Ensuring Preparedness During School Safety Crises

March 30, 2015

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INTRODUCTION

Across the entire United States, people are growing increasingly concerned about the level of violence we see every day. What is most alarming is the level of violence we see exacted against innocent children in our schools. Over the past several years, we have witnessed armed, violent attacks in our elementary schools, our high schools, as well as in our institutions of higher learning. Many of these attacks were orchestrated and executed by a lone person. This, however, has not been the case outside the United States, where armed attacks on schools were the acts of organized groups. Deadly attacks in a Russian school in the town of Beslan, the protracted reign of terror by Boko Haram on school children in Nigeria, and the abduction and murder of 43 students from a teachers college in Mexico were the result of violent groups attempting to further their extremist views.

Each time an act of school violence occurs in the United States, numerous well intended individuals from all levels of our community and government appoint commissions and panels to study and investigate how and why the violent acts occurred. Reports from these commissions and panels offer valuable insight into underlying factors that may have led to a violent act: security vulnerabilities at our schools, and a multitude of possible contributory causes such as domestic violence, bullying, and deficient mental health services. Recommendations often range from increased gun regulation, hardening of schools, the coordination of multiple agencies for better responses to schools, and enhanced mental health solutions. There are always calls for more cooperation and better communication. Many times recommendations may be codified in regulations and directives to prevent a future "Columbine" or "Sandy Hook," but direct assistance for implementing any regulations or directives too often fall on the backs of the local school districts.

The model of local school district autonomy has a proud and storied past in our nation. Communities and regional school districts need to follow various federal and state standards. However, these communities and school districts operate autonomously, and often times distinctly differently than another school located just down the street. From community to community, funding for schools varies tremendously across geographic regions. This disparity in funding and home rule oversight of schools, in addition to possibly many other factors, has widely impacted the assessment of desired academic outcomes for student success.

