans be included with fire extinguisher boxes as a community-wide best practice were recently passed by the City of Aurora council. Incorporate joint inspections as a way to increase agency familiarity with local building layouts. Upload on-file plans and building details to the CAD and to responder vehicles to ensure they are accessible during the time-sensitive incidents. (*Washington Navy Yard AAR*, p. 79, *San Bernardino AAR*, p. 114, *Henry Pratt AAR, p. 37*)

2. **Multiple Lead Investigations.** Police should be prepared to investigate multiple leads and should consider the possibility of multiple suspects. Focusing on one lead or suspect and ignoring the possibility of multiple shooters may distract police from pursuing a threat that continues to expose the community and first responders to further danger. (*Washington Navy Yard AAR*, p. 77)

3. **Drone Personnel**. It was noted that more drone personnel would have been helpful, but all were tasked with other assignments. Another suggestion was to send a page out to the Drone Team to request more pilots on scene. (*Henry Pratt AAR, p. 36*)

4. **Second Duty Commander.** Designate an individual not involved in the incident to be responsible for the remainder of the troop patrol functions. Typically this function would fall back to the second in command (Troop Master Sergeant) when the senior commander is focused on a major incident. During this incident, the initial first responder team was comprised of the Commanding Officer and Executive Officer, as well as the duty supervisor. While Troop A was able to devote virtually all of its resources to this incident for the first several hours, this will not always be the case. It may be necessary in some instances to assign regular patrol operations to other troops within the district or adjoining districts. (*Newtown AAR, 68*)

Policy, Plans, and Procedures

5. **Mass Witness Management Plan.** Develop a mass witness management plan or operating procedure, outlining the process by which many witnesses can be quickly evacuated, triaged, and interviewed. The plan would also include an appropriate checklist or form document that can be used by detectives to quickly process large numbers of potential witnesses. (*Washington Navy Yard AAR*, p. 80)

6. **Iconic Target Interest.** The determination of the terrorists to seek high body counts, go after iconic targets, and cause economic damage. Since attacks against soft targets are relatively easy and cheap to mount, such institutions will remain targets of future attacks. (*Mumbai AAR*, p. 21)

7. **Investigative Skill Determination.** A determination should be made in identifying agencies with the best skills and tools to perform investigative tasks. Jurisdictional investigative authority does not necessarily correlate with investigative skills, abilities, training, and equipment. (*San Bernardino AAR*, p. 117)

8. **Security Clearances.** Increase the number of special agents and intelligence analysts with a Secret-level security clearance. Clearances are needed for members that meet the FBI/DHS guidelines. Maintain a list of members who have a clearance and the issuing agency. (*Orlando AAR*, p. 27)

9. **Use of 911 Operators.** Review and update policies and procedures to ensure 911 operators follow-up with all callers in order to obtain any potentially valuable information. Callers may be able to provide first responders with

additional real-time intelligence or details of the incident. Information provided by callers may also be pertinent to the subsequent investigation of the incident. Call takers and dispatchers must be active participants in active shooter training. (*Washington Navy Yard AAR*, p. 71)

10. **Communications Protocols for Investigative Response.** Develop the appropriate policies and conduct comprehensive training related to communications protocols for investigative response to large incidents. Detectives/investigators should receive and be well-versed in ICS, especially their position-specific IMT role. When an incident occurs and the initial tactical objectives have been achieved (and the threat neutralized), an initial briefing should be conducted with all investigators to ensure awareness, accountability, and understanding of responsibilities. The investigative chief should be the only one providing directions and instructions from Unified Command. A dedicated radio channel should be available and known by all investigative personnel to coordinate and communicate actions. (*Washington Navy Yard AAR*, p. 79)

11. **Information Sharing Protocols.** Agencies should adhere to the notification and information sharing protocols that are outlined in the city's response plan. Review and update the plan to ensure that the notification protocols clearly outline the proper procedures for both requesting agency assistance and responding to the scene. May want to consider that in the event of a large-scale incident with multiple homicides, the request for the Medical Examiner's presence should come from the local homicide unit (regardless of which agency is serving as the lead) since the local unit is familiar with and works with the Medical Examiner on a regular basis. (*Washington Navy Yard AAR*, p. 80)

12. **Open Source Research and Social Media.** No member will use their personal social media account to conduct open source research for investigative purposes. (*Orlando AAR*, p. 20)

13. **Secure Briefing Areas.** Identify an alternate meeting room separate from designated secure briefing areas. (*Orlando AAR*, p. 21)

14. **Offender Identification.** Some officers mentioned they would have preferred to have more information about the offender (picture, further description, etc.). While some officers were provided information and photographs of the

offender, others noted that they were not. Review and update SOPs as appropriate, to determine who is responsible for sharing this information, when the information should be provided, and a method to ensure the information is shared. IC or the first responding officers should follow SOPs and responder checklist to obtain video footage for verification. Consider setting arrangements with alarm companies in the city to share video security footage during mass casualty incidents to quickly identify shooters and potential, additional threats during the response. (*Henry Pratt AAR, p. 15, El Paso AAR*)

15. **Building Side Nomenclature**. Standardize the designation of the front, rear, and sides of a building (e.g. "A" side, "B" side, etc.) and reinforce during training to ensure compliance and understanding among first responders. All involved agencies should operate under one system. Ensure all submitted reports reflect consistency in reporting. (*Newtown AAR*)

Technology and Equipment

16. **Computer Aided Dispatch Street Name Updates.** Ensure all street names and addresses of internal or gated complexes are included in the city's computer aided dispatch (CAD) system. Review and update on a regularly scheduled basis. (*Washington Navy Yard AAR*, p. 70).

17. **Intelligence Analyst Database Access.** Develop and maintain a list of all databases intelligence analysts may have access to. Require intelligence analysts to complete as part of semi-annual line inspections. Maintain a consolidated list of intelligence analysts and accesses at the regional level. (*Orlando AAR*, p. 20)

Training and Exercises

18. **CCTV Camera Operator Training Integration.** The various units or entities responsible for CCTV cameras and security personnel at given locations (military installations, government facilities, transportation hubs, etc.) should regularly coordinate and train with one another to ensure all personnel are aware of camera locations, access protocols, and information sharing procedures in the event of an incident. This is especially important for locations that may have multiple or different units responsible for various

portions or sections of a large facility or installation. (*Washington Navy Yard AAR*, p. 79)

19. **Investigative Function Training Exercises.** At least some training exercises should go beyond merely testing the tactical response and also include the investigative functions. Investigative recommendations and actions should be exercised and tested. Critical incident training and exercises should include an investigative component that includes identifying all aspects of victim and witness identification, interviewing, and reunification. Assess current trainings for fusion center analysts to determine areas for improvement to strengthen analysts' capabilities. Train additional fusion center analysts in proper information verification processes and tools in the event of a large-scale incident. (*Washington Navy Yard AAR*, p. 80, *San Bernardino AAR*, p. 117, *El Paso AAR*)

20. **Counter Violent Extremism Training Programs.** Adopt and/or create training programs to counter violent extremism. Develop training programs and/or protocols to neutralize the radicalization of incarcerated individuals. (*Paris AAR*, p. 21

21. **Evidence Preservation.** All first responder agencies must recognize that not all mass casualty incidents are crime scenes (for example, natural disasters are not crime scenes) but all terrorist events are. All responders to a potential terrorist incident should understand the importance of evidence preservation, documentation, and collection. (*San Bernardino AAR*, p. 117)

Other Considerations

22. **Campus Security.** Universities should do a risk analysis (threat assessment) and then choose a level of security appropriate for their campus. How far to go in safeguarding campuses, and from which threats, need to be considered by each institution. Security requirements vary across universities, and each must do its own threat assessment to determine what security measures are appropriate. Virginia Tech and other institutions of higher learning should have a threat assessment team that includes representatives from law enforcement, human resources, student and academic affairs, legal counsel, and mental health functions. The team should be empowered to take actions such as

additional investigation, gathering background information, identification of additional dangerous warning signs, establishing a threat potential risk level (1 to 10) for a case, preparing a case for hearings (for instance, commitment hearings), and disseminating warning information. The head of campus police should be a member of a threat assessment team as well as the emergency response team for the university. In some cases where there is a security department but not a police department, the security head may be appropriate. (VA Tech AAR)

TACTICAL RESPONSE

Organization

1. **Develop and implement a Unified Coordination System**. All responsible agencies should plan and design a unified coordination system that identifies the roles, responsibilities, reporting relationships, and missions for all organizations and operations centers supporting public safety and medical operations. (*Boston Marathon AAR,* p. 89, *Washington Navy Yard AAR*, p. 74)

2. **Incident Command System.** Activate the ICS and establish a unified command as soon as possible. The need for formal ICS varies from incident to incident. Activation of ICS does not mean waiting until every element of the ICS system is in place before acting. The main ICS deficiency in this incident was the failure to quickly establish a Unified Command between Aurora police and fire, and a failure to establish a Transportation Group to coordinate transports. (*Aurora AAR,* p. 32)

3. **Identifying Incident Commander.** Clearly identify who is the incident commander. At least one mutual aid command officer advised that due to the presence of many high-ranking police commanders, he had difficulty determining who was in charge. This problem was compounded by lack of a designated staging area and staging officer. The Incident Commander should announce his status and location on all pertinent radio talk groups (channels) or have the information rebroadcast by the Communications Center. As higher-ranking staff members arrive, they should assume command at their option. ICS command vests help in identification. (*Aurora AAR,* p. 28)

4. **Designate a Dedicated Logistics Section Chief and/or Staging Area Manager.** Designating a Logistics Section Chief and/or Staging Area Manager will support the operation, create check-in procedures, and will track sources, personnel, assignments, and deployments from the staging area. (*Boston Marathon AAR,* p. 118)

5. **Second Duty Lieutenant.** Designate someone not involved in the incident to be responsible for the remainder of the city when the senior commander is focused on a major incident. It may be necessary in some incidents to turn over regular patrol operations to mutual aid forces and their commanders or "double up" mutual aid officers with local officers. (*Aurora AAR*, p. 32)

6. **Designate a Safety Officer.** As the incident unfolds, a police command officer not directly involved in management of the incident should be designated as the Safety Officer responsible for monitoring activities and advising the Incident Commander if circumstances develop that adversely affect officer safety. This is a routine procedure of fire departments during major incidents. (*Aurora AAR*, p. 32)

7. **Command Post Location.** Locate the command post at a safe distance and maintain a scene safety zone. Although there was some suspicion that a second shooter may have been involved and the area had not been cleared for explosive devices, the command post and most of the command staff were located directly in front of the theater building. Additionally, witnesses were initially allowed to remain in the general vicinity of the theater parking lot. Had there been a second shooter or explosive device, many would have been in a danger zone. (*Aurora AAR,* p. 32, *Washington Navy Yard AAR*, p. 75)

8. **Federal Integration.** Federal agencies should evaluate how their systems can be better integrated into local and state systems. (*Boston Marathon AAR,* p. 120)

9. **Staging Mutual Aid.** Stage mutual aid assistance forces when their help is not needed for the active shooting portion of the incident. Establish the staging area remote from the incident scene. Assign a staging officer from the primary jurisdiction. The staging officer under NIMS/ICS guidelines may direct specific assignments. Mutual aid forces would be dispatched from the staging area. Prior agreements should be reached regarding the authority of outside agency supervisors and their ability to direct officer from agencies other than their own. (*Aurora AAR,* p. 31)

10. **Business Support for Tactical Operations.** Establish an on-site point of contact to liaison with Business Support Personnel (BSP) for member assignments and deployment periods. The work-cycle determination should be made within 24 to 48 hours of an emergency event so that work-cycles can be adjusted prior to the end of the cycle. This will allow members to record overtime hours and have the system correctly calculate overtime payment. (*Orlando AAR*, p. 22)

11. **Police/Fire/EMS Strike Teams.** Dispatch and incident commanders should consider calling for multiple fire or EMS units as strike teams or task forces when large numbers of responders or equipment are needed after the first several units arrive on the scene. Dispatch and the EOC must have the authority to plan responses based on using these teams. The strike teams do not necessarily stag together, the intent is to promote order and have a supervisor with the team to assure enough supervisory personnel, rather than a continual stream of units arriving or attempting to call for exact numbers of units using surgical precision, which is harder to manage. This also applies to police mutual aid, especially after the initial response. (*Aurora AAR*, p. 74)

12. **Site Security.** Ensure comprehensive actions are taken to establish site security. All personnel should be wearing appropriate identification and it should be conspicuously displayed. Have personnel prepared and standing by to respond rapidly to a secondary or additional incident. Explore technology to track officers when entering a hot zone to account for those who entered the area, especially in the event of a secondary incident. As an alternative, have a scribe record the ID number of officers as teams are formed and deployed into the hot zone. (*Washington Navy Yard AAR*, p. 76-77)

13. **Crime Scene Security.** Make sure the scene is secure. One entry control point should be established, and records maintained of all persons entering and leaving the crime scene. Lead the development of regional standards for marking rooms akin to technical rescue standards. These may include indications if there are victims, what their status is, presence of absence of explosive devices, etc. Determine if there is a need to restrict access, such as the room the victims were in, and how best to standardize. Adopt best practices regionally among agencies and disciplines. (*Aurora AAR,* p. 33, *Henry Pratt AAR, p. 33*)

