Mitigating Hazards in School Facilities

Mitigation is any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event. — FEMA

School safety is a human concern, one that every school and community must take seriously and strive continually to achieve. It is also a legal concern; schools can be held liable if they do not make good-faith efforts to provide a safe and secure school environment.

How schools are built and maintained is an integral part of school safety and crisis planning. Schools with poor access control are more vulnerable to intruders. Students in schools with overlapping pickup and drop off points are more likely to be hurt by a bus or car. Schools that store materials in stairways will have egress problems during a fire or emergency.

Every school is unique by virtue of its design, location, and students, and each has its own history and culture. Some schools are relatively open and safe, others are highly protected yet unsafe.

That is why mitigating hazards in school facilities should be planned and implemented by those who know the school and its community best — school and district staff in alliance with local emergency responders and the school community. Working together, they can successfully:

- Assess the safety and security of school buildings, grounds, and surroundings.
- Make a hazard mitigation plan.
- Implement the plan.

Improving the safety of school facilities is not a new idea. All schools practice it in some way, but often informally and on an *ad hoc* basis. A school and its occupants are best protected by conducting and maintaining a systematic, careful, and well-documented hazard mitigation planning process. This also fulfills the school's legal obligation to maintain an appropriate standard of care.

1. Assess Your School Facilities

Select an Assessment Tool. A variety of school facility safety assessment tools exist. Among the best are those developed by the state departments of education or safety centers in Florida, North Carolina, Kentucky, Texas, and Virginia.[1] The National Clearinghouse for Educational Facilities has combined the assessment measures from these and a wide variety of other sources into the following series of *NCEF Assessment Guides* for examining the safety and security of all aspects of a school facility:

School Grounds and Site Access Control
Outdoor Athletic Facilities and Playgrounds

Building Access Control: Entry Doors, Windows, Walls, Roofs
Entry and Reception Areas

Corridors, Interior Doors, and Lockers
Stairs and Stairwells
Elevators
Exitways

Classrooms
Portable Classrooms
Art, Music, and Dance Rooms
Labs, Shops, and Computer Rooms
Offices, Workrooms, and Conference Rooms

Food Service Areas and Student Commons
Restrooms

Library/Media Center
Health Services Center
Auditorium/Theater/Performing Arts Center

Indoor Athletic Facilities

Emergency Communications, Power, Fuel, and Water
Security and Surveillance Systems
Fire Alarm and Control Systems
Mechanical Systems
Custodial and Equipment Rooms

Areas of Refuge/Community Shelter

The **NCEF Assessment Guides** embody the three principles of *crime prevention through environmental design*, or CPTED: *natural surveillance*, the ability to easily see what is occurring in a particular setting; *territoriality-maintenance*, the ability to demonstrate ownership of and respect for property; and *natural access control*, the ability to restrict who enters or exits an environment. CPTED has been used to improve building and community safety since the 1970s and is universally considered to be an excellent crime-prevention methodology.

Assemble an assessment team. Find the best school safety specialist you can to head the assessment team. Include the school or district facility manager, principal or vice principal, school resource officer, head custodian, local fire, police, and rescue officials, and appropriate architectural, engineering, and security experts. Ask selected teachers and students to help inspect areas they have special familiarity with, such as specialized classrooms, theater and backstage areas, and the like. Be sure someone on the team has photography skills.

When assembling a full assessment team is impractical, interview key school personnel to identify specific safety and security concerns and potential sources of trouble that otherwise might be missed.

Make sure that safety consultants have considerable school experience and are independent of any organization that sells or promotes security systems or devices. The number one finding of a 2006 study by the Arizona School Facilities Board was that "a cottage industry has developed around recommending and selling [security] devices to school administrators, regardless of whether there is any demonstrated need."

Look at the record. Before assessing the school and its grounds, look at the record. What problems has the school been experiencing, where are they located, and when do they occur? Are unwanted visitors entering through an uncontrolled entrance after school? Is breaking and entering a problem on an isolated side of the building at night? Is there fighting in the cafeteria due to overcrowding at lunchtime? Put together a list of such incidents and look for patterns. This helps keep a focus on problem areas.

Perform the assessment. The assessment consists of one or more building and site walk-throughs by the assessment team. Keep participants to a manageable number by bringing in specialists separately to examine particular locations or systems. Use the **NCEF Assessment Guides** or a similar assessment tool to ensure a thorough inspection of each area, room, and building system. Take photographs where needed, and be sure to examine areas surrounding and adjacent to the school.

Write up the results. The facility assessment report documents the school's physical vulnerabilities. Put your findings in writing and supplement them with photographs. If the **NCEF Assessment Guides** are used, they will provide a good report framework and serve as detailed backup documents.

2. Make a Plan

Create a standing committee on hazard mitigation. The school's hazard mitigation committee should be a smaller, permanent version of the facility assessment team, but with a different focus and leadership. Appoint the principal or a vice principal as chair and include the school or district facility manager, school resource officer, head custodian, local fire, police, and rescue officials, and several staff, school board, building professional, or community representatives known for their integrity and good judgment.

The committee's job is to prepare the school's hazard mitigation plan, help integrate it with the school's crisis plan, and serve as effective advocates for the hazard mitigation plan's implementation.

Prepare the hazard mitigation plan. The hazard mitigation committee's first task is to consider the findings of the facility assessment report in the context of the hazards and risks the school has faced in the past and is expected to face in the future. This may take considerable time and thought, since vulnerability and risk are not readily quantifiable. The committee's conclusions should be documented in a way that shows they are based on all available information and on the committee's collective best judgment.

Some vulnerabilities will be small and easy to mitigate, such as trimming overgrown bushes that provide cover for intruders. Others may be more difficult and expensive, such as controlling vehicle access to the school grounds. And some may be too unrealistic or costly to mitigate, such as relocating administrative offices to the entry area or reconfiguring restrooms to make them easier to supervise.

Understand risk. A *hazard* is defined as anything that can cause loss or damage to a school or its occupants. *Risk* is the chance, or probability, that such loss or damage will actually occur. In the United States, areas prone to hurricanes, tornadoes, floods, and earthquakes are well defined. State regulations, building and fire code requirements, and emergency evacuation procedures have been developed over many decades to eliminate or mitigate the risks of these hazards, as well as most fire and accident hazards.