The disparity in local school funding and outcomes assessment cannot be the same ends that we seek for securing our schools. Statewide funding mechanisms are needed to ensure schools have sufficient budgets and safety and security expertise when planning to protect our children.
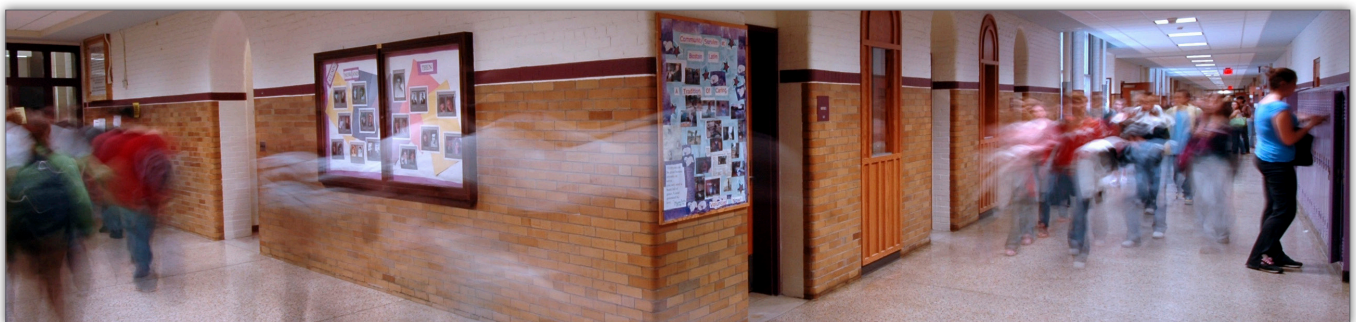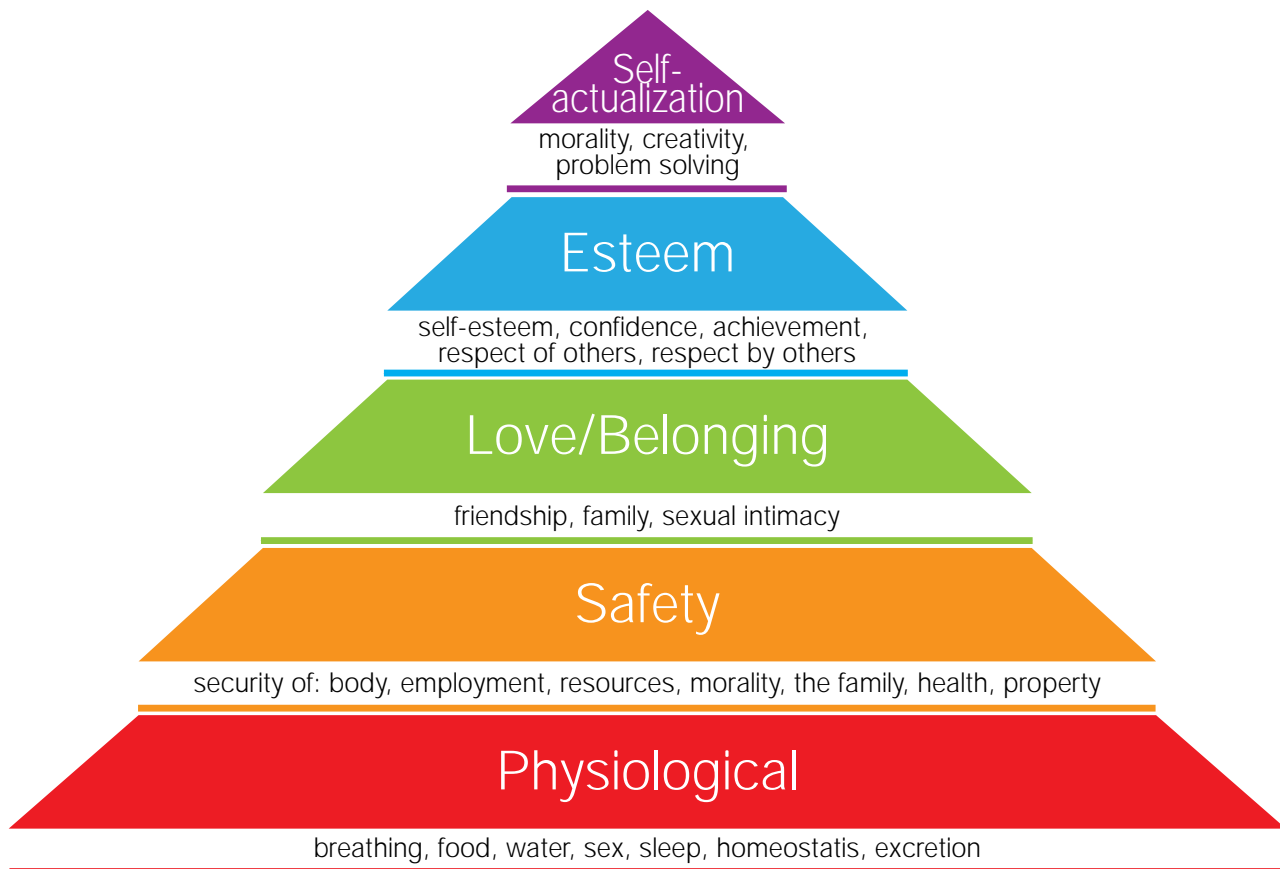
The Need for a Paradigm Shift in Safety Funding

Interestingly, the paradigm shift that must be internalized to accept the premise of a statewide funding mechanism for school safety and security is grounded in academic theory known to all teachers.

Maslow's (1954) Hierarchy of Needs forms the basis for many fields of study. Maslow's model is represented by a pyramid of human needs. At the top of the pyramid is self-actualization. Since this need is placed at the top of the pyramid, this level could be construed as students maximizing their educational efforts and achieving desired academic outcomes. At the bottom of the pyramid are the physiological needs that encompass the basic human needs for survival (e.g., water, oxygen, etc.). The physiological needs level is followed by a safety level, a love/belonging level, and an esteem level, all leading up to self-actualization. Maslow described the physiological, safety, love/belonging, and esteem levels as the "deficiency needs," reasoning that an individual cannot ascend to self-actualization if the lower levels or needs are not met.

This is an important foundation for the rationale to support state funding for school safety and security. Take a moment to think about how much annual funding each town and school district collectively allocates to directly support student outcomes assessments. To better conceptualize this amount, let's consider an example. The State of New Jersey has 565 municipalities serviced by multiple boards of education for community and regional school districts. Each board of education directly supports a plethora of assessment activities. Additionally, the State of New Jersey is expected to fund $22.1 million worth of new assessment examinations in 2015.