14. **Consult local knowledge as Standard Practice.** Mutual aid law enforcement officials should always relay on local expertise familiar with the community. (*Boston Marathon AAR,* p. 116)

15. **EOC Organizational Reporting.** Emergency management by its very nature involves support to and cooperation from all city departments in order to be effective. It is usually more difficult for this to be accomplished if the emergency management function is placed in one of the public safety departments – fire or police – because it is then perceived as "belonging" to

one or the other department and often as a lower priority division at that. Emergency Management should be in a direct line relationship with the City Manager's Office where a higher level of authority and oversight would underscore the importance of this function and provide greater visibility for planning and EOC operations, and more easily facility coordination with other key city departments and agencies. (*Aurora AAR*, p. 113)

16. **Rescue Task Force.** Evaluate the number of responders assigned to each RTF – consider reducing from approximately 10 to 5-6 depending on operational awareness during the need to utilize RTF. The City of Aurora should lead the development of an RTF SOP and validate during concurrent training and exercises. The City of Aurora should continue to lead the development of regional RTF policy documents to make RTF operations and associated expectations clear to all responders. This will include follow-on to ensure responders know the protocol and are comfortable integrating across disciplines in a dynamic incident. The City of Aurora should continue to plan and incorporate the RTF concept into training and exercises to enhance regional understanding of function and capability across disciplines. Recommend conducting joint RTF training on a minimum bi- annual schedule until all parties are comfortable with the RTF model. (*Henry Pratt AAR, p. 29, 30*)

17. **Witness Accountability.** There should be better witness accountability, including: when a witness was removed, where they went, who took them there, who they were taken to, and who interviewed them. (*Henry Pratt AAR, p. 38*)

Policy, Plans, and Procedures

18. **Unified Command and Police/Fire Procedures.** Plan and practice unified command for complex incidents. Consider changing procedures on active shooter and other major emergencies, including how to ensure there will be face-to-face contact between police and fire commanders. Joint police-fire training has been approved for the rapid deployment of four-person (two police, two fire paramedic) "combat" medical treatment and extraction teams. Radio procedures also have been changed to improve police-fire communications. The City of Aurora and the surrounding region should address the belief that fire/EMS should not deploy to worm zone operations and provide guidance and integrated training to attempt to inform and address concerns. Reviewing how staging and coordinating resources that are heading

into the warm zone (RTF) and hot zone (contact teams) would be helpful. SOPs may need to be reviewed or revised as appropriate. (*Aurora AAR*, p. 28, *San Bernardino AAR,* p. 113, *Henry Pratt AAR, p. 30, 31*)

19. **Active Shooter Protocol.** Ensure that the new active shooter protocol remains a "living document" with fire, police, and emergency management leaders providing monitoring and evaluating success and continued relevance. Evaluate the need for policy, procedures, and training regarding SWAT Aerial Platform Snipers in the event of an active-shooter incident where the shooter is at an elevated position of advantage. Expand active-shooter training to include a barricaded active shooter when the shooter is in a position of advantage. (*Aurora AAR*, p. 76, *Las Vegas AAR, p. 28, 30*)

20. **Resource Typing Systems.** States should establish resource typing systems, similar to the system used by the fire service, to categorize and track available resources that may be required to respond to a critical incident. (*San Bernardino AAR*, p. 116)

21. **Develop a formal evacuation coordination plan**. Agencies with a role in coordinating response should develop a formal coordination plan that identifies temporary shelter locations, stages appropriate transportation assets. (*Boston Marathon AAR,* p. 95)

22. **Ensure in-field personnel have food and relief**. Plan for supplying food and other necessities for in-field personnel who may be activated for long periods of time. (*Boston Marathon AAR,* p. 96)

23. **Work to create formal definitions and protocols for Shelter-in-Place requests**. There must be a concentrated effort on the part of political officials, in collaboration with public health entities and hospitals, to develop formal definitions and protocols for shelter-in-place requests. MEMA should work with MDPH and other stakeholders to clarify shelter-in-place requests and identify critical personnel and services that may be exempt. (*Boston Marathon AAR,* p. 121)

24. **Better define critical sectors, personnel and possible exemptions for Shelter-In-Place requests.** Area hospitals should work with law enforcement to better define critical sectors, critical personnel, and outline possible

exemptions from orders or requests that impose travel restrictions. (*Boston Marathon AAR,* p. 122)

25. **Building Side Nomenclature.** Harmonize designations for building sides. At this incident three different identification systems were in use – compass directions (i.e., Northwest Corner, East Side, etc.), building sides A, B, C and D (Fire Department system) and building sides 1, 2, 3, and 4 (Jefferson County K-9 system). An agreement would be desirable to establish one system for area agencies. Regions should adopt a standardized marking system, similar to the International Search and Rescue Advisory Group marking system, for easy identification of areas searched, cleared, and secured by law enforcement personnel. (*Aurora AAR,* p. 33, *San Bernardino AAR*, p. 116)

26. **Pre-identify and equip location(s) that can serve as a UCC.** Although the UCC was stood up fairly quickly, the physical location of the UCC had not been pre-identified and therefore the location was not well equipped to support such an operation. Hotels do not necessarily have the capabilities and equipment on hand to support the activities of an emergency operations center, such as large quantities of phones, phone jacks, electrical outlets, computer equipment, and other resources necessary to support emergency operations. (*Boston Marathon AAR*, p. 88)

27. **Bomb Squad Resources.** Know the available bomb disposal resources. Every law enforcement agency needs to make sure they know who to call for bomb technician and render-safe assistance should they encounter hazardous incendiary materials, explosives, or explosive devices beyond their in-house capability, or for second opinions and back-up. Training with the bomb squads to be used is also essential. In the past, many jurisdictions relied on military assistance for explosive ordnance disposal. Under current bomb disposal and render-safe procedures, military Explosive Ordnance Detachment (EOD) personnel are responsible only for the disposal of military ordnance. With the increase in the number of civilian criminal and terrorist uses of explosive devices, public safety bomb technicians now have that responsibility. For complex situations, the FBI and ATF are excellent resources. (*Aurora AAR,* p. 41)

28. **Language Interpretation.** Plan for interpretation services in real time. There now are apps for smart phones and iPads as well as telephone interpretation

services to identify and translate a wide variety of foreign languages. Emergency responders should know how to access theses services to facilitate evacuation and give instructions to non-English speakers. One can speak in English and get voice out in another language with a smart phone, and vice versa. (*Aurora AAR,* p. 41)

29. **Officer Rest and Recovery.** Several officers reported being required to return to work with little sleep and limited psychological assistance. When possible, fatigued officers exposed to high levels of trauma should be relieved by officers who were off-duty when the incident occurred. As soon as a critical incident is stabilized, assign someone to plan for continuity of operations. (*Aurora AAR,* p. 33)

30. **Decontamination and Hydration.** Be prepared to set up officer, firefighter and EMS decontamination and hydration stations. Several officers were covered with blood and did not have access to clean water for washing and drinking. Consider procurement of a suitable "cleanup/hydration" station for use at major fires and police emergencies, if not available from fire rehab vehicles. (*Aurora AAR*, p. 33)

31. **Review protocols and conduct training on management of responding vehicles**. Review protocols for responding officers and the management of their vehicles, as well as for dispatchers to remind responding officers to maintain open roadways when appropriate. Conduct training to ensure these protocols are universally understood. In an effort to respond quickly to the ongoing incident, arriving police officers topped their vehicles at the closest point of access to the ongoing scene and abandoned them, often with emergency lights on and doors left open. This bottle neck of vehicles hindered access to the area by senior police officials, as well as egress from the area. This also was an issue for the ambulance transporting a critically wounded officer and for police vehicles that may have otherwise been able to pursue the fleeing suspect. (*Boston Marathon AAR,* p. 115, *Washington Navy Yard AAR*, p. 77)

32. **Ambulance Access.** Keep paths open for ambulances and discuss access issues with fire/EMS as they occur. Likewise, Fire/EMS should actively seek access routes. It cannot be assumed that if one police car finds a path to a victim, other fire and police units will be able to do so too. Ambulance access should be a high priority task of police and fire incident command, but may get

lost as the first attention of police is stopping and apprehending… Factors to consider for facilitating access:

- Initial parking of police vehicles.
- Repositioning police vehicles, which would be easier if the department uses universal car keys. Universal car keys have their pros and cons, but many departments use them. Further research his needed on how to handle this with "chip" controlled vehicles.
- Towing or pushing civilian vehicles out of the way.
- Determining in pre-plans and purchase decisions whether ambulances and fire vehicles can be driven over curbs. Educate fire and ambulance drivers as to what heights of curbs and off-road terrain are likely to be traversable.
- Familiarization of fire, police, and ambulance crews with street and parking lot geography.
- Having a police vehicle lead ambulances up to triage areas.
- Sending pictures or maps of the parking lots or street configuration in real time, using photos from helicopters, remotely piloted vehicles, or fixed wing aircraft.
- Using pathfinder vehicles to show the path through congestions. Once one vehicle figures out how to get through a maze, the path can be sent to ambulances or other vehicles using apps on smart phones, or possibly via email from the pathfinder to the communications center for relaying to others.
Designate resources to block off/open traffic at various locations and throughout different stages of operations. Have a designated person in charge of traffic flow and parking/sectioning off areas to keep transport corridor open. Law enforcement vehicles should not be parked in roadways to ensure roads are kept clear for a transport corridor and that entry and exit points are accessible.
(*Aurora AAR*, p. 29-30, *San Bernardino AAR*, p. 114, *El Paso AAR*)

33. **Revise the Mutual Aid Protocol and Provide Mobilization Training**.
Convene a meeting of state and local law enforcement officials to establish a law enforcement mobilization plan for mutual aid at large incidents that addresses:
- Requests for immediate assistance,
- Identification of an Incident Commander (in cases where the community with the incident needs assistance in managing a large event,

- Specific requests by the IC or UCC for longer term assistance (usually for specific capabilities such as SWAT, EOD, and crime scene investigations),
- Guidelines for responding mutual aid personnel,
- Use of ICS for law enforcement in a large incident.
- Develop in-service training modules for all police officers to understand the statewide mobilization system and policies for rendering mutual aid.
- A scheduling system, such as alpha/bravo, should be prepared well in advance of an incident requiring its activation.

(*Boston Marathon AAR,* p. 117-118, *Washington Navy Yard AAR*, p. 82)

34. **Staging Area for Off-Duty LE.** Establish staging area away from the scene for off-duty personnel to check-in for tracking and assignment. This staging area should have ID markers available for plain clothed and off-duty officers to be distinctly identifiable as LE personnel. (*El Paso AAR*)

35. **Treat Everyone as Suspect.** To the extent practical, treat each individual as a suspect when clearing the scene to avoid potentially also clearing the shooter. Group bystanders orderly to a safe area to check IDs and do witness statement intake. (*El Paso AAR*)

Technology and Equipment

36. **Maintain an adequate supply of or develop a streamlined process for obtaining radio and cell phone chargers and batteries.** Because of the long duration of the event and incident, response partners worked far longer hours than anticipated and used their communications equipment more than anticipated. The ability to obtain fresh radio batteries and charge radio and cell phone batteries became a critical need. (*Boston Marathon AAR,* p. 97)

37. **Issue and train on tourniquet kits for all first responders.** First responders across the Commonwealth, in particular police, fire and EMS, should have a tourniquet kit issued to them as a standard practice. Conduct training to ensure first responders know how to apply issued tourniquets on the injured. The City of Aurora is in the process of training, manning and equipping RTFs. This includes the equipping and outfitting of medical kits, blow-out kits, and other resources such as tourniquets to assist with life-saving medical interventions. In addition to tourniquets, responders should consider carrying

hemostatic dressings and occlusive dressings to reduce preventable deaths. (*Boston Marathon AAR,* p. 106, *Henry Pratt AAR, p. 31*)

38. **Wearing Armor.** In addition to wearing protective vests, uniformed officers should carry active shooter armor kits. The Department of Justice requires patrol use of protective vests if DOJ subsidized their purchase, but there is no requirement for additional ballistics protection. Rapid arrival and a policy of confronting a shooter increase the need for protective equipment. The Department currently provides body armor for each trooper, however, personnel are not required to wear the armor at all times. The department, in consultation with relevant labor unions, should consider revisiting the policies on body armor. Additionally, the armor provided to all troopers would not have protected responding personnel from the type of ammunition used at this scene. The Department should consider providing additional ballistic protection beyond the standard issued body armor for an extra layer of protection, especially to those who may be called to respond to an active shooter situation. (*Aurora AAR,* p. 30, *Newtown AAR*)

