

Meeting Summary
School Safety Sub-workgroup
April 16, 2019

Attending:

Kenney Payne	AIA Virginia
Florin Moldovan	Spotsylvania County - VBCOA
Rick Witt	Chesterfield County - VBCOA
Brian McGraw	VDFP
David Decatur	Stafford County Sherriff's Office
Donald Smith	Augusta County Sherriff's Office
Gerry Maiatico	Warren County Fire - VFPA
Douglas Shifflett	Augusta County Schools
Gregg Fields	City of Alexandria – VBCOA
James Moss	Grayson County – VBCOA
James Snyder	Augusta County Sherriff's Office
Laura Frye	Door Hardware Institute
Linda Hale	Loudoun County Fire – VFPA
Mark Dreyer	VDGS
Mike Armstrong	Harrisonburg Fire – VFPA
Sgt. Patrick Green	Virginia State Police
Bill Aceto	Fairfax Co. Fire Marshal
Ron Clements	Chesterfield County – VBCOA
John Catlett	DHCD (Catlett Code Consulting)
Jeff Brown	DHCD
Cindy Davis	DHCD

Background:

Twenty years ago, school shootings with multiple victims became a reality and in 2018, there were over 25 school shootings. Local governments and school administrators are now faced with the challenge of protecting students and staff from life-threatening specific target and random shootings. There is a need to provide code clarity regarding approved methods that can be utilized to provide appropriate levels of classroom security to defend in place in the classroom.

The scope of the School Security Sub-workgroup originated from two sources. The first was Senate Bill 1755 which is provided below. This directs DHCD to convene a stakeholder's group of first responders and code administrators to develop code proposals to be considered by the BHCD in the 2018 code adoption cycle.

The second issue was an appeals case ([Appeal No. 18-04](#)) in which the local building official granted a modification to utilize a barricade device on classroom doors in a newly constructed school. The devices were ultimately cited by the Virginia State Fire Official as being non-code compliant and ordered removed.

Discussions, Themes and Issues:

- An opening presentation was provided by DHCD's facilitator summarizing national activities and programs, a brief overview of NFPA 3000, NFPA and ICC interest in further addressing the issue, and various illegal locking mechanisms found everyday in our communities. Various national law enforcement programs that promote some form of run-hide-defend approach to school shooting incidents were reviewed. These, including the US Department of Homeland Security, include the barricading of classroom doors with heavy furnishings and equipment as part of the hiding component. An industry has emerged of various barrier device manufacturers and a brief review of a limited number of them being marketed was provided. This was followed by an overview of the current (2015) code requirements.
- An opening presentation was made by VFPA which described the required life safety requirements of the building and fire codes. There was some repetition from the previous presentation that will not be repeated in this overview. Several makeshift devices were shown including fire hose pieces placed over door closer devices, modifications made to fire rated doors, and even smoke-releasing vision obscuring devices marketed to provide a military-type smoke cover. VFPA provided an overview of their legislative activity relating to classroom security.
- Several key points were made including:
 - No one has ever attempted to breach a locked door in any of the school shootings;
 - Secondary explosive devices were found in the Columbine school shooting;
 - Although fire has not been utilized as a weapon or as a diversionary tactic to date, that possibility exist;
 - Hazardous materials have not been utilized to date, but that possibility exist; and
 - Fire evacuation alarms have been utilized to bring students in to open areas or to the exterior of schools to increase the ability to produce mass casualties.
- Following the presentations, each person present on the sub-workgroup was provided an opportunity to introduce themselves, provide a reason why they were on the sub-workgroup, and what they hoped would be accomplished. Several themes emerged that were discussed:
 1. There was a distinct difference between how these types of incidents were viewed by law enforcement and fire officials. The three law enforcement departments represented, including the Virginia State Police, view these types of incidents as a critical life safety event that requires immediate containment and in-class barricading to reduce casualties. This includes a defend-in-place strategy that removes students and staff from harm while limiting those exposed to the threat.
 2. The fire officials, including the Virginia Department of Fire Programs and those representing VFPA, feel that the threat of mass shootings may lead to a multi-hazard event that could include fire, explosive devices, and/or hazardous substances. This creates a fluid situation that could include initial phase of defend in place followed by rapid need to evacuate.