Self-actualization
morality, creativity, problem solving

Esteem
self-esteem, confidence, achievement, respect of others, respect by others

Love/Belonging
friendship, family, sexual intimacy

Safety
security of: body, employment, resources, morality, the family, health, property

Physiological
breathing, food, water, sex, sleep, homeostatis, excretion

Maslow's Hierarchy of Needs

Needless to say, a tremendous amount of funding directly finances student outcomes assessments. This funding is derived from both the state and local school budgets. How much money do states directly contribute to school safety and security? Consider this: The safety level (or safety need) was identified by Maslow in his hierarchy of needs as a deficiency need because it was well understood that people cannot ascend to the self-actualization level if they do not feel safe. If we do not fund the safety needs of our students, it is inefficient to disproportionately fund efforts to achieve positive student outcomes assessments because students' increasing safety concerns will undermine academic achievement efforts.

The chaos, fear, and carnage that are witnessed at schools subjected to violence is counter to the environments we all desire for our schools, and it is not an exemplar of the safety and security that our students need to self-actualize. Collectively, states must do more to finance the safety and security of our schools if we expect positive student outcomes assessments.

Theory in Action

In addition to community partners and first responders, private sector entities like Mutualink can serve as important strategic partners for school districts with regard to safety and security. The company specializes in interoperable multimedia communications and has extensive experience delivering collaboration solutions to law enforcement, the military, hospitals, and of course, schools.

Strategic collaboration with statewide and local officials in New York has resulted in a pilot program in 20 schools in two counties, intended to link to police and other entities in the event of an emergency. Mutualink's technology creates a network of connected communities, which improves situational awareness and response time while protecting privacy and minimizing costs. By partnering with experts such as Mutualink, school administrators can focus on educating, knowing that advanced technology is helping to achieve unprecedented communication and collaboration to protect their students.

The Need for Strategic Collaboration

Many times when we are faced with complex problems or crises, there is a call for enhanced cooperation and communication. Nobody can argue that when individuals, groups, and agencies work together, great things can happen. The problem is that securing our schools is a uniquely complex challenge given the varying types of risks that we all are attempting to mitigate. Simply stated, merely cooperating with those around us may leave us short in reaching our desired safety and security goals.

There is a fundamental difference between cooperation and collaboration. Many times people and organizations cooperate with each other because they each need to achieve a goal that they cannot achieve on their own. Therefore, this need motivates them to cooperate with their existing partners or those around them. Collaboration, on the other hand, is different in the sense that people and organizations work together because they want to work together. Research shows that cooperation is actually a component of collaboration. The other component of collaboration is assertiveness. Thus, collaboration amongst individuals, groups, and agencies is characterized by their level of cooperation and their level of assertiveness to work together to accomplish goals.

The problem of school safety and security needs to be addressed through strategic collaboration. The basis for strategic collaboration is an intentional, collective approach to address public problems or issues through building shared knowledge, designing innovative solutions, and forging consequential change (Norris-Tirrell & Clay, 2010, p. 2).

The three main components of this definition of strategic collaboration are:

1. an intentional, collective approach to address public problems/issues through building shared knowledge
2. designing innovative solutions
3. forging consequential change

The intentional collective approach aspect of the first component is conducive to the assertiveness aspect of collaboration. From an assertiveness perspective, this might involve an entity searching for and locating appropriate partners and stakeholders that have information or knowledge that may be beneficial to solving their safety/security dilemma. This might differ from mere cooperation because they are not just dealing with those individuals and entities local to them; they are actually seeking the beneficial partners that they need (if their needs are fully known).

The second component focuses on innovative solutions. An innovative solution is usually not based on incremental change. The solution might be creative or be the synthesis of seemingly incongruent processes or technologies. Acquiring such innovative solutions for local school districts is difficult because of voter predispositions for pared-down school budgets in depressed economic times. In fact, the financing of an increased budget with innovative solutions is probably out of reach for many school districts.

The final component rests on change that is significant and far-reaching. The discussion about a statewide funding mechanism for school safety and security is an example of a consequential change.

What Strategic Collaboration Means for School Administrators

For schools to be prepared to provide an optimal setting for learning and growth, they must not only be safe, but provide a feeling of security to all stakeholders – faculty, students, parents, board members and community supporters. In this regard, strategic collaboration enables individuals and entities to make contributions in their respective areas of excellence. Administrators bear the burden of navigating the river of security measures available to them, each offering a panacea against prospective dangers. Teachers need to be free to focus on curriculum and student welfare. Students need the freedom to learn, explore, and create. Fortunately, the needs of teachers and students can be met when administrators can call on cooperative community partners with the requisite expertise (if they exist in the area) to formulate security plans that will provide well-rounded preparedness and threat management. These security plans also provide the ability to rapidly respond to and mitigate any natural or man-made hazard that may arise.