39. **Tactical Medical Kit.** Officers assigned to patrol should have a tactical medical kit (like IFAKs). While the main motivation is to be able to assist wounded officers, the skills and equipment can be used for civilians as well. At the Tucson, AZ shooting incident on January 8, 2011, in which Congresswoman Gabrielle Giffords and several other people were host, lives were probably saved because the Tucson police had combat medic kits and training which they used to attend to some of the gunshot wounds. Multiple SWAT operators were found to not have their IFAKs and tourniquets when inspected by TEMS personnel at the request of SWAT team physician after the CPMS event. The police component of the SWAT team is roughly 45 members in total with only 5 being full- time. Consequently 40 members of the team split their time between standard daily operations where they are normally assigned in addition to SWAT team activations. Thus they have multiple armor sets/configurations (tac heavy, tac light, clandestine, patrol) that they don and doff often. Due to budgetary constraints the officers are not issued IFAKs and TQs for each armor set. Officers will frequently move their IFAKs and TQ between armor sets. Many times this leaves the operators without IFAKs and TQs because of the need for rapid response and forgetting to transfer their medical gear. Operators will also sometimes keep IFAKs and TQs in the cargo pants pocket opposite their thigh rigs, again exposing them to forgetting to transfer gear when changing uniforms. Despite properly medically

trained operators and TEMS medics, both SWAT operators wounded in the shooting required multiple tourniquets on their wounded limbs. In both instances the TQs were properly placed, tightened, inspected, re-tightened and then a secondary TQ was deployed. The issue and lesson learned is multifactorial. As previously discussed, the operators sometimes will not have their IFAKs or TQs on the armor they are wearing. In addition, all operators are only assigned one TQ each. Thus the potential for lack of adequate medical equipment exists. One operator suffered an arterial injury, did not have a tourniquet with him and was isolated from TEMS personnel for ~18 minutes due to active gunfire and juxtaposition to the rest of the team. Had a fellow operator not been with him and used his TQ the results could have been catastrophic. The city is currently working on funding to outfit each operator with multiple TQs and IFAKs. (*Aurora AAR*, p. 30, *Tree of Life AAR*)

40. **Gas Masks.** Police should broaden their training on use of gas masks, if not already done. Gas masks can protect officers from hostile gas munitions as well as gas munitions they deploy themselves. (*Aurora AAR,* p. 31)

41. **Air Support.** Develop agreements for air support for critical incidents, consider procurement of a low-cost Remotely Piloted Vehicle (drone). Many studies have shown that airborne monitoring can increase safety of pursuits, help set up perimeters to contain suspects, respond quickly to criminal activity, and assist in other activities. However, operating rotary or fixed wing aircraft for surveillance is expensive. A relatively new, cost-effective alternative is to use a small helicopter drone that provides aerial imaging of the incident commander. Some cost less than $5,000 and can be operated with no more skill than needed for a model airplane. The images might have been of use to both fire and police command in this incident and would have been helpful if the event had gone on longer. (*Aurora AAR*, p. 31)

42. **Smartphone Usage for Automated Note-Taking and Witness Identification/Statements.** Officers can make use of "smart phone" note taking and video capability. One officer reported that he used his cell phone to record witness identification and statements in the theater parking lot. Smart phones also may be used to record the location of evidence and victims or transmit pictures to the command post or police headquarters. In the absence of smart phone technology, officers can notify the Communications Center on an alternative radio channel or talk group (separate from primary dispatch of

incident command channel) so that CAD notes may be updated to create a permanent record. (*Aurora AAR*, p. 32)

43. **Alarms and Emergency Announcement Capability.** To improve personal safety, theaters should consider putting alarms on emergency or secondary exits, and preferably monitor them by video surveillance. Having a voice communications system to inform people about emergencies also is important in an emergency. Additionally, theater complexes should be able to quickly switch off the movies and turn on the lights in each theater, to facilitate exiting and improving visibility in an emergency. Besides cost, the downside is that if leaving through an exit sets off an alarm, some may be tempted to do it for fun. (*Aurora AAR*, p. 11)

44. **Equipment in the Police DOC and City EOC.** There were not enough phones and computers for all the representatives in the operations centers, and the communications were not recorded since many people were using their personal devices. (*Aurora AAR*, p. 113)

45. **Equipment Truck.** Explore the procurement and deployment of an equipment truck that is manned and ready for rapid deployment to any location in the city in the event of a critical incident. This truck would hold various tools and equipment – such as breeching equipment, rifles, shotguns, Level III vests and helmets, compact shields, lights, batteries, etc. While many police departments have long had the equipment deployed to various officers throughout the department, the deployment of an equipment truck, standing by 24-7, is a practical approach that allows equipment to be ready and available for responding officers. Many patrol officers are not in vehicles, but rather patrol on foot, bike, motorcycle, or other mode that does not allow for carrying large pieces or large amounts of this type of equipment. Equipment should include active shooter armor kits (ballistic helmets and ballistic vests with ceramic plates) that afford greater protection from high-powered, semi- and fully automatic weapons and ammunition. (*Washington Navy Yard AAR*, p. 35, *San Bernardino AAR,* p. 116)

46. **Utilizing Heavy Fire Vehicles as Shields/Cover from Active Shooters.** Response protocols should include positioning heavy fire response vehicles as shields from secondary devices and active shooters. (*San Bernardino AAR*, p. 117)

47. **Take-Home Cars.** It may be beneficial to address the option of take-home squad cars for SRT and/or magnetic blue lights that off-duty personnel can use when responding to this type of major incident. This may reduce the response time of critical personnel and provide safety for off-duty responders and the general public. (*Henry Pratt AAR, p. 28*)

48. **Equip RTF Teams.** RTFs should have the proper equipment, both tactical and medical, ahead of making entry. Aurora and Naperville are reportedly in the procurement process working towards fully equipping RTF teams. The City of Aurora is in the process of developing procedures for the operational coordination of police, fire, and EMS organizations to maximize interagency coordination and update as needed. (*Henry Pratt AAR, p. 31*)

49. **Breaching Equipment.** Several officers noted that they did not bring breaching equipment and it would have been helpful for building search and clearing. Others noted they could have used NFDDs. One SRT operator noted that in the future, they should ensure the bomb-disposal robot is loaded on the bearcat. Finally, officers mentioned needing their tourniquets but not having them handy. (*Henry Pratt AAR, p. 32*)

50. **Forgotten Equipment.** Often during response operations, responders are working quickly to get to the scene and equipment is left behind. Consider reviewing/developing pre-deployment checklists with materials that are likely to be forgotten during a high-stress incident. Share with the department and use during training when possible. (*Henry Pratt AAR, p. 32*)

51. **Placement of IFAK.** Consider having a standard location for medical kits/tourniquets on the officer's uniform during steady-state operations. (*Henry Pratt AAR, p. 32*)

52. **Utilize Drones.** A drone or robot could have been utilized ahead of the contact teams. This would have been useful to get a forward look due to the unfamiliar layout, as well as the enormity, of the building. (*Henry Pratt AAR, p. 33*)

53. **Incident Management Software**. Research and identify a critical incident management software program with sufficient capacity to accommodate an investigation the size of 1 October. The system must easily enable access for all investigative personnel involved (internal and external to LVMPD) and

permit extensive data entry, record the assignment of investigative tasks, and track leads and follow up steps. (*Las Vegas AAR, p. 74*)

54. **Identifiable Clothing**. LE agencies should consider having a reserve of identifiable clothing (vests, shirts, jackets, etc.) that have 4-sided markers that can be distributed at the scene. (*El Paso AAR*)

55. **Placement of on Scene Medical Equipment**. On scene medical equipment was not accessed. The Tree of Life congregation had recently undergone 'Stop The Bleed' (STB) training and had a fully stocked STB kit directly underneath an AED near a main entrance of the facility. Likely wounded civilians on scene were unable to access the kit due to the ongoing danger of the shooter moving through the structure repeatedly. The kit was placed in a very advantageous and visible location, but this unfortunately meant it likely presented a danger for those wanting to approach and access it. (*Tree of Life AAR*)

Training and Exercises

56. **Pre-Incident Planning and Training.** Revise pre-incident planning and training for an active shooter or bomber. Police in departments small as well as large must plan in advance for a large-scale critical incident response, including pre-planned mutual aid and mutual assistance. Such planning should include establishing joint command with fire, building diagrams, internal contact telephone numbers, mutual aid staging locations, and communications procedures. Neighboring law enforcement agencies, both Federal and local, should conduct collaborative, inter-agency training exercises. The Active Shooter SOP should incorporate real-world findings from this incident prior to finalization. Continue to develop and revise SOPs on RTF operations, namely warm zone operations. Offer training opportunities for active shooter incident operations and management. Fire department to review MCI policies and procedures regarding access to warm zones for casualty collection points in these types of incidents. Pre-incident planning is critical for active shooter or other mass casualty incidents. Police departments of all sizes must plan in advance for a large-scale critical incident response, including pre-planned mutual aid agreements and mutual assistance. Such planning should include identifying high risk target areas, building diagrams, appropriate staging areas and command post locations, establishing joint command with local police agencies, fire, and EMS, as well as compiling internal contact telephone numbers and testing communications procedures. (*Aurora AAR*, p. 28, *Washington Navy Yard AAR*, p. 72, *Henry Pratt AAR, p. 32, Newtown AAR*)

57. **Leadership Skills Development.** Equipping personnel with strong leadership skills and the ability to make difficult decisions in the midst of a crisis requires a long-term effort. The Command on scene was a veteran police official with over 35 years of service. Strong leadership skills are honed through exposure to a myriad of experiences, comprehensive training, and police leadership opportunities. One consistent theme in the after-action reports following similar mass shooting incidents is the recognized need for strong, composed and decisive leadership during the initial response. A well-coordinated and effective response often hinges on the leadership of the police official managing the on-scene efforts. Provide additional training, including live exercises on MCI, for leadership at the rank of lieutenant and above, regardless of assignment. (*Washington Navy Yard AAR*, p. 72, *Las Vegas AAR, p. 46*)

58. **Frequent Active Shooter Formation Tactical Reviews.** Review active shooter formations and train officers to adapt their tactics to fit the environment. For instance, the current standard of training instructs active shooter teams to move in a diamond formation. While this formation may work well for scenarios involving large hallways, in schools for example, it may not be effective in narrow hallways and walkways of offices and cubicles. In narrower environments, the diamond formation may allow a hidden gunman to more easily target officers. (*Washington Navy Yard AAR*, p. 73)

59. **Conduct IED Awareness Training for Law Enforcement.** Ensure law enforcement officers can obtain IED awareness training. (*Boston Marathon AAR,* p. 116)

60. **Regularly exercise removing and using rifles and other tactical equipment stored in vehicles.** It is common that law enforcement officers do not regularly practice removing and using tactical equipment mounted and/or stored in their vehicles. As such, all law enforcement officers should exercise removing equipment from their mounts/storage areas at least weekly, and practice using equipment to ensure they are able to access and use it under high-stress conditions. Explore the feasibility of establishing pre-identified locations, in proximity to officers working special events overtime, to store weapons and personal protective equipment for a quicker response in the event of an emergency. (*Boston Marathon AAR,* p. 116, *Washington Navy Yard AAR*, p. 74, *Las Vegas AAR, p. 97*)

61. **SWAT Paramedics.** Train several more fire or police personnel as SWAT paramedics. Dispatch SWAT paramedics to live shooting incidents where victims may be in the hot zone. SWAT paramedics should report their arrival on scene and their location should be known to the extent possible. (*Aurora AAR,* p. 29)

62. **Sensory Deprivation Training.** The ability to understand and apply response strategies in a high-stress environment improves performance. Training should attempt to create as much sensory deprivation or stimulus as possible to simulate real-world scenarios. (*San Bernardino AAR*, p. 114)

63. **Conduct additional training on weapons discipline.** Conduct additional ICS and firearms training with a focused emphasis on weapons discipline, including target acquisition, trigger discipline, and authorization. (*Boston Marathon AAR,* p. 115)

64. **Adapt Training to Modern Security and Conduct Pre-Incident Building Evaluations.** Active shooter training should include difference types of locations, buildings and structures in the scenarios, including modern buildings with various levels of security, access card entry, motion sensors, cypher locks, alarms and narrow hallways and complex layouts. Police departments should conduct pre-incident evaluations of buildings and facilities located within their area of responsibility, and those evaluations should be stored in an accessible, central location. Provide MACTAC response training to hotel and casino industry stakeholders as well as community partners, schools, churches, and those supporting critical infrastructure. Develop curriculum and train all commissioned officers on clearing techniques for larger-than-normal establishments/venues, such as open-air events, in the case of a significant incident and/or MCI after an active shooter. (*Washington Navy Yard AAR*, p. 73, *Las Vegas AAR, p. 15, 26*)