3. Law enforcement indicated that regardless of locking mechanism and/or barrier device, they continue to educate and promote the use of other physical barriers including furnishings and equipment as a secondary security measure. Their concern is that although no known school shooter(s) have ever breached a locked door, there is a high potential that that could occur. Door vision panels provide a much easier breach point, which leads to access to interior locks located at code approved heights. Although shooters looking to do the most harm typically would not take the time to try to breach individual doors to classrooms, a shooter who has an intended target or targets may use any means to reach those targets.
4. Fire officials discussed two other possible scenarios where barricade devices other than locks would be problematic. A shooter could injure or kill the classroom teacher/responsible adult who may have deployed a lock or barricade, virtually causing the students to become trapped and unable to evacuate when requested and/or necessary. They provided an example that the teacher is shot from the outside through a window or through gypsum walls that would provide little protection from a bullet. The other scenario would be if someone threw an incendiary device through an exterior window in to a locked-down room. The occupants could become trapped if they could not exercise operating both a door lock and a barricade device.
5. Law enforcement participants pointed to school construction methods (typically non-combustible construction types) and that modern schools typically contain fire sprinklers to contain fire as a mitigating measure for fire as a weapon concerns.
6. Additional discussions focused on the possible misuse of specifically barricade devices to accomplish assaults, sexual assaults and rape, or other illicit activity. A barricade being in place without the ability to quickly bypass/remove the device from outside the classroom was an issue raised.
7. Vision panels in doors were discussed at this point. Although needed for classroom monitoring and classroom space monitoring when not in use, these add an additional security concern. Typical locks and door hardware fall within reach of a breached vision panel. In a targeted shooting, breaching the vision panel must be considered. Industry has developed films that can be placed on existing glass. Yet the existing window frame may become the weak point. Retrofit vision panels are available, but their cost may be prohibitive for most school systems.
8. A general discussion ensued that every scenario on both sides of the issue cannot be anticipated or protected against. Law enforcement stated that although their goal is to protect every life, the reality is that it can't be accomplished in the random shooter type of incident. The average response for police to arrive from the time the shooting begins is longer than the average duration of a school shooting. Tactics have changed from the Columbine shootings where tactical teams were assembled before entry was made to confront the shooters nearly an hour later. Tactics now call for the first arriving officers to enter and move to the active gunfire and suppress the shooter. However, from the time shooting begins until the shooter can be confronted, significant carnage occurs. In many incidents the shooter has killed themselves or attempted to flee before law enforcement can enter. Although their goal is to save every life, they know that by the time they arrive significant casualties will have already occurred. They stated that their

goal is to contain the incident and reduce the number of casualties inflicted. They feel it is imperative that appropriate barricading (without stating any particular type) take place until additional support can clear the building.

9. Law enforcement participants representing more rural communities stated that their response times are much longer and with far less manpower. The Augusta County sheriff stated that they have six school resource officers for sixteen schools and they are deployed at the elementary schools. There are times due to training, leave, or other emergencies that those officers are not at their post. The sheriff stated that in their community, it was agreed to by the building official, school system, law enforcement and local first responders (fire and EMS providers) that a secondary barricade device with external capability to be removed was the best solution for their community.
10. The Augusta County school representative stated that consideration of providing additional barricade devices in their schools began during construction of two new schools. They pulled together the local authorities including the building official and sheriff to discuss possible solutions before the devices were ordered and installed. The device that they decided upon met the desire to be applied from inside the classroom, it was located out of arm range from an intruder that would breach the door light, and it was removable by first responders from outside the class room. They consider the barricade devices as being deployed in a last resort situation and not part of normal operations of the doors. He also stated that all staff are regularly trained and drilled in their operation and deployment. And that regular mass shooter drills are conducted, monitored, and fine tuned as part of their school systems plan. He also stated that the devices could not be misused by being placed on the school egress doors because of the hardware required on the door that they are intended to be deployed on. He noted that the school system also requires that they be inspected and maintained along with other hardware.
11. The Va. State Police stated that in a recent Maryland school shooting, there was a school resource officer on duty. The officer immediately moved to the gun fire and killed the shooter as it appeared he was getting ready to shoot himself. However, even with police resources in the school, two targeted people were shot and killed. It was an example of how fast these incidents occur and the level of carnage that can occur quickly before police intervention.
12. There was some discussion about recent mass shootings outside of the school setting. In a recent incident at a Maryland newspaper office, a disgruntled individual not employed by the paper used a shotgun to shoot out a glass door and bypass an electrically operated security lock to reach his intended targets in the office. Although the glass was easily breached, and the targets were in the office, this was one of the first reported mass shootings where a locked door was breached to commit the shooting.
13. There was discussion regarding the applicability of accessibility requirements and whether they would apply to door locks or barricades placed on doors for the sole purpose of immediate life safety and only deployed during drills or emergencies. An informal opinion from ICC staff stated that it would not apply. However, DOJ has not provided an opinion to the group's knowledge. There were discussions on seeking an AG opinion. It was felt that the AG would not provide an