In order to achieve optimal collaboration, expertise must be shared. Abundant resources are available from agencies that specialize in emergency preparedness and security to provide a roadmap for planning. For example, in 2013, several federal agencies collaborated to publish the "Guide for Developing High-Quality School Emergency Operations Plans" at the request of the US Department of Education. The Guide recommends forming a collaborative team comprising a wide range of school personnel, student and parent representatives and community partners such as first responders and emergency managers[1].

Collaboration also infers the acceptance of responsibility by all parties to become engaged in the solution. In this way, while each brings a necessary expertise and defers to those with differing functional knowledge, all must gain a base level of proficiency in safety and security so that they become active participants in the process. To facilitate this, the Federal Emergency Management Agency (FEMA) offers web-based courses to provide general knowledge for National Incident Management System (NIMS) training (IS-700a) as well as Incident Command System (ICS) training specifically designed for schools (IS-100.SCa). The ICS is a standard management tool used as a best practice for effective communications in an emergency. With minimal time investment from collaborating partners, the courses provide a common operating language and foundation for further operationalizing ICS in the school environment.

1   "Guide for Developing High-Quality School Emergency Operations Plans", US Department of Education, 2013, p 6.

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Finally, as previously stated, school administrators must collaborate with policy makers to forge consequential change in the form of statewide funding mechanisms. An example of this approach, which might be regarded as a potential best practice case, is unfolding in the State of New York, where the Governor and the Division of Homeland Security and Emergency Services announced on November 17, 2014 a school safety pilot that they rolled out in 20 public schools in two counties north of New York City [see Theory in Action section on page 4]. The state-level solution, implemented locally, can provide secure communication between the schools and first responders during emergencies, as well as for daily operations as they deem appropriate. Solving this larger communications problem at a state level enables community-level collaboration, as well as the opportunity to draw on state and even federal emergency management resources, as needed. This also allows administrators to focus more on teaching and learning rather than attempting to find collaborative partners with the relevant expertise and desire to solve local problems.

Strategic Collaboration for Public Safety: Reduce Time to Effective Resolution

The public safety community has long recognized the need for inter-agency and cross-jurisdictional collaboration for incident resolution. The variety and nature of the emergencies to which they respond has historically left first responders swapping radios between agencies in an effort to achieve interoperability, but falling short of full and effective communication, as is evidenced by frequent reference to communications as an area for improvement in after-action reports. In the worst cases, the inability of dispatchers or first responders to successfully patch communications to partners results in **time lost**, which correlates to **lives lost**. Optimal outcomes are achieved when situational awareness among all responders is highest and the interoperability of communication is optimized. The more complex the emergency, the more diverse are the agencies participating, thus necessitating more collaboration.

In a school environment, both minor and major emergencies will precipitate the need for the administrators to interact with public safety agencies. As more high-profile incidents take place in academic settings, individual schools, as well as state and local agencies, are addressing the need for hardened entrances and physical barriers. Unfortunately, as was the case at Sandy Hook Elementary School, these obstacles can be breached. If and when this happens, rapidly responding to and neutralizing the perpetrator will lead to lives saved. Therefore, one of the most cost-effective and quickly implemented solutions will come in the form of real-time interoperable multimedia communications to enhance situational awareness. IP-based, peer-to-peer technologies provide not just voice, but data and video intelligence, as well, to first responders.
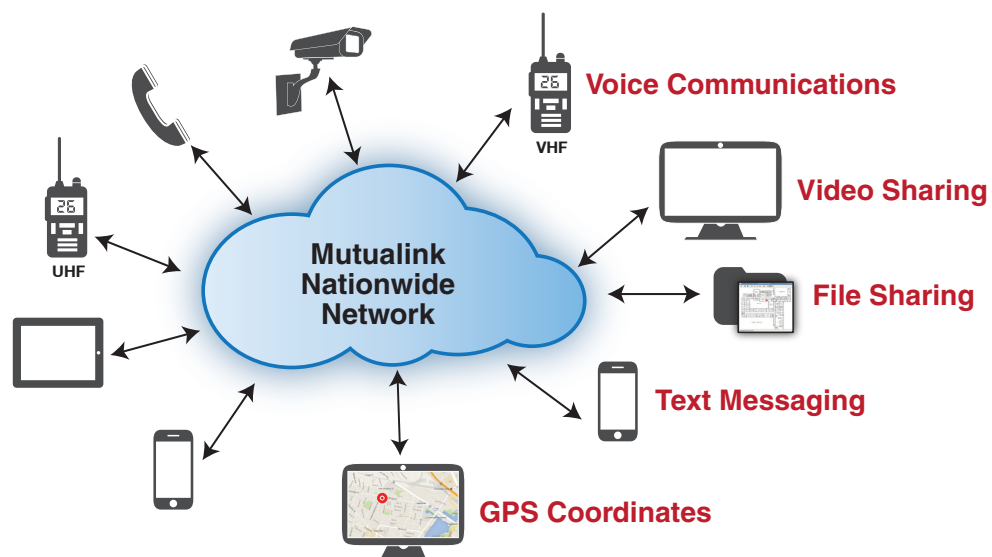
Nearly a third of active shooter events occur in schools, and can take up to 15 minutes for police to respond[2]. Trained officers responding to these types of events know that rapid resolution and neutralization of the assailant will result in lives saved. Through the use of this real-time multimedia technology, officers can receive communications (voice, data, and video) directly from school personnel with intimate knowledge of the school layout or from command post personnel who might be monitoring the officers' movements from a safe location via the school's video surveillance system. Through shared video surveillance, law enforcement command and control personnel can see and listen to the operation as it unfolds, using text communication, if necessary, to silently message the team. In cases with multiple agencies responding, all of the first responders can participate using multimedia push-to-talk applications on their mobile devices.