Aside from natural disasters, the most problematic hazard is human behavior, particularly violence in its extreme forms. The probability, or risk, of a shooting occurring in a school is extremely low, but shootings do happen. The probability of a terrorist attack on a school is nearly zero, but attacks have occurred in other countries, and schools near the World Trade Center in New York City were affected by 9/11.

Nothing can be made free of risk, so do not put off the mitigation of everyday accident, fire, natural disaster, and human behavior hazards in the name of fortifying a school for the unlikely chance of a terrorist attack. Looking at past incidents and their patterns of occurrence cannot wholly predict the future, but it makes the planning process more realistic.

Weigh passive vs. active safety. Think about the tradeoffs between the passive safety that buildings provide and the active safety people provide. The one-time cost of even a fairly expensive building safety upgrade may be significantly lower than the perpetual costs of the security guards or extra school staff that might otherwise be needed.

Select security technology with care. School safety can be enhanced by the appropriate use of security technologies such as alarm systems, smart cards, and surveillance equipment. Technology can be expensive, however, and require ongoing maintenance, repair, and frequent upgrading by specialized employees or service contractors. It can be oversold or mismatched to the problems being addressed. In some cases, it may reinforce fear and undermine the social ecology of the school. For these reasons, carefully think through the costs and benefits of each technology, closely evaluate all sales pitches, and talk to as many vendors as possible before making a decision.[2]

Improve school climate. Creating an environment where students, staff, and the surrounding community have a relationship of trust, mutual respect, and open communication is the best and least expensive way to reduce or even eliminate the need for many security improvements. This takes time and effective leadership, but it may be the single most important security measure your school can undertake.

Calculate costs, locate funding. Once a preliminary list of mitigation measures has been drafted, prepare rough cost estimates and identify possible funding sources for each measure. Usual funding sources are the school's *maintenance and operation fund*s for small projects and *capital improvement funds* for large ones. Other sources include *school and community fundraising activities* and *state, federal, and private grant programs*.

Seek input. Refine the list of mitigation measures until it is realistic and achievable. To gain the widest possible support, seek input from the entire school community. Rank-order the final list of measures according to cost, urgency, ease of completion, or any other method that aids decision making and implementation.

Coordinate hazard mitigation with crisis planning. Your school's crisis plan should have four components: mitigation, preparedness, response, and recovery (see *Practical Information on Crisis Planning: A Guide for Schools and Communities*, U.S. Department of Education, Office of Safe and Drug-Free Schools, 2007). Most of the measures in your hazard mitigation plan will be directed to the first component, mitigation, but it may include a few preparedness- and response-related measures as well, such as fortifying emergency shelter spaces, upgrading emergency communications, and installing improved door hardware to aid lockdowns.

To supplement the school's crisis plan, create digital files of the school's site and floor plans and include selected interior and exterior photographs and other key building information, such as the location of alternative site access points and the location and operation of critical water, power, and gas controls. Make these files available, with appropriate safeguards, to school staff and local emergency responders.[3]

No doubt some of the people involved in your school's crisis planning are involved in hazard mitigation planning too, so integrating hazard mitigation measures into the crisis plan should not be difficult. Nevertheless, coordination between these two activities is necessary and important. As a rule, the more building-related hazards can be mitigated, the simpler and more effective crisis planning can be.

3. Implement the Plan

Start small, think big. After the hazard mitigation plan is complete, the hazard mitigation committee should oversee its implementation. Only the least costly mitigation measures are likely to be implemented immediately, with the rest added to either the school's maintenance and operations or capital improvement plans. There, in the absence of outside funding, they will have to compete with other, well established priorities like custodial services, HVAC maintenance, roof replacement, and new athletic facilities.

Justify thoroughly. What may seem like a logical safety improvement to the hazard mitigation committee may be a hard sell to those with other interests. Which should be funded first, new artificial turf for the football field or a new school security card system? Marshal your best arguments for each mitigation proposal to be sure it receives appropriate consideration.

Meet regularly, advocate continually. To be effective advocates, the committee should meet regularly to:

● Monitor the implementation of mitigation measures.

● Brainstorm alternative mitigation strategies that can be implemented sooner and at lower cost. Always include improving the school's climate as a mitigation strategy.

● Seek additional sources of funding from your community and from state, federal, and private grant programs.

● Monitor problems in and around the school and changes to the school crisis plan that may require adjustments to the hazard mitigation plan, and update the hazard mitigation plan as needed.

● On a regular basis, inspect and reassess school buildings, grounds, and surroundings for new vulnerabilities and potentially hazardous conditions.

● Document the school's good faith efforts in meeting its legal obligation to mitigate hazards.

Some, or perhaps many, hazard mitigation measures may not be implemented because of their expense. Nonetheless, their identification and consideration through an informed and deliberative process highlights the school's efforts to maintain an appropriate standard of care. Unimplemented but necessary mitigation

measures may serve another purpose as well: to help justify a major school renovation or even a new school facility.

Benefit mutually. Both the school and community will benefit from the relationships that develop among school staff and community officials as they work together on the hazard mitigation process, relationships that will help make the entire community safer and more secure.

Additional Information

For more information on safe school facilities, including web access to the *NCEF Assessment Guides* and other NCEF safety and security publications, visit the NCEF Safe Schools page at www.ncef.org.

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[1] *Florida Safe School Design Guidelines: Strategies to Enhance Security and Reduce Vandalism*. Florida Department of Education. 2003. http://www.fldoe.org/edfacil/pdf/fl_ssg.pdf

Safe Schools Facilities Planner . North Carolina Department of Public Instruction. 1998. http://www.schoolclearinghouse.org/pubs/safesch.pdf

K12 Security & Vulnerability Assessment. Kentucky Center for School Safety. No date. http://www.kycss.org/emp/SSVulnerabilityAssessment.doc

Campus Safety and Security Audit Toolkit. Texas School Safety Center. 2006. http://www.cscs.txstate.edu/txssc/txssc-safety-audits.htm

School Safety Audit Protocol. Section 1, "Buildings and Grounds." Jo Lynne DeMary, Marsha Owens, A.K. Ramnarian. Virginia Department of Education. 2000. http://www.doe.virginia.gov/VDOE/Instruction/schoolsafety/safetyaudit.pdf