65. **Expanded Police EMS Role.** Consider expanding the EMS scope of practice for police officers, especially for gunshot wounds. The International Association of Chiefs of Police now recommends (since October 2013) that every law enforcement officer receive tactical emergency medical training including critical core skills of early, life-threatening hemorrhage control and rapid evacuation of mass casualty victims to a casualty collection point. Tactical emergency medical skills are critical life-saving interventions whether as officer applied self-aid or aid given to a fellow officer, or aid to victims of a

mass casualty situation such as an active shooter or bombing event. TEMS elements deployed as far forward as safely possible saved lives. Patient 3 initially thought deceased until TEMS was cleared to perform hands-on assessment. He arrived at the closest level 1 trauma center with a heart rate of 125 and blood pressure of 50/palpation. He spent 4 minutes in the trauma bay and was taken to the operating room where trauma surgeons were greeted with greater than 2 liters of hemoperitoneum. He would have died on scene with standard EMS model. In the instance of the most critically injured SWAT operator, only 45 seconds went by between him being shot multiple times and being delivered to the TEMS cadre whom were staged 30 feet away. He already had his armor removed and helmet taken off prior to the hand-off to TEMS. Immediate point of injury care was started by the embedded SWAT physician and a full compliment of TEMS medics. This allowed for a full MARCH algorithm assessment and treatment in less than 3 minutes with exfiltration and transport immediately afterward. Despite the rapid treatment, transport and delivery to a level one trauma center he arrived hypotensive and minimally responsive. Had there been a delay at any point in the chain of treatment it is the author's belief he would have died. In addition, the TEMS cadre addressed two other patients with potentially life-threatening extremity hemorrhages. Both could have easily resulted in death had the injuries not been addressed in a timely fashion. (*Aurora AAR*, p. 78, *San Bernardino*, p. 116, *Tree of Life AAR, p. 8*)

66. **Marking Cleared Areas**. Supply officers with training and necessary equipment to mark areas that have been cleared to prevent duplication of efforts during a significant incident and/or MCI. (*Las Vegas AAR, p. 26*)

67. **Interagency Training.** Develop and train investigative crime scene protocols with federal partners for significant incidents and/or MCI. Strengthen working relationships with partnering agencies through regular communication and frequent joint training across ranks of personnel. Federal agencies should be included in tabletop and full-scale exercises practicing ICS. Incorporate additional active-shooter/MACTAC training between SWAT and patrol officers for a more coordinated response during significant incidents and/or MCI. EPFD and EPFD should continue to participate in MCI trainings to establish relationships across agencies and have a clear understanding of interagency roles and responsibilities. (*Las Vegas AAR, p. 107 El Paso AAR*)

Demobilization

68. **Use of Force Investigations.** Officials must track and debrief officers and inspect weapons prior to the officer departing the scene to determine which officers have used force or deadly force. Develop policy, procedures, and protocols for a major case squad to be activated at the discretion of the head of the Agency. This policy should be specific in detailing all components necessary including specific roles and responsibilities required to conduct large-scale, in-depth, lengthy investigations. (*Washington Navy Yard AAR*, p. 77, *Las Vegas AAR, p. 80*)

69. **Debriefing and Demobilization.** All law enforcement and emergency response agencies should have clear policies and training that directs responding personnel to follow the appropriate demobilization procedures prior to departing the incident location. Debriefing of personnel, especially those in the "hot zone", is a vital aspect of demobilization as it also allows officers to get critical witness information, assess the well-being of the officers, and offer EAP (Employee Assistance Program) support services once the crisis is over. We cannot ignore the fact that incidents with shocking mass casualties can be troubling to even a hardened, veteran police officer. Ensure ICS protocols are followed and employee "shooting survivors" directly involved in a significant incident and/or MCI are sent to staging as they are relieved from their post. All department member "shooting survivors" should be identified and documented for later debriefing/wellness plans. (*Washington Navy Yard AAR*, p. 81-82, *Las Vegas AAR, p. 28*)

70. **Critical Incident Counseling and Mental Health Support.** Ensure your department has a policy regarding mental health support after critical incidents and clearly communicate it to the entire department. Assign a mental health or officer wellness incident commander to oversee officer mental health and coordinate services among participating agencies. Compel participation in critical incident debriefings or post-incident counseling both for victims and civilians and commissioned staff. Consider follow-up counseling as it is not unusual for post-traumatic stress to manifest itself several weeks or months after an event. Have supervisors monitor and check in with members to determine if they have a need for mental health provider services. Ensure all responders are aware and use the services as needed. Require all responding members to attend a stress management session debriefing following a traumatic event. In addition to mental health assistance, consider unit, team, or

department-level briefings to bring closure to the event. (*San Bernardino AAR*, p. 118, *Orlando AAR*, p. 28)

71. **Retain Public Safety Assets for a longer duration**. Public safety assets should be maintained at an appropriate level until crowds have largely disbursed. Maintain emergency buses on standby. (*Boston Marathon AAR*, p. 89).

72. **Report Writing.** Defer report writing until officers have had time to recover. Many officers advised that although exhausted (and in some cases traumatized), they followed normal procedures requiring submission of written reports before going off duty. Fatigue can impair report quality. (*Aurora AAR*, p. 33)

Other Considerations

73. **Explore revising policy to allow arming of soldiers assigned to law enforcement missions. (SEE APPENDIX A)** Develop a coordinated plan for arming soldiers assigned to law enforcement missions, under appropriate circumstances. (*Boston Marathon AAR*, p. 93)

74. **Limit Self-Deployment/Self-Dispatch.** It must be part of police training throughout the state that in complex, large incidents, or multiple incidents, an officer does not respond unless requested by an official with the authority to make such a request. Only police units assigned by incident command should respond. If an officer who does not have an assignment happens to be near the location where the suspect is reported to be, that officer should report availability to respond, rather than responding directly to the incident. Organizations, response units, and individuals proceeding on their own initiative directly to an incident site, without the knowledge and permission of the host jurisdiction and the Incident Commander complicate the exercise of command, increase the risks faced by responders, and challenge accountability. Mass casualty and active shooter response plans should include preselected and well-marked staging areas and a plan for handling self-dispatched personnel. Dispatch instructions should be clear. Law enforcement agencies should be familiar with deployment plans and quickly establish incident site access controls. When identified, self-dispatched resources should be immediately released from the scene, unless incorporated into the Incident Commander's response plan.

(*Boston Marathon AAR,* p. 118, *Newtown AAR, p. 71*)

75. **Self-Dispatch. (SEE APPENDIX A)** First response agencies should develop policies for when an officer initiates self-dispatch. A staging area should be created for such officers given the inability to control self-dispatch activities. (*Broome County, NY, Shooting,* Area 12)

76. **Self-Dispatch Policy.** If not already in existence, agencies should establish clear policies regarding self-dispatching. MPD has reiterated its policy regarding members not self-dispatching. Officers should instead follow established protocols (Example: report to the appropriate patrol district or nearest police facility) and if required to report to the scene of the incident, do so at a designated location or staging area. Training should test the officers understanding of self-dispatch procedures. Training and exercises should also test the supervisors' and managers' ability to manage an incident in which there are many self-dispatching officers. IC should establish an LE staging area away from command post for officers awaiting assignments.

77. (*Washington Navy Yard AAR*, p. 76, *El Paso AAR*)

78. **Self-Deployment.** Supervisors must anticipate the likelihood of unnecessary self-deployment and make efforts to discourage and restrict officer response. (*San Bernardino AAR*, p. 114)

79. **Size of Improvised Explosive Device (IED) Evacuation Area.** Make the size of the safe area match the threat. Ensure the area cleared around potential explosive or fire hazards is large enough to prevent injury to bystanders if a device explodes. A police supervisor at Paris Street said that before starting the rendering safe procedures of the explosive devices they should have created a larger safe area around the suspect's apartment then they did initially. Eventually, they did expand the safe area. The basic rule is 'do not remove the device, move the people.' (*Aurora AAR,* p. 40)

80. **Reducing Stressors.** Reduce noise and light stressors at incident scenes as soon as possible. Sound and darkness add to confusion and make it difficult to identify hostiles. They also may hinder evacuations and search and rescue efforts. Movie and alarm shut-offs and switches for theater lights would be useful for public safety personnel. Reducing Stressors: Reduce noise and light stressors at incident scenes as soon as possible. Attempt to identify non-combatants and distinguish between potential threats and civilians. Sound and

low light conditions add to confusion and make it difficult to make timely and appropriate identifications. Additional stressors may hinder evacuations and search and rescue efforts. (*Aurora AAR*, p. 31, *Newtown AAR, p. 68-69*)

81. **Crime Lab Mutual Aid.** Consider use of mutual aid resources to reduce lab overloads. The crime lab became overloaded by the vast amount of evidence collected at the theater and the Paris Street apartment. The ATF laboratory was uniquely well equipped to process gun evidence and could have been tasked more to share the crime lab workload. Identify classification and appropriate handling of electronic evidence. Consider how the management of such evidence will interoperate with investigative case management and sharing contingencies. (*Aurora AAR*, p. 33, *Las Vegas AAR, p. 102*)

82. **Flight Restriction.** The Temporary Flight Restriction was effective, ensuring the news helicopters did not unduly impact air operations. In this incident, the Federal Aviation Administration (FAA) requested to talk to Incident Command to close the air space – they were not able to, but ultimately closed the air space as requested. For the future, recommend developing SOPs for closing airspace. While the news helicopters were prevented from getting too close, they were still close enough to get high quality footage that could have hampered police tactical operations if there were more offenders launching a coordinated attack. Police should determine how to coordinate with the FAA and news agencies to balance the need to share information with the public with tactical operations. (*Henry Pratt AAR, p. 36)*

83. **Training Pays Off.** Training pays off when it sucks. The military and law enforcement arena abound with clichés but one that proves true more often than not is 'The more you sweat in peace time, the less you bleed in war.' We have a multidisciplinary TEMS cadre with experts in high angle rope rescue, river rescue, moulage, etc. One example, when we train with new 'movement' equipment and we are ready for final evolutions we will use the heaviest operators available. They get carried for hundreds of meters, up and down stairs and through tundra. It sucks. On the day of the synagogue shooting it was one of our heaviest operators (that we commonly use in training because of his size) that was critically injured. There was absolutely no delay and no difficulty moving him down 3 flights of stairs and to a waiting stretcher. (*Tree of Life AAR, p. 8-9)*

MEDICAL RESPONSE

Organization

1. **Warm Zone Triage Area.** To reduce the amount of time it takes for victims to receive medical care, regions should establish medical tactical teams designed to work in a "warm zone," allowing victims to be moved more quickly to a mass casualty triage area. (*San Bernardino AAR*, p. 116)

2. **EMT on Standby for Victim Notifications.** Have sufficient Emergency Medical Technicians on standby when notifications are made. (*Orlando*, *AAR* p. 24)

3. **ICS Reporting and Treatment Dispatch Managers.** Pay closer attention to completing ICS forms and transportation records in order to better document incidents. Appoint Treatment Dispatch Managers under ICS in order to have better organized transfer of patients from treatment units to awaiting ambulances. (*Aurora AAR*, p. 78)

4. **Medical Examiner Request.** In the event of a large incident with multiple homicides, the request for the presence of the Medical Examiner should come from the local homicide unit (regardless of which agency is serving as the lead) since the local unit works with the Medical Examiner on a regular basis. (*Washington Navy Yard AAR*, p. 80)

Policy, Plans, and Procedures

5. **Establish protocols for Integrating Local Law Enforcement into Hospital Security during Emergencies**. Hospitals and local law enforcement should meet to discuss the circumstances under which law enforcement resources may be assigned to enhance hospital security and establish protocols for integrating local law enforcement. Hospitals should consider options for contracting for additional security personnel when needed. (*Boston Marathon AAR,* p. 90-91, *Washington Navy Yard AAR,* p. 77)

6. **Develop and distribute HIPAA Guidance for Emergency Situations.** Collaborate with appropriate federal authorities, legal counsel and hospitals to develop guidance on emergency allowances to HIPAA to release patient

information. This guidance should be distributed to all hospitals. (*Boston Marathon AAR,* p. 99)

7. **Hospital-Public Information Coordination.** Establish formal protocols for ensuring the appropriate representatives from the hospitals are integrated into the JIC. Conduct training that involves the relevant personnel from the area hospitals and the D.C. agencies that coordinate with medical facilities including HSEMA and Department of Health. Ensure hospital communications are prioritized during incident response to improve patient outcomes. Review and revise SOPs as appropriate to encourage proactive communications with hospitals. (*Washington Navy Yard AAR*, p. 81, *Henry Pratt AAR, p. 35*)

8. **Ambulance Access.** Keep paths open for ambulances and discuss access issues with fire/EMS as they occur. Likewise, Fire/EMS should actively seek access routes. It cannot be assumed that if one police car finds a path to a victim, other fire and police units will be able to do so too. Ambulance access should be a high priority task of police and fire incident command, but may get lost as the first attention of police is stopping and apprehending… Factors to consider for facilitating access:
   - Initial parking of police vehicles.
   - Repositioning police vehicles, which would be easier if the department uses universal car keys. Universal car keys have their pros and cons, but many departments use them. Further research his needed on how to handle this with "chip" controlled vehicles.
   - Towing or pushing civilian vehicles out of the way.
   - Determining in pre-plans and purchase decisions whether ambulances and fire vehicles can be driven over curbs. Educate fire and ambulance drivers as to what heights of curbs and off-road terrain are likely to be traversable.
   - Familiarization of fire, police, and ambulance crews with street and parking lot geography.
   - Having a police vehicle lead ambulances up to triage areas.
   - Sending pictures or maps of the parking lots or street configuration in real time, using photos from helicopters, remotely piloted vehicles, or fixed wing aircraft.
   - Using pathfinder vehicles to show the path through congestions. Once one vehicle figures out how to get through a maze, the path can be sent to ambulances or other vehicles using apps on smart phones, or possibly via email from the pathfinder to the communications center for relaying to others. (*Aurora AAR*, p. 29-30)