*In repeated in-school active shooter exercises, the use of real-time multimedia sharing technology results in a **40%** savings in time to resolution.*

As public safety agencies participate in a collaborative team environment to solve the challenges of providing safe school environments, they will need to recognize and accommodate the school stakeholders' concern for faculty and student privacy and security. For this reason, a distributed collaboration network is favored; one in which no central server is wholly controlled by one agency. Each school and participating agency should control when (and whether) to share their radio, video and data. This on-demand sharing leaves each agency with sovereign control over its own communication assets and data.

CONCLUSION: A Model for Strategic Collaboration to Deliver a Safe School Environment

The existing funding model (**Figure 1**) is based on the concept that individual schools struggle with the dilemma of allocating funding from limited local budgets to required student outcomes assessment, while struggling to provide adequate resources for the more fundamental need for physical safety and security.

Mutualink and a faculty member of Fairleigh Dickinson University jointly developed the Strategic Collaboration Model for Safe Schools (**Figure 2**) to outline the stages of strategic community collaboration that lead to safety in our schools, as well as tactical components of collaboration to reach resolution once school security has been breached. The statewide funding mechanism provides the consequential change required to ensure these basic safety and security needs are met in all geographic regions of a state in an equitable and strategically collaborative manner.

← Safety **EXISTING LOCAL BUDGET DOLLARS** **Student Outcomes Assessment →**

FIGURE 1: Traditional Model

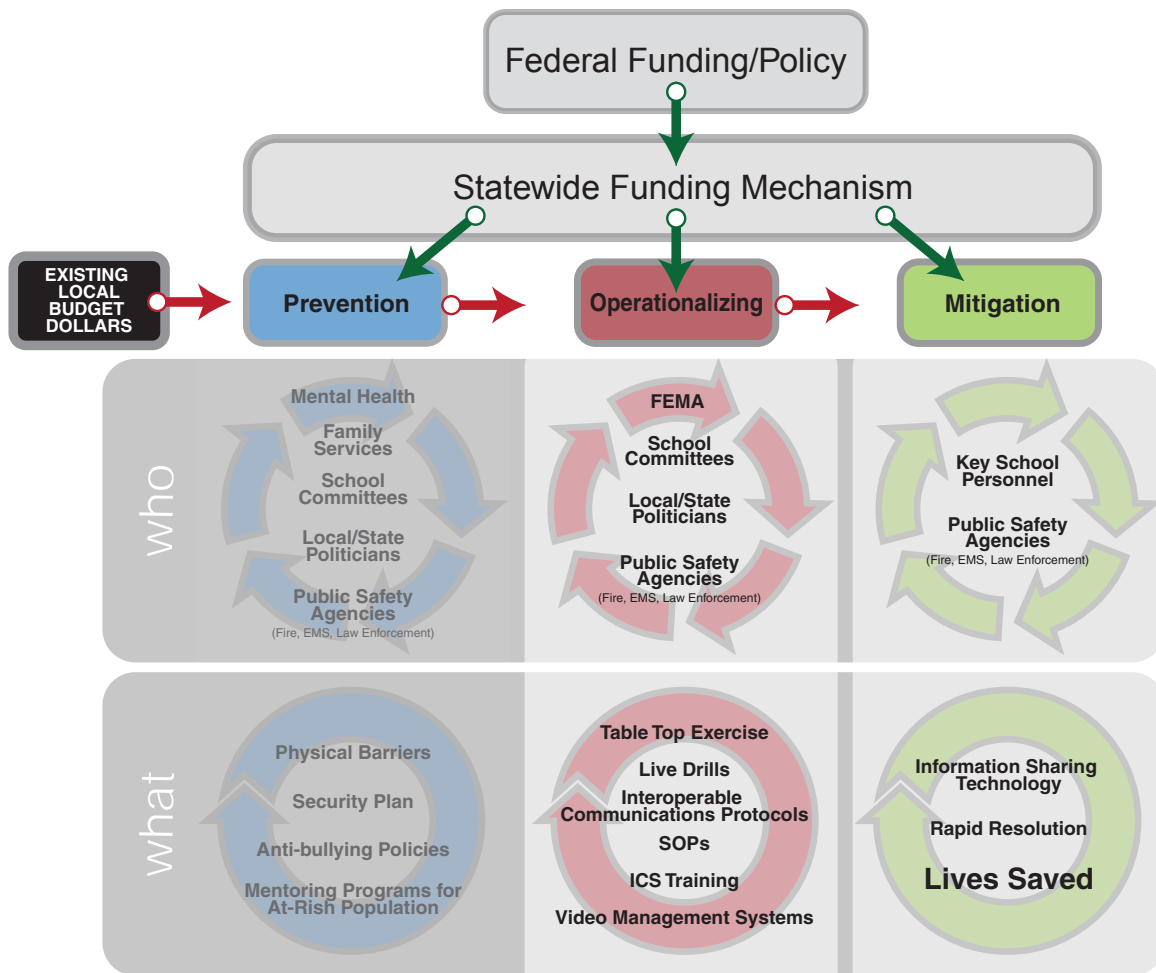2 J. Pete Blair, Ph.D., M. Hunter Martaindale, M.S., and Terry Nichols, M.S.; Active Shooter Events from 2000 to 2012, posted 1/7/2014 to http://leb.fbi.gov/2014/january/active-shooter-events-from-2000-to-2012

FIGURE 2: Strategic Collaboration Model

Preventing school violence is outside the scope of this paper, but clearly benefits from collaborative efforts on the part of the mental health, family services and school communities, at a minimum, as well as state and federal policy-makers. Schools can and are addressing preventive measures to keep unwanted aggressors out of schools through physical barriers, often with the input and consult of the public safety community.