[2] For more information, see the NCEF publication *School Security Technologies*, www.ncef.org/pubs/security_technologies.pdf

[3] For more information, see the NCEF publication *Emergency Response Information for School Facilities*, www.ncef.org/pubs/emergency_response.pdf

January 2008; updated April 2008

Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* and related assessment guides: *SCHOOL GROUNDS AND SITE ACCESS CONTROL*

Location _____   **Date** _____

1. Natural Surveillance

■   Are athletic facilities and playgrounds in direct view of front office staff or other staff in the building? Options for improving natural surveillance include placing play areas on higher ground, installing lighting for night games, removing visual obstacles, or installing windows.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

2. Boundaries and Setbacks

■   Do play areas have clearly defined boundaries and are they protected by fencing?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■   Are student gathering places set back from streets, driveways, and parking areas by at least 50 feet? A generous setback makes it harder for intruders to sell drugs to students, lure them off campus, or victimize them with drive-by shootings. One urban school solved this problem by building a basketball court on the roof; others incorporate completely contained inner courtyards. This recommendation may be unworkable for schools built on small lots.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

3. Separation from Vehicular Traffic

■   Are play areas well separated from vehicular traffic?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■   Can emergency and maintenance vehicles readily access play areas and ball fields, while all other vehicles are restricted by fencing, bollards, gates, landscaping, or other features?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

4. Play Areas and Equipment

■   Are pre-kindergarten and kindergarten play areas separated from play areas for older children?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■   Are emergency escape gates installed in walls or fences enclosing pre-school or kindergarten outdoor play areas?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■   Are school grounds free of loose rocks, bricks, or other potential projectiles?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■   Are hard-surface play areas located far enough from classrooms to protect windows and avoid being a classroom distraction?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are windows near hard-surface play areas protected?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do surfaces around playground equipment have a minimum depth (usually one foot) of wood chips, mulch, sand, pea gravel, safety-tested rubber, or rubber-like mats?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do protective surfaces extend a minimum of 6 feet horizontally in all directions from play equipment? For swings, does the surfacing extends in back and front twice the height of the suspending bar?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are play structures more than 30 inches high spaced at least 9 feet apart?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are playground equipment and areas well maintained, with no tripping hazards such as exposed concrete footings, stumps, or rocks; no sharp points or edges; and no open "s" hooks or protruding bolt ends? More than 200,000 children in the United States go to emergency rooms annually with playground equipment injuries, mostly involving falling.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are outside drinking fountains vandal-resistant by design, such as by being wall-mounted and made of durable materials?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

5. Joint Use Facilities

■ Are access points between joint-use facilities and the school limited and secure?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ During non-school hours, can sections of the building that are unoccupied or off limits be sealed off from public use?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are separate or limited-access amenities such as restrooms, water fountains, garbage cans, and vending areas provided near after-hours or community recreational areas? This bars unwelcome visitors from entering an unsupervised area of the school and engaging in illicit behavior. It can also help deter littering, etc.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

6. Bleachers, Field Houses, and Outbuildings

■ Are bleachers well maintained, with no signs of rust, rot, or splintering? Risers between bleacher seats should prevent entrapment and keep children from falling through, and handrails and guardrails for bleachers or seating areas should be adequate.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are field houses and other outbuildings securable to prevent intruders from gaining entry?

− Exterior door hinge pins are not removable from the outside.

− Hasp screws are one-way or cannot be accessed while the padlock is in place.

− Deadbolt locks are used.

− Sliding windows have lift and slide protection.

− Other windows are kept locked or protected when the building is unoccupied.

− Alarms should be considered in high-value or high-crime circumstances.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

7. Water Fountains

■ Are water fountains wheelchair accessible?

− Water fountains should be located on an accessible path.

− The spout should be at most 36 inches off the floor, with at least 27 inches of clearance for wheelchair users' legs beneath the apron of the fountain.

− Avoid foot-operated fountains, which don't work for wheelchair users. Push-bar or lever designs work well.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are water fountains vandal resistant in materials and placement, solidly mounted, and well secured. Are splash guards made of soft, bendable material?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

8. Vending Machines and Public Telephones

■ Are vending machines and public telephones located in well-monitored activity areas rather than in isolated areas?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are outdoor vending machines adequately secured for local conditions?

− If subject to vandalism, vending machines can be enclosed in a recessed area that can be closed off by a roll-down security grill or in wire cages with hand openings for operating the machines.

− Wire cages can look menacing, however, and should be used as a last resort; it's preferable to temporarily remove or relocate machines to a location easier to control.

− Many health experts advocate doing away with vending machines.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do vending machines and public telephones impede natural surveillance or cause foot traffic conflicts?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is a pay phone, emergency call station, or similar device available outside the building for after-hours emergencies?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Room No _____ **Location** _____ **Date** _____

1. School Office

■ Are confidential records separated from the reception area and stored in locked, vandal- and fire-resistant containers.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Does the main office have two-way communication capability with all classrooms?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Does a mass notification system reach all building occupants (public address, pager, cell phone, computer override, etc.)? Does it provide warning and alert information, along with actions to take before and after an incident?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Does the main office have a windowless space or "safe room" with a lockable door and a telephone for emergencies?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

2. Principal's Office

■ Does the principal's office have a window or door that can serve as a secondary emergency exit?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

3. Guidance Office, Teachers' Workrooms, and Conference Rooms

■ Are vision panels with blinds installed in guidance offices and all other areas where one-on-one adult/child conferencing is conducted?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

4. Nonstructural Hazards

■ In earthquake-prone areas, are free-standing appliances, office equipment, sculpture, televisions, computers, hanging plants, file cabinets, lockers, bookshelves, aquariums, and other heavy objects adequately secured against falling?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are partitions that terminate at hung ceilings properly braced to the structure above? Heavy partitions are particularly vulnerable to strong earthquake or explosive forces because of their stiffness and mass and are prone to damage.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are plaster and gypsum board ceilings adequately supported and secured to structural framing?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In earthquake-prone areas, are suspended lighting fixtures, suspended ceiling systems braced and provided with safety wires?

– Lighting fixtures, ceiling systems, and other overhead components or objects should be mounted to minimize the likelihood that they will fall and injure building occupants.