9. **Shelter-In-Place requests.** Area hospitals should work with law enforcement and emergency management to better define critical sectors, critical personnel, and outline possible exemptions from orders or requests that impose travel restrictions. (*Boston Marathon AAR,* p. 122)

10. **Ambus.** Adjust policies to request Ambus at the start of a large-scale response. (*El Paso AAR*)

11. **Hospital SOP.** Include forensic evidence collection in hospitals' plans and procedures for mass casualty incident response. In cases of active shooting MCI, area hospitals should follow their practice of immediately activating their lockdown protocols. Consider implementing hospital task forces to address needs of mass casualty incidents. (*El Paso AAR*)

Technology and Equipment

12. **Identify whether a central resource of patient information can be developed and shared after Mass Casualty Incidents.** Coordinate with legal counsel, hospitals and human services to determine whether a centralized resource of patient information should be developed following mass casualty and other emergency incidents, and whether information contained in that resources could be shared with family members of victims and survivors and/or human services agencies. (*Boston Marathon AAR,* p. 99)

13. **Issue and train on tourniquet kits for all first responders.** First responders, in particular police, fire and EMS, should have a tourniquet kit issued to them as a standard practice. Conduct training to ensure first responders know how to apply issued tourniquets on the injured. One officer mentioned that a tourniquet that was applied to another wounded officer was not tight enough to stop the bleeding. Tourniquets may fail for a variety of reasons – it is critical to have backups, including multiple tourniquets, hemostatic dressings, and other dressings as appropriate to treat the victim. It is also important to practice tourniquet application in training to ensure it is applied higher than (proximal to) the wound, tightened to effect much tighter than one might expect, will likely cause pain to the injured individual), and that direct pressure is applied to stem the bleeding during application. Provide a surge supply of trauma kits within proximity to major events. Consider issuing additional mass casualty kits and

training each responder. (*Boston Marathon AAR,* p. 106, *Henry Pratt AAR, p. 34, El Paso AAR*)

14. **Tactical Medical Kit.** Officers assigned to patrol should have a tactical medical kit (like IFAKs). At the Tucson, AZ shooting incident on January 8, 2011, in which Congresswoman Gabrielle Giffords and several other people were host, lives were probably saved because the Tucson police had combat medic kits and training which they used to attend to some of the gunshot wounds. Determine if expanded medical/MCI kits should be issued to officers. Evaluate against TECC guidelines as appropriate. Enforce officers keeping personal self-aid items on their person and ensure these items are not left in their vehicles so they have the equipment if needed. Consider issuing Stop the Bleed kits for four personnel for each structural unit. Continue current measures to place MCI kits in patrol cars. Ensure every battalion and Rescue Operations Captains (ROC) have mass casualty kits separated and stop the bleed kits with every battalion. Consider a tear away Individual First Aid Kit (IFAK) upgrade. Consider providing individual EPFD responders with MCI materials, in case of separation. Multiple SWAT operators were found to not have their IFAKs and tourniquets when inspected by TEMS personnel at the request of SWAT team physician after the CPMS event. The police component of the SWAT team is roughly 45 members in total with only 5 being full- time. Consequently 40 members of the team split their time between standard daily operations where they are normally assigned in addition to SWAT team activations. Thus they have multiple armor sets/configurations (tac heavy, tac light, clandestine, patrol) that they don and doff often. Due to budgetary constraints the officers are not issued IFAKs and TQs for each armor set. Officers will frequently move their IFAKs and TQ between armor sets. Many times this leaves the operators without IFAKs and TQs because of the need for rapid response and forgetting to transfer their medical gear. Operators will also sometimes keep IFAKs and TQs in the cargo pants pocket opposite their thigh rigs, again exposing them to forgetting to transfer gear when changing uniforms. Troopers assigned to patrol should have ready access to a medical kit. In the months following the Sandy Hook shooting incident, all CSP personnel were issued Individual First Aid Kits (IFAKs) and trained in their use. While the main purpose of the IFAK is to assist wounded officers, the skills and equipment can be used for civilian injuries as well. Decontamination and Hydration: Many active crime scenes require decontamination and hydration stations and in this instance, several officers did not have access to clean water for washing and drinking. Consider procurement of a suitable "cleanup/hydration" station for use at major emergencies if not readily available from local emergency services.

(*Aurora AAR*, p. 30, *Henry Pratt AAR, p. 34, El Paso AAR, Tree of Life AAR, Newtown AAR*)

15. **Scene Safety for EMS.** During a mass casualty incident, command should announce when the scene is reasonably safe for EMS to proceed, or what level of protection responding providers need to operate under (e.g., police guarding EMTs). There almost always will be the possibility of another shooter or another bomb, but the probability will vary. Different Departments or incident commanders may have different value judgments as to what is acceptable risk to firefighters vs. victims who need their help, but there should be strong police-fire discussion as to the detailed circumstances of risk in an incident. Several recommendations have been offered by various national and regional agencies regarding how aggressive EMS providers should be in entering and providing triage in a warm zone. Choices include SWAT trained EMS providers, SWAT or law enforcement teams to escort and protect EMS providers in the warm zone, body armor for EMS providers, or having law enforcement quickly remove patients to a triage unit in the cold zone. Provide ballistics vests for all first responders and MCI bags for structural units. Area hospitals should continue coordination with local law enforcement to provide security during critical incidents. (*Aurora AAR*, p. 73-74, *El Paso AAR*)

16. **Access of Ambulances.** When access is difficult, police, fire or other agencies may have to physically guide ambulance units into the scene. By guiding units into the scene, ambulances can get closer to patients, and a transition from police to ambulance transportation can more quickly occur. (*Aurora AAR*, p. 75)

17. **Police EMS Transports.** In situations where immediate transport of patients is warranted, use of police or other emergency vehicles is appropriate when ambulances are not immediately available. This is especially true for patients suffering from penetrating wounds to the turaco-abdominal area. Specific guidelines should be developed to guide police, fire and EMS crews. (*Aurora AAR*, p. 75)

18. **EMS ICS Vests.** EMS ICS position vests should be used to identify those placed in key ICS positions. During larger mass casualty incidents, there is often mutual aid from places where providers are unfamiliar with each other. ICS vests help providers to understand the EMS command functions and to identify key leaders. (*Aurora AAR*, p. 78)

19. **Evaluate inventory for responding to Mass Casualty incidents.** Hospitals and EMS agencies should evaluate options and contingencies for obtaining additional supplies and equipment in a Mass Casualty incident. In addition, each region should work to develop a listing of regional resources that can be accessed during emergencies, and detail steps on how to obtain such resources. Ensure a regional stockpile of surgical supplies are ready for rapid access. (*Boston Marathon AAR,* p. 94, 116)

Training and Exercises

20. **Annual Training.** Regional disaster drills should be held on an annual basis. The drills should include hospitals, the Regional Hospital Coordinating Center, all appropriate public safety and state agencies, and the medical examiner's office. They should be followed by a formal post incident evaluation. Incorporate life-saving skills during training and exercises. Consider allocating funding for LE and fire personnel to attend external RTF related trainings. Consider Simple Triage and Rapid Treatment (START) and general triage trainings and incorporate in exercises. Victim rescue trainings should include extraction practices for critically injured victims. Collaboratively plan, train, and exercise on victim rescue and how to utilize their surrounding environment to safely transport victims. (*Henry Pratt AAR, p. 34, Newtown AAR, El Paso AAR*)

21. **Provide additional training to hospitals on Investigative Protocols and Evidence Collection**. Law enforcement officials should provide additional training to hospitals on investigative protocols and evidence collection. (*Boston Marathon AAR*, p. 90)

22. **Provide additional Training and Exercise the Use of Triage Ribbons and tags for Mass Casualty Incidents**. EMS personnel should train and exercise using triage tags and ribbons during mass casualty incidents to ensure they are well practiced in efficiently implementing this system. The triage identification system should include color-coded triage ribbons for patients. Traditional patient triage tags should be saved for use in treatment units. Initially, patient details are not necessary, just the patient's initial condition. Recent research has suggested that initial on-site (hot zone) triage be limited to just red or green identifiers (acute or not acute). Triage tags, patient care reports, or standardized Incident Command System forms must be completed accurately and retained after a multi-casualty incident. They are instrumental in evaluating each component of a multi-casualty incident. (*Boston Marathon AAR,* p. 92, *Aurora AAR*, p. 76, *VA Tech AAR, p. 122*)

23. **Ensure Hospital Staff are familiar with their Facility's Bomb Threat, procedures, protocols, roles and responsibilities**. Hospitals should ensure that all staff members understand their hospital's protocols and procedures, as well as their individual roles and responsibilities during a bomb threat or discovery of a suspicious package. Hospitals should regularly exercise these procedures in coordination with local police and fire departments. (*Boston Marathon AAR,* p. 94)

24. **Expanded Police EMS Role.** Police departments should consider expanding the EMS scope of practice for police officers, especially for gunshot wounds. The International Association of Chiefs of Police now recommends (since October 2013) that every law enforcement officer receive tactical emergency medical training including critical core skills of early, life-threatening hemorrhage control and rapid evacuation of mass casualty victims to a casualty collection point. Tactical emergency medical skills are critical life-saving interventions whether as officer applied self-aid or aid given to a fellow officer, or aid to victims of a mass casualty situation such as an active shooter or bombing. (*Washington Navy Yard AAR*, p. 77, *San Bernardino AAR*, p. 115, *Aurora AAR*, p. 78)

25. **American Red Cross Integration.** Increase experience/training of American Red Cross personnel in post-disaster criminal situations. Expose ARC staff to instruction and protocols for working within a crime scene, perhaps through a program like a Citizens Police Academy. American Red Cross will follow the lead of Crime Victims Assistance to ensure crime scene compliance maintained for crime-related incidents. (*Broome County, NY, Shooting AAR*, Area 7)

26. **Interagency Training.** Continue EPFD and EPPD developing a victim rescue unified response policy and related trainings. Ensure that multidisciplinary response practices are shared among response organizations. El Paso emergency management community, including EPPD, EPFD, area hospitals, Department of Public Health, and EOC members, should conduct routine assessments of the patient distribution plan to support medical providers' capabilities in providing services to patients in need, accounting for hospitals' intake capacity and accurate patient information. (*El Paso AAR*)

Other Considerations

27. **Critical Infrastructure Familiarization.** First responders should be familiar with critical infrastructure as well as facilities that regularly bring large numbers of people together. (*San Bernardino AAR*, p. 114)

28. **Eliminate Environmental Stressors.** Consideration should be given to reducing or eliminating environmental stressors if possible. Sound, darkness, and other environmental stressors can make it difficult to find and identify suspects and may hinder evacuations as well as search and rescue efforts. (*San Bernardino AAR*, p. 114)

29. **Responder Stress Management.** Review all responding agency policies and procedures related to critical incident stress management. Response agencies should ensure that their staff are provided with opportunities for formal critical incident stress management – to "debrief" and "destress", as well as connect with others who have endured similar experiences. While these efforts are most effective in the time period immediately following an incident of this nature (in the first two days), they can also be valuable outside of this time frame. Continue to provide access to long-term stress support in the form of peer support groups, critical incident stress management programs, psychological first aid, and formal therapy. Develop long-term mental health and critical incident stress management programs for responders to ensure that they receive the support and resources they need. Consider addressing cumulative stress, repeated exposure to traumatic events building over time, in addition to critical incident stress management. (*Henry Pratt AAR, p. 35*)

VICTIM AND FAMILY SERVICES

Organization

1. **Identify Lead Victim Services Agency.** Create plans to determine which agency is the lead agency for human services needs and providing guidance regarding who is responsible for that determination. Create a policy statement for the emergency action plan. In criminal events, crime victim specialists lead the situation. Begin preparing for and implementing the family reunification operations early on during the incident to provide family members with information and instructions. (*Broome County, NY, Shooting AAR*, Area 9, *Washington Navy Yard AAR*, p. 78)

2. **Integration of Coroner Liaison.** Chiefs should be briefed on the county fatality management plan, which should be reviewed by OES and the County Coroner. Review death investigation and body identification plans to gather best practices. Create a death notification plan and integrate with the mass casualty plan. Victim's Assistance should be included in this process to make personnel, referrals and other resources available to families. Include the County Coroner or a Coroner representative in the EOC and in training exercises to assist with planning modifications. (*Broome County, NY, Shooting AAR*, Area 10)

3. **Clergy.** Designate a special area where clergy can assemble within the family reunification center. Let them know that family members and friends will initiate contact if they want their assistance, and make sure families are aware of which clergy are present. Do not allow clergy to circulate and approach families on their own. Provide training regarding psychological first aid to clergy members and chaplains who are designated to respond to mass casualty and critical incidents. Credential clergy and counselors so that they are vetted, properly trained, and readily identifiable as to prevent untrained persons from entering secured areas. (*Aurora AAR,* p. 136, *San Bernardino AAR*, p. 118)