opinion on a federal regulation. In addition, the AG request must come from the cabinet secretary level and that may be difficult to obtain. Typical AG opinions take over a year, which will not be timely enough for the sub-workgroup's work.

14. Discussions were held on cost considerations for retrofitting existing door hardware versus adding some form of barricade device in existing schools. No solid data was available at this meeting. This moved the conversation to whether there should be different considerations for new construction or buildings already planning to replace doors as part of renovations and existing buildings intending to provide the additional security protection without door modifications.
15. The code prohibits the use of "Key, tool or special knowledge" for egress hardware. Discussions around the application of terms regarding active shooter locking/barricade devices were held. There was no consensus that there could be exceptions for a second security device on classroom doors if part of a school security program.

Paths Forward

Although differences remained at the end of the meeting, there were several key areas of consensus that will serve as a successful path forward. These include:

1. There was complete consensus that devices that deploy smoke or obscure vision to provide "cover" be prohibited.
2. There was complete consensus that a definition of "security device" is needed.
3. There was general consensus from the code community (building and fire) that the barricading of doors with furnishings and equipment should only be a last resort if there is no other means to secure a classroom door. This complicates the ability for law enforcement to clear an area and public safety to systematically evacuate people when it is considered appropriate to do so.
4. There was general consensus that educational settings offer a unique set of challenges, but also have demonstrated the ability to design and implement plans, train staff appropriately, and drill on plan implementation. This has been demonstrated through years of fire evacuation planning and drill experience.
5. There was general consensus that any locking/barricade device needs to be unlocked or removable from outside of the classroom by first responders or school officials.
6. There was complete consensus that new construction and existing facilities could have differences and they should be explored separately.
7. It was agreed that new construction requirements should be the easiest to address. Requirements can be incorporated into the design and budget at the beginning of a school construction project. Implementation and inspection would be a part of construction.

8. Existing building regulations should be addressed after new construction.
9. Some form of review of various locking and barricade devices will need to occur.
10. The conflict between the building official's authority to approve egress hardware and the fire official's responsibility to approve lock-down plans should be the last item addressed by the group.
11. Kenney Payne agreed to provide a base draft for the next meeting as starting point.
12. John Catlett to research other state laws and regulations.

Completion steps:

June

- Review and consider information gathered after the April meeting
- Receive new information from participants
- Consider first draft of new construction requirements; complete new construction requirements in a code change format
- Start discussion and assignments for existing building regulations

July

- Continue discussion of existing building requirements
- Review devices currently being marketed
- Draft existing building code changes in code change format
- Address coordination between the building official approval of egress hardware and the fire official approval of lock-down plans

For meeting materials or referenced documents, including the 2018 ICC building and fire code provisions without amendments for base code change consideration visit:

- cdpVA (<https://va.cdpassess.com/>) – See School Safety Subworkgroup Documents Under “LINKS”, or
- 2018 Code Update Cycle School Safety Subworkgroup Dropbox Folder - <https://www.dropbox.com/sh/rd0n90q62eqnjw4/AABYxA1krH4PfH4FSF0PhiULa?dl=0>

Note: Any materials (including the DHCD presentation) that were discussed at the meeting are available in the Dropbox folder at the above links.