– Lay-in fluorescent lights should be supported independent of the ceiling grid. Spot lights and track lights should be securely attached to the structure.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

5. Windows in High Risk Areas

■ In high risk areas, are windows and their framing and anchoring systems designed and located to resist the effects of explosive blasts, gunfire, and forced entry? Windows overlooking or directly exposed to public streets or dangerous areas should be either minimized or protected.

– The greatest risk to occupants from an explosive blast originating near the school or even blocks away is injury from flying glass shards, so window glazing should be laminated or protected with an anti-shatter film. Glass-clad polycarbonate and laminated polycarbonate are two types of alternative glazing material.

– Bullet resistant glazing should meet the requirements of UL 752.

– Security glazing should meet the requirements of ASTM F1233 or UL 972.

– Window assemblies containing forced-entry-resistant glazing should meet the requirements of ASTM F588.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

Additional notes and comments:

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Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Location _____   **Date** _____

■ Does the library or media center, if jointly used by the school and the community, have separate and secure access for school use and after-hours activities, and does it restrict access to and from other areas of the school?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is the library or media center well lit, with no dark or shadowy areas?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are the library's or media center's reception area and circulation desk located near the main entrance and positioned to control traffic in and out of the area?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do the library's or media center's reception area and circulation desk positions have unobstructed surveillance of the entire area and can all users be monitored? Low stacks (maximum 4 feet high) parallel to the librarian's line of sight help accomplish this. Shelves along walls can be full height.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are there separate, lockable areas for storing media equipment, or are other security measures in place?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are adequate theft deterrents used, such as magnetic strips in books, door readers, and alarmed exits?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are computers, printers, copiers, and other equipment secured against theft?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are storytelling areas or niches all on one level, or, they are if recessed or elevated, are they designed to prevent fall injuries or hidden activities?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is all shelving securely fastened to walls or floors or otherwise designed to keep from tipping or falling due to student behavior or natural disasters? Book shelving is a particular hazard in earthquake areas.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In earthquake-prone areas, are wall- or ceiling-mounted televisions, projectors, and screens, and other heavy objects secured from falling?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In earthquake-prone areas, are partitions that terminate at hung ceilings properly braced to the structure above? Heavy partitions are particularly vulnerable to strong earthquake forces because of their stiffness and mass and are prone to damage.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are plaster and gypsum board ceilings adequately supported and secured to structural framing?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are suspended lighting fixtures, suspended ceiling systems braced and provided with safety wires?

– Lighting fixtures, ceiling systems, and other overhead components or objects should be mounted to minimize the likelihood that they will fall and injure building occupants.

– Lay-in fluorescent lights should be supported independent of the ceiling grid. Spot lights and track lights should be securely attached to the structure.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In high risk areas, are windows and their framing and anchoring systems designed and located to resist the effects of explosive blasts, gunfire, and forced entry? Windows overlooking or directly exposed to public streets or dangerous areas should be either minimized or protected.

– The greatest risk to occupants from an explosive blast originating near the school or even blocks away is injury from flying glass shards, so window glazing should be laminated or protected with an anti-shatter film. Glass-clad polycarbonate and laminated polycarbonate are two types of alternative glazing material.

– Bullet resistant glazing should meet the requirements of UL 752.

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– Window assemblies containing forced-entry-resistant glazing should meet the requirements of ASTM F588.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

Additional notes and comments:

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Location _____   **Date** _____

1. Fresh Air Intakes and Exhausts

■ Are fresh air intakes are located on roofs or placed high on exterior walls, at least 12 feet off the ground (or the fourth floor or higher in tall buildings), and away from vehicle exhaust-laden areas? Roof-mounted air intake locations are vulnerable to flying debris in high winds, so wall-mounting is preferable. Wall intake heights should be increased where existing platforms or building features (i.e., loading docks, retaining walls) might provide access to them.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are fresh air intakes located within secure fenced areas, cages or enclosures and protected by metal mesh sloped at least 45 degrees to reduce the threat of objects being tossed onto them?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are exhaust air outlets located downwind from air intakes and separated by the maximum distance possible?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

2. Air Handling and Filtration

■ Is there a master ventilation system shut-off in the principal's office or other designated area, making it possible to help control the spread of airborne contaminants through the ventilation system from any source, from chemical spills to volcanic ash fall to chemical-biological-radiological (CBR) attack?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Have critical air systems been balanced after initial construction or rebalanced after later renovation?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are functional, tight-sealing fire dampers installed and operational at all fire barriers, as required by building and fire codes?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In high risk areas, is a smoke evacuation system with adequate purge capacity operational, installed facing away from high-risk buildings, with controls and wires protected against damage, and connected to emergency power?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

3. Areas of Refuge/Community Shelter

■ If the school has designated areas of refuge or is to designed to serve as a community shelter, is the mechanical system equipped to heat or cool these areas during an emergency?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are major mechanical, electrical, plumbing, security, communications, and other systems are maintained, recommissioned, and tested on a preventive maintenance schedule, by trained workers in cooperation with security staff?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

4. Asbestos

■ If the school contains asbestos now or has contained asbestos in the past, is an asbestos management plan per 40 CFR 763, Subpart E, in place? Title 40 of the Code of Federal Regulations (CFR), Part 763, contains federal asbestos regulations. Subpart E covers "Asbestos-Containing Materials in Schools." To access Subpart E, visit GPO Access at *www.access.gpo.gov*.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

Additional notes and comments:

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5. Equipment Stability

■ In high risk or earthquake-prone areas, is heavy mechanical equipment adequately secured? Are sensitive equipment and gauges protected against vibration damage; for instance, is spring-isolated equipment restrained from jumping off isolators?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

6. Equipment Inspection, Maintenance, Recommissioning, and Testing

■ Are there well-maintained records of fire inspections by fire officials, elevator inspections by building officials, and maintenance logs for all mechanical equipment?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Room No _____ **Location** _____ **Date** _____

■ Does faculty have direct surveillance over work and entry areas, with no visual obstructions?

☐ Yes　☐ No　☐ Not applicable　☐ Further study
Note:

■ Do labs, shops, and computer room entries have alarm systems to deter breaking and entering?

☐ Yes　☐ No　☐ Not applicable　☐ Further study
Note:

■ Do rooms for storing equipment, supplies, chemicals, tools, or other items that could be used for dangerous purposes have adequate, locking doors? Do hazard placards on the door conform to fire code requirements?