4. **Family PIOs.** Promote the successful concept of assigning PIOs to families of the deceased victims at state and federal level, including DOJ's Office of Victim Assistance in Washington D.C. (*Aurora AAR*, p. 137)

5. **Family Assistance Volunteers.** Do not allow even good-hearted volunteers without family assistance training to have easy access to families and victims after a mass casualty incident. They can do harm. (*Aurora AAR*, p. 135)

6. **Hospital-Based Advocates.** There should be a lead advocate assigned to each hospital that receives victims to coordinate all victim advocates responding to that location. Hospitals should include a point of contact in their mass casualty plans who would work with that victim advocate coordinator. As a team, they would be in position to handle requests for information on the status of the injured, help family members to be with their loved ones and coordinate information with the family reunification center. (*Aurora AAR,* p. 136)

7. **Consistent Advocates.** Once a family advocate is assigned to a victim or family, it is best not to eliminate that advocate, even if another advocate needs to be added per legal protocols. Of course, an exception would be removal if requested by the victim, or for some overt problem. A key aspect of the assistance is providing someone the family can regard as a trusted advocate. (*Aurora AAR,* p. 135)

8. **Family and Individual Meetings**. In addition to assigning liaison officers to each impacted family, CSP made every attempt to keep the families informed of the case investigation through individual and group meetings. The purpose of the meetings was to provide accurate and timely information and to dispel circulating rumors. The meetings were private and helped prepare the families for upcoming media releases. The practice of conducting individual and group family meetings should be sustained and included in operational protocols. Ensure that meeting guidelines are set and adhered to ahead of time. LE should be prepared to answer questions and provide assistance to individuals who are grieving. Victim assistance should be done in consultation with mental health and grief counseling experts. The family liaison program was an important victim assistance program that provided support and communication to the victims' families. The agency should continue to develop this program and include it in operational response protocols for mass casualty incidents, along with other victim services as deemed appropriate. (*Newtown AAR, p. 72*)

Policy, Plans, and Procedures
9. **Clarify mass care and shelter roles**. Though various agencies worked well together, there were several instances where primary responsibility for an aspect of the operation was unclear. (*Boston Marathon AAR,* p. 102)

10. **Gathering Place.** In a major incident, designate an area near but not immediately adjacent to the family reunification center where people can gather without interfering. Establish access control as soon as a family reunification center is opened. (*Aurora AAR,* p. 136, *San Bernardino AAR*, p. 118)

11. **Victim Donations.** Include in the mass casualty plan options for receiving and distributing large amounts of donations likely to flow in to help victims. One approach that worked well in Aurora and in Boston after their Marathon bombing is to quickly establish a "One Fund" into which all unrestricted financial donations are channeled. Other types of donations, for example airline tickets for victims, families can be accommodated separately. Create policy, procedures, and protocols for the tracking and disbursement of internal donations following a significant incident and/or MCI. Responsibility for such tracking should fall within the Logistics Bureau. (*Aurora AAR,* p. 136, *Las Vegas AAR, p. 95*)

12. **Staggered Leave.** Victim Services should consider scheduling leave so that there are not too many advocates on leave at the same time. Advocates also recommended establishing a phone tree with assigned team leads to facilitate the process of callbacks. (*Aurora AAR,* p. 136)

13. **Next-of-Kin Death Notification.** Homicide Units often conduct all family or next-of-kin notifications. It is an extremely difficult and emotional task that requires understanding, compassion, candor and strength. It is prudent that the death notifications be led and conducted by the local agency that is familiar with and experienced in carrying out such a difficult task. In mass casualty events, notifications should be made in a timely manner to lessen the stress on family members or significant others as they are waiting notification about loved ones involved in the incident. Whenever possible, notifications should be made in person. The Coroner's Office should develop MCI protocols that include the coordination of next-of-kin death notifications with area hospitals. Consider establishing multi-agency task forces to conduct family notifications to streamline operations and reduce the likelihood of duplication of effort. Accurate and timely death notification to victims' families should be one of the highest priorities. Delays in notification were a great source of frustration for agency personnel at the firehouse CP location and added confusion, frustration, and stress for the family members. Policy and procedures should be clearly established and enforced to ensure accurate and timely death notifications are made to family members. If feasible, consider honoring family requests to view the victim.

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(*Washington Navy Yard AAR*, p. 78, *San Bernardino AAR*, p. 118, *Orlando AAR*, p. 6, *Las Vegas AAR, p. 73, El Paso AAR, Newtown AAR, p. 72*)

14. **Regularly Review Family Assistance Center Plan.** The Family Assistance Center Plan should be reviewed, updated, and clarified. All pertinent agencies should be involved in the review. Modifications should be made that clearly denote the agency responsible for initiating and leading the family assistance and reunification efforts. Conduct training and exercises to ensure stakeholders understand their role and responsibilities with family reunification efforts. Ensure that Victim Services and Notification Centers are written into SOPs, this may require wider discussion about responsible parties, resource commitments, where and how to establish, etc. Determine where a Notification Center may be established if there were a larger incident and ensure it is written into SOPs. Increase the Agency's knowledge and expertise in establishing a Family Assistance Center. Implement standard operating guideline or orders from the executive team for dealing with elected officials, to be integrated into the NIC and FAC plan. Local FAC/NIC leads should consider developing a yes/no list for local level access management. Follow best practice of designating separate time for media and VIPs to tour NIC and FAC facilities before families arrive. This would lessen impact to victims and their families' wellbeing, as well as FAC operations. Formalize continual update of points of contact for partners involved in establishment and operations of NIC and FAC. (*Washington Navy Yard AAR*, p. 78, *Henry Pratt AAR, p. 38, Las Vegas AAR, p. 112, El Paso AAR*)

15. **Victim Identification.** LVMPD, in conjunction with the Clark County Coroner's Office, Clark County Fire Department and hospital administrators, should develop a plan regarding victim identification and tracking during significant incidents and/or MCI. Establish protocol regarding who will respond to the DOC and facilitate the sharing of this information. (*Las Vegas AAR, p. 54*)

16. **Notification and Information Center (NIC).** Notification and Information Center (NIC) family notification process and procedures should be reviewed and revised as needed to ensure a coordinated effort with supporting agencies, including EPPD Crimes Against Persons Unit. Update Notification and Activation Protocol to include all four layers. Develop a checklist for NIC and FAC facility requirements, such as air conditioning, appropriate bathrooms, and breakout and rest areas, to then pre-identify NIC and FAC locations. Activate FAC IMT concurrent to activating NIC operations and setup. This allows for more effective communication among the Department of Public Health, emergency responders,

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and victim services and support agencies within the NIC and FAC. Implement standard operating guideline or orders from the executive team for dealing with elected officials, to be integrated into the NIC and FAC plan. Local FAC/NIC leads should consider developing a yes/no list for local level access management. Follow best practice of designating separate time for media and VIPs to tour NIC and FAC facilities before families arrive. This would lessen impact to victims and their families' wellbeing, as well as FAC operations. Conduct regular and frequent briefings first to the family members at the NIC, followed by briefings and information releases to the media and general public. Incorporate onsite security in NIC planning and establishment. Consider having stakeholders establish a clear checklist/policy/SOPs on operational requirements prior to when NIC opens, with security measures as a priority. Develop a list of pre-identified NIC and FAC locations in the Emergency Management Shelter Annex. In developing this list, emergency response leadership should consider identifying options in different areas throughout the city. Additionally, leadership should consider city and county facilities that can host the NIC. Formalize continual update of points of contact for partners involved in establishment and operations of NIC and FAC. (*El Paso AAR*)

17. **Mass Fatality Management Plan.** Update Mass Fatality Management Plan to request for TMORT/DMORT support for medical examiners as soon as the need is identified. (*El Paso AAR*)

Technology and Equipment

18. **Toll Free 1-800 Number.** After this incident, the city acquired a toll-free number to facilitate public contact with the city after a major incident. Although the city set up some special telephone lines, a ready-to-go 1-800 number would make it easier for callers and staff. (*Aurora AAR*, p. 91)

19. **Single Victim File.** Establish one central file on victim information to avoid multiple files with conflicting or incomplete information. Hospitals, police and victim advocates are the primary suppliers and users of this information and should work together to create a template for any future mass casualty incidents. Versadex (Police Records Management System) is one option**.** (*Aurora AAR,* p. 136)

20. **Establish Victim Information Files.** Establish one file on victim information to avoid conflicting or incomplete information. Pre-identify and establish a contact

list for victim advocate (clergy, etc.) with the file. (*San Bernardino AAR*, p. 118, *Orlando AAR*, p. 24)

21. **Facilities and Equipment Management for Large Numbers of Victims, Witnesses, and Families.** If Jurisdictions and communities faced with similar challenges of managing large numbers of victims and witnesses (in this case more than 400 people) should identify safe, stable and comfortable facilities in advance of an incident. Consider provisions for victim and witness care while they are awaiting interviews and family members being notified. These may include making cell phone charging stations and other forms of communication available and making food and water available. Counselors should be clearly identified with arm bands, vests, or similar so that they are readily identified by victims and witnesses. Natural disaster preparedness serves as a model for predesignated areas. (*San Bernardino AAR*, p. 118, *Orlando AAR*, p. 24)

Training and Exercises

22. **Training for Victim Services.** Training exercises should continue past the point where the threat no longer exists and extend to notification of victims' families by the medical examiner or coroner. Critical incident training and exercises should include an investigative component that includes identifying all aspects of victim and witness identification, interviewing, and reunification. (*San Bernardino AAR*, p. 115, 117)

23. **Family Assistance Center Training.** Expand MCI tabletop exercises and training beyond initial response to include post-incident needs such as establishing a Family Assistance Center and employee wellness and healing. Relevant partnering agencies should be included in this training. Continue conducting regular meetings and exercises of NIC and FAC partners. Continue training and exercises for FAC personnel to develop flexible operating guidelines that can be used in better effectively managing the FAC. Train NIC and FAC partners on roles and functions of individual agencies and the IMT. Follow best practices to increase planning, training, coordination, and exercises related to NIC and FAC. Ensure all victim service providers are included in tabletop exercises and ongoing meetings and trainings for large-scale incidents, particularly active shooting MCIs. Conduct training and exercise for partners on EOC role in supporting NIC/FAC establishment and subsequent communication throughout the response. (*Las Vegas AAR, p. 112, El Paso AAR*)

24. **Notification Information Center (NIC) Training.** Consider providing trainings on the process of transitioning between the NIC and FAC. Train and familiarize law enforcement and NIC/FAC security with roles and responsibilities of those involved in operations and who should have access to the facilities. Conduct training and exercise for partners on EOC role in supporting NIC/FAC establishment and subsequent communication throughout the response. Develop plan for NIC operations based on assigned responsibilities and outlining agencies' responsibilities and ICS structure. (*El Paso AAR*)

Other Considerations

25. **Timely Identification of Victims.** The identification of victims is extremely challenging under these types of circumstances. However, law enforcement should attempt to identify victims as quickly as possible. (*Washington Navy Yard AAR*, p. 78)

26. **Explanation of Identification Delays.** Be prepared to explain to families of victims why identification of the deceased takes so long. Families should be given general information about how and why the crime scene must be processed first before the deceased can be processed – and how long both generally take. They also should be informed about what is considered "positive identification" and what the law and good practice require. Explain the potential impact of an incorrect identification on other families. Families will still be unhappy, but at least they will have more information about why the process requires a certain amount of time to be completed correctly. (*Aurora AAR,* p. 136, *San Bernardino AAR*, p. 118)

27. **Employee Wellness.** Organizational leadership should ensure that all involved in the response are provided access to the physical and mental health resources they may need after a critical incident. Agencies should identify best practices related to employee wellness. (*San Bernardino AAR*, p. 113, *Washington Navy Yard AAR*, p. 82)

28. **First Responder Relief.** If possible, do not require first responders who worked at a traumatic incident to work their immediate next shift, especially if those become 12-hour shifts. Give first responders and other city employees a change to rest and unwind. For vigils, visits by the President or other high-ranking officials, or memorial events held immediately following a mass casualty event,

use mutual aid agencies to relieve officers who are likely to have been physically and emotionally fatigued. (*Aurora AAR,* p. 137)

29. **Critical Incident Counseling and Mental Health Support.** Ensure your department has a policy regarding mental health support after critical incidents and clearly communicate it to the entire department. Assign a mental health or officer wellness incident commander to oversee officer mental health and coordinate services among participating agencies. Compel participation in critical incident debriefings or post-incident counseling both for victims and civilians and commissioned staff. Consider follow-up counseling as it is not unusual for post-traumatic stress to manifest itself several weeks or months after an event. Have supervisors monitor and check in with members to determine if they have a need for mental health provider services. Ensure all responders are aware and use the services as needed. Require all responding members to attend a stress management session debriefing following a traumatic event. In addition to mental health assistance, consider unit, team, or department-level briefings to bring closure to the event. (*San Bernardino AAR*, p. 118, *Orlando AAR*, p. 28)

30. **Transportation of Deceased.** Under no circumstances should the deceased be transported under emergency conditions. It benefits no one and increases the likelihood of hurting others. (*VA Tech AAR, p. 122*)