Operationalizing the school safety plan will contribute to confidence and internalized responses in an actual emergency. Solutions at this stage might include hand-held radios for communication within the school, a video management system for visual surveillance, and an IP-based information sharing platform to achieve interoperability with public safety agencies and schools outside the district. School communities can avail themselves of a FEMA web-based course, and hold periodic tabletop exercises, as well as actual practice drills with local law enforcement, fire and emergency management organizations. A well-prepared community will respond more effectively to internal and external threats. Strategic collaboration at the operational level means that school personnel will avail themselves of the FEMA-offered web-based courses. Schools and local public safety groups (fire, police, EMS) will collaborate on tabletop exercises and live drills. Perhaps most importantly, state agencies will develop best practices and make available grants to guide and fund these activities.

Mitigating multiple hazards is challenging. The most critical step in responding to any mass casualty threat, whether school-related or otherwise, is establishing real-time, secure, coordinated communications between and among first responders. Historically, attaining voice interoperability, while a challenge of itself, was deemed sufficient. Today, multi-agency audio, video, text and data interoperability is possible, and surprisingly affordable. For any school emergency, the ability for public safety and school personnel to share situational awareness speeds up response and resolution times. When hospitals and other resource organizations are included in the coordinated, collaborative effort to deal with mass casualty threats, best-case outcomes will be optimized and become commonplace.

As described, it would be impossible for one community to attain this level of collaboration on their own. By definition, the model calls for cross-jurisdictional collaboration, as needed, depending on the nature and scale of any incident. A truly advanced level of collaboration needed to deal with such incidents is dependent on forging consequential change. Developing statewide school safety funding mechanisms will facilitate this change.