☐ Yes　☐ No　☐ Not applicable　☐ Further study
Note:

■ Are chemical storage areas labeled with appropriate NFPA hazard diagrams?

☐ Yes　☐ No　☐ Not applicable　☐ Further study
Note:

■ Are windows in rooms with costly equipment or hazardous materials highly burglar resistant, or are they alarmed, or both?

☐ Yes　☐ No　☐ Not applicable　☐ Further study
Note:

■ Are fire extinguishers located in all laboratory and shop areas?

☐ Yes　☐ No　☐ Not applicable　☐ Further study
Note:

■ Are circuits for hazardous machines controlled via "kill switches"?

☐ Yes　☐ No　☐ Not applicable　☐ Further study
Note:

■ Are laboratories and vocational shops equipped with eyewash stations? Are they in good working condition?

☐ Yes　☐ No　☐ Not applicable　☐ Further study
Note:

■ In chemistry labs, are logs maintained for all chemicals and dangerous substances?

☐ Yes　☐ No　☐ Not applicable　☐ Further study
Note:

■ Are battery-powered emergency lights installed in chemical storerooms that do not have windows?

☐ Yes　☐ No　☐ Not applicable　☐ Further study
Note:

■ In vocational shops, is there adequate dust removal equipment and is the equipment in good working order?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are paint booths, auto shops, welding booths, and fume hoods well ventilated and do they exhaust directly to the exterior?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are sawdust, used oil, and other debris stored in fire- and vandal-proof containers?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is an electric solenoid key-operated shut-off switch installed on each gas line in instructional areas?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are electrical outlets protected by ground fault circuit interrupters (GFCIs) to prevent accidental electrical shock?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are shelving, equipment, and wall- or ceiling-mounted objects secured from falling due to student misbehavior or natural disasters?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are partitions that terminate at hung ceilings properly braced to the structure above? Heavy partitions are particularly vulnerable to strong earthquake forces because of their stiffness and mass and are prone to damage.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are plaster and gypsum board ceilings adequately supported and secured to structural framing?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are suspended lighting fixtures, suspended ceiling systems braced and provided with safety wires?

– Lighting fixtures, ceiling systems, and other overhead components or objects should be mounted to minimize the likelihood that they will fall and injure building occupants.

– Lay-in fluorescent lights should be supported independent of the ceiling grid. Spot lights and track lights should be securely attached to the structure.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

Additional notes and comments:

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Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Location _____   **Date** _____

1. Gymnasium, Fitness Center, Weight Room, or Related Facility

■ Does the facility have separate, secure entrances for school use and after-hours activities?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is user access to the rest of the school controlled?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is there a secure area for equipment, with an entry visible to users and staff?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are walls and entryways free of hiding places, such as deep niches or recesses?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Can retractable partitions be fully recessed into walls and locked in place?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are basketball courts provided with safety borders that are at least 6 feet wide on the sides and 8 feet wide on the ends? Walls or protrusions at the ends of courts may require padding where borders are too narrow.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ If it exists, is fitness center and weight room equipment in good working order?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are bleachers safe, secure, and in good condition, free of sharp edges and splinters? Do they have guardrails, handrails, and fall-through protection as appropriate? If the bleachers are electronically controlled, are they equipped with safety features that prevent entrapment of people as they close? Are control buttons located in a position to provide the operator with a clear view around, under, and behind the bleachers?

2. Locker Rooms

■ Do the coach/instructor's offices have window walls with an unobstructed view of the locker rooms?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do the locker rooms have a solid ceiling so contraband cannot be hidden in above-ceiling spaces?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are lockers recessed in perimeter walls and adequately spaced to avoid overcrowding, or, if freestanding, limited in height to 4 feet or placed in rows perpendicular to office window walls?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are locker room windows, fixtures, and hardware vandal- and impact-resistant?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are mirrors shatterproof?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are lockers of the open mesh type, making concealment of prohibited items more difficult?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are electrical outlets protected by ground fault circuit interrupters (GFCIs) to avoid electrical shock?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ If separate locker rooms are provided for visiting teams, are their doors clearly labeled "Visiting Team Lockers" and not located adjacent to those of home team locker rooms? The separation of locker room doors and clear labeling help avoid confusion and conflict.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are lockers locked with school-owned padlocks, and does the school maintain control of and access to the locks and lockers?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

3. Nonstructural Hazards

■ Are all heavy objects secured from falling due to student misbehavior or natural disasters?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In earthquake-prone areas, are plaster and gypsum board ceilings adequately supported and secured to structural framing?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In earthquake-prone areas, are suspended lighting fixtures, suspended ceiling systems braced and provided with safety wires?

– Lighting fixtures, ceiling systems, and other overhead components or objects should be mounted to minimize the likelihood that they will fall and injure building occupants.

– Lay-in fluorescent lights should be supported independent of the ceiling grid. Spot lights and track lights should be securely attached to the structure.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

Additional notes and comments:

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Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Location _____ **Date** _____

■ Can medical equipment and supplies be locked in an observable area?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Does a vision panel with blinds provide natural surveillance into patient care areas as needed?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do toilet room doors swing outward to prevent patients from being trapped if incapacitated? A fallen patient or overturned wheelchair could otherwise block the door.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are shelving and equipment secured from falling?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

Additional notes and comments:

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Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* and related assessment guides: *OUTDOOR ATHLETIC FACILITIES AND PLAYGROUNDS and EMERGENCY COMMUNICATIONS, POWER, FUEL, AND WATER.*

Location _____ **Date** _____

1. Site Surveillance

■ Can site entry points can be readily observed and monitored by staff and students in the course of their normal activities?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are site entry points positioned so one individual can monitor as many entries as possible? Nothing should block this means of visual surveillance, such as signs, trees, shrubs, or walls.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is natural surveillance from the surrounding neighborhood maintained, allowing neighbors and passing patrol cars to help serve as guardians of the school?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are there are any hidden areas on the site? In many cases, landscaping, signs, vending machines, bus shelters, trash receptacles, mailboxes, storage sheds, or street furniture can be altered or moved to improve natural surveillance.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are there hidden areas adjacent to the school that might provide offenders with "cover" or provide students with a location for illicit activities? Have they been made safer by opening them up, exposing them, sealing them off, or other measures?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