31. **Scene Walk-Throughs.** Family members were allowed to visit the school once the crime scene was cleared. In the future, this could include victim advocates, mental health professionals, and LE personnel to answer questions and assist as appropriate. (*Newtown AAR, p. 72*)

COMMAND AND CONTROL

Organization

1. **Tactical Operations Center.** There were a few recommendations to stand up a Tactical Operations Center (TOC) in a centralized location. This would allow Command Staff to remain in one location, while others who needed to meet with them could easily identify the location. It was noted that even without a TOC, the Incident Commander did an excellent job coordinating responses and teams. (*Henry Pratt AAR, p, 14*)

2. **Incident Management Assistance Team.** Going forward, an Incident Management Assistance Team may be needed. This team could be deployed to set up staging, begin scribing, etc. Team members could be preassigned to come in as other officers are reassigned. In addition, the Incident Commander may be offered a trained assistant to take some of the administrative burden off the position. Include plans an emphasis that support personnel should be assigned to assist Incident Command, rather than pulling personnel from Incident Command to attend to duties elsewhere. (*Henry Pratt AAR, p. 15*)

3. **Clarify EOC Responsibilities.** The EOC was activated quickly and effectively coordinated with Command. Some suggested further clarifying the City EOC's responsibilities. Continue developing and EOC SOP for large-scale incidents such as this one. Personnel noted the need for more information on roles and responsibilities and recommended pre-populated checklists with specific guidance. Recommend developing checklists or reviewing/updating if they currently exist. (*Henry Pratt AAR, p. 15, 20*)

4. **Mutual Aid Organization Chart.** Develop up-to-date mutual aid organizational charts and distribute to the appropriate parties. All responding personnel and mutual aid that are not immediately needed should be staged at a nearby location. This will ensure their rapid deployment when their services are necessary, without flooding the incident scene prematurely. In accordance with NIMS/ICS guideline, assign a staging officer from the primary jurisdiction who may direct assignments. It is preferably to reach agreement before an emergency incident regarding span of control and the authority of outside agency supervisors to direct officers from other agencies. (*Henry Pratt AAR, p. 26, Newtown AAR, p. 68*)

5. **Staging Area.** Establish a staging area separate from the command post. It is important that the Incident Scene Commander establish a staging area for emergency personnel as soon as practically possible, and all responding units, including those that self-dispatch, should report to the Incident Command Staging area for appropriate task assignments. Failure to do so can limit management control, increase risk, and severely hinder accountability. (*El Paso AAR, Newtown AAR, p. 68*)

6. **Unified Command.** The CSP established its command presence within minutes of the incident. Other supporting agencies, with few exceptions, operated seamlessly and collaboratively within the existing operational framework. Organizations and individuals unfamiliar with the ICS and Unified Command concepts should train accordingly. Clearly Defined Roles and Responsibilities. A unified command post should be established and operated based on the National Incident Management System Incident Command System model. For this incident, law enforcement would have been the lead agency. (*Newtown AAR, VA Tech AAR, p. 122*)

7. **Briefings.** Conduct timely briefings and create other communication methods to cover information if briefings are not possible. Continue to implement protocol developed after the incident to adhere to briefing schedules. Consider designating the Planning Section Chief as the one to lead briefings. Consider developing a formal IAP to ensure timeliness of briefings. Conduct briefings for each operating briefing, during which roles, responsibilities, duties, and tasks are assigned and handed over, as needed. (*El Paso AAR*)

Policy, Plans, and Procedures

8. **Mark Off Cleared Areas.** Have a map of the building and marking off cleared areas. Even without the floor plan, a crude diagram with some basic layout information on a dry erase board would have been helpful. (*Henry Pratt AAR, p. 14*)

9. **Mobile Command Vehicle.** Develop and socialize a SOP on distinguishing between the "mobile command vehicle" and Incident Command Post/Mobile Command Post to reduce miscommunications. The CSP was fortunate to have the use of various locations to use as CP locations. However, the Agency does not currently have an adequate mobile command vehicle with multi-functionality designed to handle an incident of this magnitude. Consideration

should be given to acquiring a mobile command vehicle. (*Henry Pratt AAR, p. 14, Newtown AAR, p. 70*)

10. **Active Shooter Regional Guidelines**. Develop regional guidelines for responding agencies during a situation similar to an "Active Shooter". This remains an issue with large-scale incidents across the country involving the need for law enforcement. (*Henry Pratt AAR, p. 25*)

11. **Self-Dispatched Officers.** There are mixed reviews on whether a separate location for self-reporting off-duty personnel would be effective. Review and reinforce communications to the responder community regarding self-deployment as appropriate. Review and revise SOPs as appropriate to determine who is responsible for personnel accountability and how it should be tracked. Ensure there are designated personnel to complete this assignment during an incident. Consider a pass card system for police for easier check-in and accountability. Create and strengthen policy to control and manage the inevitable self deployment of off-duty first responders during these types of incidents. LE agencies designate SOP or standards for off-duty officer responses. These guidelines should include what LE identifications should be available and visible during the response and where/how to report. Preplan and Institute Staging Areas - create check-in station(s) for off-duty personnel to receive assignments and more detailed information on their arrival for major venues and locations in the jurisdiction. (*Henry Pratt AAR, p. 25, 27, 39, El Paso AAR*)

12. **MCI Training.** Create policy, procedures, and protocols for securing the DOC and IC during a significant incident and/or MCI. As part of this process, ensure there is an established entry access list of authorized personnel. Establish annual or semi-annual reviews of all Emergency Management and DOC documents including section manuals. Ensure they are available in the DOC. Re-evaluate the Emergency Mobilization Plan to include who specifically is responsible for implementing and documenting the ABX roster during significant incidents and/or MCI. Expand the Emergency Mobilization Plan to include critical civilian positions during significant incidents and/or MCI. Create policy, procedures, and protocols that describe the roles, responsibilities, and expectations of the sheriff and the Executive Staff during a significant incident and/or MCI and incorporate training as needed. All heads of law enforcement agencies within Clark County should create policy, procedures, and protocols for a comprehensive mass-casualty incident plan. Establish response

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protocols to the DOC for the Logistics Bureau during a significant incident and/or MCI. Create policy, procedures and protocols for a comprehensive mass-casualty incident plan, including the identification of likely partnering agencies and their anticipated roles and responsibilities during MCIs. Create policy, procedures, and protocols that establish Incident Command System training requirements for all LVMPD sergeants and above. (*Henry Pratt AAR, p. 50, 53, 55, 86, 95, 104, 106*)

13. **Audit of Policies/Processes.** Develop a plan for annual review (audit) of all policies and procedures related to full-scale exercises requiring multi-agency response and Unified Command. Ensure policies have clear and concise definitions, assignments, and role descriptions for responding personnel. Further develop the current after-action review process to reference significant incidents and/or MCI. This process should also include all the necessary staffing and logistical needs based on the size and scope of the review. Continue to use, refine, and document these processes and relationships. Consider documenting in plans and procedures and formalizing agreements as needed. (*Henry Pratt AAR, p. 104, 106, El Paso AAR*)

14. **Interagency SOP.** Local responder agencies should communicate and routinely update inventories and plans with investigation tools, such as diagram scanners, and develop SOPs should tools need to be used by other agencies. Ensure walkthrough communication updates among EPPD, supporting LE agencies, and the OME are established and maintained as part of IC duties and responsibilities. Develop plans and processes for outside agencies to integrate into the command structure and appropriate staging of resources. Develop plans and processes for establishing a unified command structure during a joint effort incident response for LE external agencies. Responding agencies and city departments should identify points of contact who will coordinate information exchange and partnership throughout a response. (*El Paso AAR*)

15. **First Officer in Command.** Continue following recently revised policies and SOPs to follow best practice that the first officer of scene assumes command until relieved by a supervisor. (*El Paso AAR*)

16. **Incident Action Plan (IAP).** EOC leadership establish a working IAP among partners and share with IC at the scene. El Paso emergency response partners should consider developing pre-loaded IAPs for different incident

types (i.e. floods or shootings). Draft can be developed along the NIMS Intelligence/Investigations Guide and edited to address incident specific details during response. (*El Paso AAR*)

Technology and Equipment

17. **Vehicle Keys.** Since the incident, several issues centered on the mobile command vehicle have been addressed. APD has increased the number of trained drivers and given them keys to the vehicle. Extra keys are now also kept in a communal location. There are plans to cross-train SRT personnel to drive it as well. (*Henry Pratt AAR, p. 14*)

18. **EOC Tech Training.** Provide training on how to get all of the technology within the EOC up and running. Step-by-step checklist may also be helpful for specific systems. Determine ways to provide a common operating picture on incident operations – this could include projecting incident information of the EOC wall or tapping into television screens to regularly update EOC personnel on incident information. Conduct regular technology testing to ensure televisions and other systems are working. (*Henry Pratt AAR, p. 18*)

19. **Resources in Staging Area.** Recommend developing and implementing a system to track and assign resources, as well as check resources back in, in line with ICS and Illinois MABAS guidance. Coordinate messaging on resource requests to ensure that is not an overwhelming amount of resources in the staging area. Avoid "all call" requesting. (*Henry Pratt AAR, p. 26*)

20. **Personal Tracking Resources.** Consider utilizing personnel tracking resources, such as Android Team Awareness Kit (ATAK) or blue force tracking. (*El Paso AAR*)

Training and Exercise

21. **Isolate Incident Command Post.** There is a need to isolate the Incident Command Post, especially early in response. Some reported that the influx of personnel made it difficult to coordinate and distracted Unified Command from the mission. During large-scale events, identify a secondary location for a command post in the event the primary command post is inoperable, and include this in the Incident Action Plan. Incorporate this concept into training. Conduct ICS training on how to establish and announce the assumption of

command and location of the command post. CP operations were set up during the early stages of this incident at various locations, including a Crime Scene Processing CP at Sandy Hook Elementary School, a Criminal Investigation CP at the Emergency Operation Center, and an overall Incident CP at the Sandy Hook Fire House. As more emergency response personnel, family members, and media continued to converge on the scene, access to the Incident CP at the Fire House became difficult and it became apparent that it was an error to establish a CP at the school. At no time should any type of CP be set up inside an active crime scene, and commanders should be prepared to set up CP locations in a location that is outside of the crime scene and not widely accessible to the public. (*Henry Pratt AAR, p. 14, 34, El Paso AAR, Newtown AAR*)

22. **Standardize Terminology.** Encourage common use of terminology per the Incident Command System (ICS) wherever possible. In areas where this is untenable, ensure police and fire understand specialized terminology (e.g., North side of the building vs. "A" side). (*Henry Pratt AAR, p. 14*)

23. **Push Out Perimeter.** If feasible, responders recommended having the perimeter pushed out farther than it was to prevent non-response personnel from crowding and hindering response efforts. Plan to establish a forward command closer to the scene, separate from the Incident Command for larger incidents to prevent overcrowding end enable perimeter control. (*Henry Pratt AAR, p. 15, 16*)

24. **Command Post Liaison ID Card.** Incorporate training, specifically for all commissioned officers within each area command, on the importance and requirements of the Command Post Liaison Identification Card. Develop an SOP for coordinating with external jurisdiction and regional liaisons, with the goal of ensuring effective communications and minimizing the number of people at the Incident Command Post. (*Henry Pratt AAR, p. 14*)

25. **MCI Training.** During a large-scale event and/or MCI, schedule and modify briefing times to communicate effectively. Provide clear policy direction with ICS roles and responsibilities defined for the staging manager during a significant incident and/or MCI. Establish and implement geographical identifiers for responding teams during a significant incident and/or MCI. The incident commander should assign an assistant to the staging manager during a significant incident and/or MCI. Create a Department Operations Center

quick reference guide for area commanders to be utilized for all levels of crisis including MCI. Ensure LVMPD captains are trained on DOC activation. Conduct live training exercises with all captains. Conduct training and exercises to ensure responders understand their roles and roles of others in evacuating premises during active incident response. (*Henry Pratt AAR, p. 37, 38, 40, 41, 49, 50, El Paso AAR*)

26. **Plain Language During Training**. Enhance training (tabletops and large-scale exercises) for NCORE users on MACTAC and Rescue Task Force concepts. Reinforce plain language, not police/fire codes, as a form of communication during these training opportunities. First responders be trained or familiarized with ICS terminology and plain language. (*Henry Pratt AAR, p. 60, El Paso AAR*)

27. **Interagency Training.** Conduct regular tabletop and full-scale exercises with top agency leaders of nearby and partner jurisdictions in Incident Command System and joint command of significant incidents and/or mass-casualty incidents. Create a unified response plan for an active shooting incident that involves Communications, Emergency Management, EPFD, and EPPD. Establish more training and familiarity among LE and Fire Department for critical incident response as well as ICS training on the Unified Command structure. El Paso emergency responder agencies, including the OME, and partners should participate in regular meetings or opportunities to establish working relationships and to understand each other's operations and responsibilities during a response. (*Henry Pratt AAR, p. 85, El Paso AAR*)