2. Site Territoriality-Maintenance

■ Are the school site and buildings well maintained, reinforcing territoriality? Are there signs of graffiti, breakage, neglect, or disrepair? Well maintained buildings and grounds promote civil order and demonstrate ownership of and respect for school property, qualities that tend to be reciprocated by students, staff, and community. Where necessary and possible, exterior walls should be treated to repel graffiti or tolerate repeated cleaning, and game lines should be provided on walls and surfaces in play areas so that students are not tempted to create their own.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Does the school have a marquee or other sign visible from beyond school property that clearly identifies the school by name?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are site entry points clearly marked?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do adequate signs, postings, or window decals direct all visitors to the main site entry points to gain permission to enter? Are illustrations, such as a map with arrows showing visitors the route to the main entry, included where appropriate? Signs should be simple, readable, well lit, written in all relevant languages, located at all entry points onto the property and at all entry points into the school, and easy to read from an appropriate distance, such as from a car window when approaching the site by car.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are school property lines clearly marked, establishing territoriality? Boundaries between joint-use areas and school-only areas should be similarly marked. Examples of property line markers include fencing, landscaping, natural geographic features, ground surface treatments, sculpture, architectural features, signs, or changes in elevation.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Have future development plans in the surrounding area been identified and has the school site development planning been adjusted accordingly?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are separate wings, separate buildings, and stand-alone, portable or modular classrooms readily identified from a distance by colors, icons, or signage? Reflective or lighted markings are ideal. Clear identification of buildings and areas greatly aids emergency response and rescue efforts.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

3. Site Access Control

■ Are entry points to the site kept to a minimum?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are there are at least two entry points so that if one is blocked, the other can be used?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do site entries provide for the ready passage of fire trucks and other emergency vehicles?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Can unsupervised site entrances be secured during low-use times for access control purposes and reinforce the idea that access and parking are for school business only? Are gates available for closing access points when necessary?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do perimeter fences, walls, or "hostile vegetation" provide sufficient access control, surveillance and territoriality? Fencing options, including their pros and cons, include:

– A solid wall or fence blocks natural surveillance and can attract graffiti.
– A stone or concrete block wall can be an effective barrier against bullets.
– A solid wall or fence can enhance privacy.
– Wire mesh fencing usually provides foot holds, making it easy to climb over.
– Wire mesh fencing is relatively easy to vandalize but often the most economical option.
– Smaller gauge wire mesh may deter climbing.

– Powder-coated wire mesh fencing can be more aesthetically pleasing.

– Wrought iron fencing is low maintenance, vandal resistant, without blocking surveillance or providing foot holds.

– A short fence can establish territoriality, but is of limited value for controlling access.

– Tall, continual fencing can significantly restrict access, but may also block a pedestrian path serving students who walk to and from school, forcing them to take a longer route where they are more exposed to traffic, crime, or environmental hazards. A compromise may be appropriate, such as installing gates at selected locations. Open gates at least define likely entry points; lockable gates provide the school with the ability to further secure the site but can also create an unexpected barrier for a student trying to escape to or from the site.

– "Hostile vegetation" (dense, thorny groundcover or bushes) often can be used effectively to define boundaries of various kinds around and within school property, providing it doesn't interfere with natural surveillance.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

4. School Surroundings

■ Have potential threats or targets near the school been identified, along with their possible impact? Are appropriate crisis plans in place? Examples of potential threats include nearby chemical plants, gas lines, heavy truck traffic, and railroad lines. Potential targets include major government buildings, structures with high symbolic value, power plants, communications towers, and dams.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

5. High Risk Sites

■ Are panic button or intercom call boxes used in parking areas, at entry points, in isolated areas, or along the building perimeter as needed? Where panic buttons or call boxes are impractical, do individuals carry pendant alarms?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is the perimeter of the site secured to a level that prevents unauthorized vehicles or pedestrians from entering, and does this occur as far from the school building as possible? Anti-ram protection may be provided by adequately strengthened bollards, street furniture, sculpture, landscaping, walls, and fences. Anti-ram protection should be able to stop the threat vehicle size/weight at the speed attainable by that vehicle at impact. If anti-ram protection cannot absorb the desired kinetic energy, consider adding speed controls such as speed bumps to limit vehicle speed. Serpentine driveways can also help slow down a vehicle's approach.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Can vehicle entry beyond checkpoints be controlled, permitting entry by only one vehicle at a time?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is there space outside the protected perimeter to pull over and inspect cars?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are there perimeter barriers capable of stopping vehicles?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are manholes, utility tunnels, culverts, and similar unintended access points to the school property secured with locks, gates, or other appropriate devices, without creating additional entrapment hazards?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In areas subject to chemical spills, is the school sited in a depression or low area that can trap heavy vapors or inhibit natural decontamination by the prevailing winds?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In areas of high fire risk, are fire evacuation sites at least 300 feet from at-risk buildings?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do bomb threat evacuation sites remain confidential to administrators, staff, and law enforcement?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are outdoor containers in which explosives can be hidden (such as garbage cans, mailboxes, and recycling or newspaper bins) kept at least 30 feet from the building and are they designed to restrict the size of objects placed inside them or to expose their contents (e.g., by using steel mesh instead of solid walls)?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In areas considered susceptible to explosive attack, is the stand-off distance between buildings and the nearest parking or roadway at least 75 feet, with more distance for unreinforced masonry or wooden walls? If this is not achievable, consider creating additional stand-off protection through barriers and parking restrictions. More stand-off distance is needed for unscreened vehicles than for screened vehicles. Also consider relocating vulnerable functions within the building.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

6. Earthquake, Wind, and Flood Protection

■ In areas prone to flooding, is the site located in a flood plain or is it at high risk if nearby water sources flood? Does the building design incorporate features to protect against flood damage? Can emergency vehicles access the site during high water conditions?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In areas prone to earthquakes or high winds, have alternate routes into and out of the site been identified to avoid potential fallen trees, buildings, utility lines, or other hazards?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In areas prone to earthquakes, has the proximity and vulnerability to active geological faults been investigated? Within the context of local conditions, is the site considered safe, or have extra safety measures been built into the facility to compensate for the risk? In any case, does the facility meet all applicable building code requirements for earthquakes?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In areas prone to earthquakes or high winds, are building setbacks adequate to prevent battering from falling trees or buildings?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In areas prone to earthquakes, high winds, flooding, or other natural or man-made hazards, have nearby facilities been identified as safe areas of refuge or community gathering places? The refuge area should not be located in the likely path of falling buildings or trees, nor should it be prone to flooding or adjacent to potential terrorist targets, chemical storage areas, or other high risk facilities.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In areas prone to earthquakes and high winds, are roof tiles, parapets, cornices, balconies, signs, satellite dishes, etc., adequately secured against falling?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

7. Landscaping

■ Does landscaping reinforce access control, natural surveillance, and territoriality? Careful design can maintain ample sight lines for effective surveillance.

– Where fences are used to border property, appropriate landscaping can soften edges while communicating to the public the message of privacy.

– Uninviting neighborhood development can be screened and intrusive noise softened, while discouraging unwanted visitors.

– In more rural settings, landscaping can define boundaries without the use of fences.

– Landscaping can serve to control and direct access and traffic. Trees lining sidewalks or drives can give natural direction to pedestrian and vehicular traffic while limiting or denying access to identified sections of the school site.

– Hedges should be kept low enough to expose places where people could otherwise hide.

– North Carolina recommends that shrubs and hedges bordering walkways not exceed 18 inches in height and that tree branches and leaves be kept clear to a minimum height of 8 feet off the ground.

– Large tree canopies have a tremendous capacity to absorb high-speed wind energy from hurricanes and other storms, thereby reducing storm and wind damage.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are trees located far enough away from buildings or are they trimmed appropriately to avoid providing roof, window, or second story access, damage from falling limbs, or a fire hazard in areas at risk of forest or brush fires? California recommends a minimum distance of 10 feet between buildings and trees.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are trees well maintained, with dead or weak limbs or trees removed?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are trees planted far enough away from exits, access roads, equipment, utilities and emergency refuge areas to ensure that, if they blow over or lose large branches, they will not block these areas?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are planters, garbage cans, seating, tables, or other amenities on site well maintained, designed for easy maintenance, free of vandalism, and vandal resistant? Do they restrict sidewalk space unreasonably or create logjams for passers-by? Do design features make these amenities unattractive to abuse by skateboarders?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

8. Site and Exterior Building Lighting

■ Is exterior lighting uniform and does it eliminate pockets of shadow or glare? Exterior lighting is best evaluated at night.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are exterior lighting fixtures vandal resistant, beyond easy reach (at least 12 to 14 feet off the ground), maintainable, and built with break-resistant lenses or protected by cages or other means?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are lighting fixtures designed to avoid providing handholds for climbing onto the building?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is exterior lighting well maintained?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is the exterior lighting scheme effective for enhancing natural surveillance, discouraging trespassing, and preventing school vandalism?

– Practice either the "full lighting" or the "dark campus" approach after hours. The dark campus approach discourages trespassing inside the building at night (intruders' lights are readily visible) and saves on electricity.

– A compromise to a complete blackout is to utilize motion detectors to activate lighting as needed.

– Security lighting should be directed at the building if the building is to be patrolled from the exterior. Lighting should illuminate the grounds if the building is to be patrolled from the interior, without compromising surveillance by creating glare for the observer.

– Timers or motion detectors should illuminate entry points for the first worker to arrive and the last one to leave.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Can exterior lighting controls be centrally accessed from the main administration area?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Does school lighting avoid excessive illumination of adjacent neighborhoods?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

9. Traffic Circulation

■ Are all vehicle pathways, access points, and interfaces with main thoroughfares designed to avoid accidents, speeding, blind spots and traffic conflicts? Are transitional areas between streets and school access points clearly marked, such as with "School Zone" signs? Traffic control options include:

− Traffic controls or calming devices such as speed humps, bumps, raised crosswalks or traffic circles that reduce the likelihood of injury due to speeding vehicles.

− Driveways that curve, change direction, or are broken into short enough segments to prevent cars from building up speed.

− Driveways that access slower streets directly, but not high speed streets.

− Signs, fences and landscaping at intersections that do not block vision.

☐ Yes　☐ No　☐ Not applicable　☐ Further study
Note:

■ Is pedestrian safety addressed by well designed crossing areas and separation from vehicle traffic? Pedestrian safety options include:

− Lighting, traffic signals, flags, painted crosswalks, signs, and crossing guards that are visible to drivers and that are effective.

− Electronically controlled "Walk/Don't Walk" lights with countdown displays and push buttons.

− Pedestrian islands or median strips that provide safe havens for students crossing streets.

− Pedestrian bridges, walking or biking paths that provide alternatives to walking near traffic.

☐ Yes　☐ No　☐ Not applicable　☐ Further study
Note:

■ Does emergency vehicle access around the building meet local requirements? If emergency vehicle access lanes are required by local codes, they should be constructed as wide sidewalks or grassed, hardened surfaces. Vehicular access should be over the curb, rather than via curb cuts that could encourage unauthorized use. California requires a 20-foot-wide fire lane.

☐ Yes　☐ No　☐ Not applicable　☐ Further study
Note:

■ Are bus, car, pedestrian and bike traffic reasonably safe from each other at entry and exit points as well as throughout the site, and do traffic calming strategies discourage speeding? Options include raised and marked pedestrian or bicycle crossings, median strips, pedestrian safety islands, one way traffic, speed bumps, speed humps, and the elimination of blind spots or their remediation through the installation of convex mirrors.

☐ Yes　☐ No　☐ Not applicable　☐ Further study
Note:

■ Is handicapped parking located on the shortest route from adjacent parking via an accessible path to an accessible entrance?

☐ Yes　☐ No　☐ Not applicable　☐ Further study
Note:

■ Is site circulation at peak loading and unloading times acceptable, without vehicle or pedestrian conflicts?