28. **Train and Establish Staging Officers.** Communicate directly with the command post and dispatch to issue assignments as responders are en-route or at the scene. Clearly defined roles and responsibilities should be established to limit miscommunication and potential for future errors. Protocols should be put in place in order to voice concerns upward through the chain of command without fear of reprisal. (*El Paso AAR, Newtown AAR, p. 71*)

29. **EOC Training.** Consider testing EOC personnel activation twice a year. Consider conducting training and exercises for key personnel and decision makers that will be present within the EOC. Department of Public Health leadership should be present at the EOC throughout the response to represent their agency and coordinate with staff in the field. Incorporate activation of mass care branch in EOC's planning and operations for the set-up of NIC and

FAC to provide transportation access for those in need. Consider having DPH present at the onset of EOC activation to set internal and interagency communication channels and resource support. El Paso Department of Public Health should consider conducting regular trainings on the delegation of authority structure and responsibilities at the EOC during large-scale incidents. (*El Paso AAR*)

30. **IMT Training.** Consider automatic activation of IMT by the EOC as part of plans and processes for the set-up and operations of NIC during large-scale event response. Train additional, multi-disciplinary IMT personnel for both a more diversified roster and to have alternatives, should the primary personnel not be available during a response. Incorporate IMT activation in process and protocols to activate setup and operations of the NIC during a large-scale event response. Train IC and emergency management on IMT's role and their roles and responsibilities in supporting IMT functions. (*El Paso AAR*)

Other Considerations

31. **Develop and implement a Unified Coordination System**. All responsible agencies should plan and design a unified coordination system that identifies the roles, responsibilities, reporting relationships, and missions for all organizations and operations centers supporting public safety and medical operations. (*Boston Marathon AAR,* p. 89, *Washington Navy Yard AAR*, p. 74)

32. **Designated Safe Zones.** Ensure designated responders direct fleeing people to designated safe zone(s). (*El Paso AAR*)

33. **Traffic Control.** Designate resources to block off/open traffic at various locations and throughout different stages of operations. Ensure IC identifies traffic patterns early in incident response to shut down appropriate roads and re-set traffic patterns. Have a designated person in charge of traffic flow and parking/sectioning off areas to keep transport corridor open. (*El Paso AAR*)

COMMUNITY PREPAREDNESS

1. **Response Partners.** Continue strengthening relationships with non-traditional response partners, such as Aurora University. (*Henry Pratt AAR, p. 38*)

2. **Communication with Tourism Industry.** Maintain open communication with key stakeholders in the tourism industry by holding monthly meetings and sending notifications when necessary to the Las Vegas Convention and Visitors Authority, Las Vegas Security Chiefs Association, and community stakeholders. (*Las Vegas AAR, p. 13*)

3. **Partnership with Las Vegas Convention.** Support the education of and partnership with the Las Vegas Convention and Visitors Authority and the Las Vegas Security Chiefs Association with awareness training on "See Something, Say Something" as well as "Run, Hide, Fight." (*Las Vegas AAR, p. 14*)

4. **MACTAC Training.** Provide MACTAC response training to hotel and casino industry stakeholders as well as community partners, schools, churches, and those supporting critical infrastructure. (*Las Vegas AAR. p. 15*)

5. **Public Sector Partners.** Continue to include administrators of private-sector partners, such as public transportation and ride-share companies, in tabletop exercises related to significant incidents and/or MCI. (*Las Vegas AAR, p. 111*)

6. **Modular Space.** Consider developing plans, policies, budget requests, and contracts to support the ability to expand operations by bringing in modular space (trailers, tents), command vehicles or by moving some operations to a larger, borrowed, or leased space. (*El Paso AAR*)

EMPLOYEE WELLNESS

1. **Cadre for Peer Support.** Develop a cadre of individuals and agencies from the region who are trained and willing to serve as force multipliers when additional peer support to LVMPD employees is necessary. (*Las Vegas AAR,* p. 117)

2. **Crisis Training.** Provide crisis and trauma training to collective bargaining associations to assist membership in the aftermath of a critical incident. (*Las Vegas AAR,* p. 118)

3. **SER Program.** Expand the Significant Event Reporting (SER) program to all Agency employees following a significant incident and/or MCI. (*Las Vegas AAR,* p. 119)

4. **Employee Assistance Program (EAP).** Re-evaluate EAP benefits to ensure all LVMPD employees and their family members have similar access to the same programs and providers. (*Las Vegas AAR,* p. 120)

5. **Stress Management Debrief.** Create and implement policy, procedures, and protocols for an agency-wide, critical-incident, stress-management debriefing process. (*Las Vegas AAR,* p. 123)

6. **Leader Listening Sessions.** Consider establishing senior leader listening sessions for responders as soon after the shooting as possible. (*El Paso AAR*)

7. **Express Gratitude.** Senior leaders should consider openly addressing the work force to express gratitude, acknowledge challenges, encourage employees to take advantage of available resources and answer questions. (*El Paso AAR*)

8. **Critical Incident Stress Debrief.** Hold critical incident stress debrief for all directly involved in the response for a mass casualty incident, particularly an active shooting incident. (*El Paso AAR*)

9. **Mental Health.** Identify additional trauma informed mental health support providers and programs for personnel and develop a plan for how those resources will be provided in the aftermath of large-scale incidents. (*El Paso AAR*)

10. **Ensuring access to care**. The magnitude of this incident, especially given the age and number of victims, certainly had an impact on all responding personnel. The agency must ensure that responding personnel are receiving proper mental health services prior to an event and long after. Employee Assistance Programs are a critical component to a long term mental wellness process. Additionally, the CSP currently has a confidential employee assistance and peer support (STOPS) program. They also have established policy and procedures outlined in the A&O Manual which addresses dealing with potentially distressed employees through the Personnel Early Awareness and Intervention System. Commanders should be prepared to deal with the short and long term effects on personnel who respond to mass casualty incidents. Investigators, responders, and the families of those who were involved in this investigation should be provided EAP and other resources in order to deal with any potential adverse effects. (*Newtown AAR, p. 71*)

11. **Limiting impact of trauma.** Commanders should strive to minimize the potential adverse effects of crime scene exposure and all law enforcement personnel should be mindful to avoid unnecessary exposure to trauma. Crime scene access should be given only to individuals with a legitimate law enforcement need, regardless of rank. (*Newtown AAR, p. 71*)

12. **Long term care.** Mental health experts maintain that effects of post-traumatic stress may not manifest until years after the event. CSP leaders should continuously support their personnel's health and well-being in the short and long term. (*Newtown AAR, p. 72*)

13. **Stress Management.** Critical incident stress management and psychological services should continue to be available to EMS providers as needed. (*VA Tech AAR, p. 122*)

OTHER

1. **Law Enforcement Partnerships.** Due to the magnitude of this incident, there was an overwhelming law enforcement response on the local, state, and federal level. All available resources were made available to investigative personnel. Commanders established effective communication between the State's Attorney as well as other law enforcement partners. It is important to have effective working relationships and personal points of contact in place before the need for the contact arises. Establishing and maintaining law enforcement partnerships is critical to overall mission success. (*Newtown AAR, p. 72*)

2. **Documenting Investigations.** The agency utilizes an in-house system to document investigations. There were some issues regarding late reports and the submission of reports that had errors despite having been approved by a supervisor. The agency should emphasize the importance of report writing competencies and strive to take immediate corrective steps to prevent inaccurate, untimely, and poorly written reports. The Agency currently has policies and procedures outlined in the A&O Manual that address reporting requirements and these policies and procedures should be followed and enforced. Additionally, at the time of the incident certain units did not fully utilize the electronic reporting system which made it difficult for the assigned investigators to access and review reports, however, since that time the system has been implemented in all units agency-wide and now all reports are completed through the same system. (*Newtown AAR, p. 72*)

3. **Resist Theorizing.** In the preliminary stages of an investigation, the police should resist focusing on a single theory and communicating that to decision makers. (*VA Tech AAR, p. 87*)

4. **Canceling University Classes.** Plans for canceling classes or closing the campus should be included in the university's emergency operations plan. It is not certain that canceling classes and stopping work would have decreased the number of casualties at Virginia Tech on April 16, but those actions may have done so. Lockdowns or cancellation of classes should be considered on campuses where it is feasible to do so rapidly. (*VA Tech AAR, p. 87*)

Appendix A: Recommendations for De-Confliction

The recommendations listed below, and that are noted in red inside the text of the document, have been identified by the BTI team for review. These recommendations conflict with Department of Homeland Security and/or Department of Justice guidance.

Arming Soldiers assigned to Law Enforcement Missions

Boston Marathon

- **Explore revising policy to allow arming of soldiers assigned to law enforcement missions.** Develop a coordinated plan for arming soldiers assigned to law enforcement missions, under appropriate circumstances. (*Boston Marathon,* p. 93)

This recommendation potentially conflicts with numerous Department of Defense and Department of Justice Memoranda of Agreement on the issue.

Self-Deployment/Self-Dispatch

Self-dispatch of assets is in direct violation of the National Incident Management System and in Incident Command System (ICS) courses. As stated in ICS 100.b

"Resources should respond only when requested or when dispatched by an appropriate authority through established resource management systems. Resources not requested must refrain from spontaneous deployment to avoid overburdening the recipient and compounding accountability challenges."

- ICS 100.b, Introduction to the Incident Command System
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- **Self-Dispatch.** First response agencies should develop policies for when an officer initiates self-dispatch. A staging area should be created for such officers given the inability to control self-dispatch activities (*Broome County, New York*)

- Training and exercises should also test the supervisors' and managers' ability to manage an incident in which there are many self-dispatching officers. (*Washington Navy Yard*, p. 76)

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Annex of References

The after-action reviews listed below were the primary sources for this Compendium. While not classified, several reports were labeled For Official Use Only (FOUO) and contain law enforcement sensitive information. All primary sources are available by request to the BTI Institute.

1. **Virginia Tech Shooting, Blacksburg, VA (April 16, 2007),** *Mass Shooting at Virginia Tech: Addendum to the Report of the Review Panel,* TriData Division, System Planning Corporation, November 2009.

2. **Mumbai, India Attack (November 26-29, 2008),** *The Lessons of Mumbai,* RAND Corporation, January 9, 2009.

3. **Broome County, New York (April 3, 2009),** *American Civic Association Shooting, April 3, 2009 After Action Report and Improvement Plan,* Beck Disaster Recovery, September 2009.

4. **Aurora, Colorado Century 16 Theater Shootings (July 20, 2012),** *Aurora Century 16 Theater Shooting After Action Report for the City of Aurora, Colorado*, System Planning Corporation, April 2014

5. **Newtown Shooting Incident, Newtown, CT (December 14, 2012),** *After Action Report of the Connecticut State Police – Newtown Shooting Incident 12-14-2012.*

6. **Boston Marathon Bombings (April 15, 2013),** *After Action Report for the Response to the 2013 Boston Marathon Bombings*, Massachusetts Emergency Management Agency, December 2014.

7. **Washington Navy Shipyard Shootings (September 16, 2013),** *After Action Report - Washington Navy Yard, September 16, 2013: Internal Review of the Metropolitan Police Department*, Washington, D.C., July 2014 (FOUO).

8. **Paris, France Attacks (November 13, 2015***), The Attacks on Paris: Lessons Learned, A Presentation of Findings* by the Homeland Security Advisory Council, June 2016.

9. **San Bernardino Shootings (December 2, 2015),** Braziel, Rick, Frank Straub, George Watson, and Rod Hoops. 2016. *Bringing Calm to Chaos: A Critical Incident Review of the San Bernardino Public Safety Response to the December 2, 2015, Terrorist Shooting Incident at the Inland Regional Center.* Critical Response Initiative. Washington, DC: Office of Community Oriented Policing Services.

10. **Pulse Nightclub Shooting, Orlando, FL (June 12, 2016),** *Florida Department of Law Enforcement After Action Report*, December 13, 2016 (FOUO).

11. **Pulse Nightclub Shooting, Orlando, FL (June 12, 2016),** Straub, Frank, Jack

Cambria, Jane Castor, Ben Gorban, Brett Meade, David Waltemeyer, and Jennifer Zeunik. 2017. *Rescue, Response, and Resilience: A Critical Incident Review of the Orlando Public Safety Response to the Attack on the Pulse Nightclub*. Critical Response Initiative. Washington, DC: Office of Community Oriented Policing Services.

12. **Las Vegas Harvest Music Festival (October 1, 2017),** *1 October After Action Report, August 24, 2018,* Clark County Fire Department and the Las Vegas Metropolitan Police Department in collaboration with the Federal Emergency Management Agency National Exercise Division, August 24, 2018.

13. **Las Vegas Harvest Music Festival (October 1, 2017),** *1 October After Action Review*, Las Vegas Metropolitan Police Department, July 6, 2019.

14. **Tree of Life Synagogue, Pittsburgh, PA (October 27, 2018),** *After Action Report and Lessons Learned – Tree of Life Synagogue – Pittsburg, PA,* May 22, 2019.

15. **Henry Pratt Active Shooter Incident, Aurora, IL (February 15, 2019)**

16. **El Paso Walmart Active Shooter, El Paso, TX (August 3, 2019)**