☐ Yes　☐ No　☐ Not applicable　☐ Further study
Note:

■ Are vehicle circulation routes to service and delivery areas, visitors' entry, bus drop-off, student parking, and staff parking separated as needed and do they function safely in the context of the site?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Where there are roadways through the site, are they serpentine or otherwise indirect or do they include traffic calming features, with gates or barriers as needed? Do signs prohibit through traffic?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are designated entries, routes, and parking lots for after-hours use clearly identified and controlled within the context of the site?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are hiding places minimized or eliminated along pedestrian routes? Hiding places can be exposed to natural surveillance by trimming landscaping, improving lighting, removing solid fencing, or installing convex mirrors.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

10. School Bus Areas, Parent Pick-Up Areas, and Public Transportation

■ Can buses drop and pick up students directly from a designated, marked loading and unloading zone near a designated and supervised school entrance, in full view of designated school staff? Do students have to walk in front of the bus or other traffic to move between the bus and the school?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do busses have to back up to turn or park, or do they have to be parked in double rows?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are areas where students congregate while waiting for buses, and associated pedestrian paths, adequate to avoid overcrowding?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are curb lanes adjacent to school facades marked to prohibit parking?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are sheltered areas provided in clearly designated, logical locations for students waiting to board buses or to be picked up by parents? Are they large enough to avoid conflict over limited space and located in a position that allows for natural surveillance from the main office?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are parent drop-off and pick-up zones clearly designated and separated from bus traffic?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In schools where students use public transportation, is the route from the school to the point of public transportation access reasonably safe due to good natural surveillance, traffic safety features, and other measures?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

11. Vehicle Parking

■ Are parking areas within view of the main office, other staffed areas, or surveillance cameras?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do signs or posted rules clearly identify who is allowed to use parking facilities and when they may do so?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is visitor parking located near the main entrance, with clear signs directing visitors to the main office?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In high schools, are parking spaces numbered and marked for the designated users: students, faculty, staff, and visitors? Are unassigned parking spaces minimized, especially in student parking zones?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In high schools, is a section of the parking lot reserved for students who attend part time or who spend part of the day off-site? This makes it easier for the school to secure the main parking area during the day and for staff to pay attention to cars coming and going during the school day.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is access to parking areas limited by curbs, fencing, gates, and a minimum number of entry points?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Can gates close off unnecessary parking entrances during low-use times to control access and reinforce the perception that school parking areas are private?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are student and staff parking areas separated or mixed appropriately for the school's circumstances?

– Separate parking areas may protect staff's cars from vandalism. They can also make it easier to manage parking overload.

– Staff can park near a secondary entry where they can use proximity cards to gain entry. Unlike publicly accessible entries, the staff parking entry does not need to be supervised.

– Mixed parking can provide adult supervision in areas prone to inappropriate behavior in student vehicles.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do school expansion plans include anticipated parking expansion? Note that parking patterns predict entry points; if drivers start using a new lot on the south side, they will enter and exit on the south side regardless of where the official entry is. Plans for expanded parking should anticipate this by adding a fully controlled entry that serves the new area.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are bicycle parking areas sheltered, securable, and readily observable from inside the school? Do rack designs make it possible to use U-locks or other effective locking devices?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are bicycle routes located to maximize surveillance from inside the school?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

12. Dumpster Enclosures

■ Are dumpsters either enclosed in a designated service area or surrounded on three sides by a high wall, preferably a see-through, climbing-resistant fence, and provided with a securable gate? Through the use of see-through fencing, wall openings, convex mirrors or motion response lighting, hiding around these enclosures is made difficult.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are dumpsters and their enclosures positioned so that they cannot be used as ladders for gaining access to the school roof?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

13. Site Utilities

■ Is access to site utilities, such as electrical transformers, generators, and meters, limited and secure, and is exposed equipment protected against vandalism and vehicular damage?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do site utilities create hiding places?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do site utilities impede access by emergency vehicles?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are exterior mechanical equipment enclosures lockable? Do doors have protected hasps, hinges, and deadbolt locks or a high security padlock? Do hasps and hinges have secure fasteners and are hinge pins non-removable?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Can exterior mechanical equipment be climbed upon and is it protected from thrown objects?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is exterior mechanical equipment reachable by vehicles protected with bollards or other devices?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do meter locations allow access for meter readers without compromising access control for secure areas of the school?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are fire hydrants on or around the site readily visible and accessible?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are school buildings and structures located an appropriate distance from power transmission lines? California recommends the following minimum distances between school facilities and power transmission lines:

– 100-110 kV line, 100 feet from easement
– 220-230 kV line, 150 feet from easement
– 345 kV line, 250 feet from easement

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

14. Storm Water Retention Areas

■ Where used, are storm water retention areas located to help limit access to school property, demarcate school boundaries, or segregate play and pedestrian areas from heavy vehicular traffic?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Does fencing around enclosed storm water retention areas provide footholds for climbing or interfere with natural surveillance of these areas or other parts of the site?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are storm water pipes over 15 inches in diameter leading to or from storm water retention areas protected with appropriate grating or metal rebar to prevent access into the retention area or school site?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

Additional notes and comments:

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Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Location _____   **Date** _____

■ Are entry doors to food services and student commons areas large enough to prevent bottle-necking and student conflict?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do food services and student commons areas have separate entrances and exits into adjacent corridors or walkways to reduce conflict?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are food services and student commons areas well lit, with no shadowy or dark or hidden areas?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are food services and student commons areas' acoustics designed to keep noise levels low? Low noise levels reduce occupant stress and the incidence of misbehavior.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is there a clear view of the entire dining area and serving line from a controlled entry point?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is there sufficient circulation space between and around table areas and serving lines?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Can the kitchen and serving areas be secured during and after school hours?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are food services or students commons areas that are used after school designed to prevent unauthorized access further into the building?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are kitchen evacuation plans posted and readily visible, along with "Helping a Choking Victim" and hand-washing instructions?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are walk-in coolers, if accessible to students, able to be secured when not directly supervised? Is there is a door release inside the cooler and a distress button that allows an occupant to call for help, and is the door release is fully operational?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Does fixed kitchen equipment block emergency exit paths?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are wall- or ceiling-mounted televisions, projectors, screens, and other heavy objects secured from falling due to student misbehavior or natural disasters?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In earthquake-prone areas, are partitions that terminate at hung ceilings properly braced to the structure above? Heavy partitions are particularly vulnerable to strong earthquake or explosive forces because of their stiffness and mass and are prone to damage.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In earthquake-prone areas, are plaster and gypsum board ceilings adequately supported and secured to structural framing?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In earthquake-prone areas, are suspended lighting fixtures, suspended ceiling systems braced and provided with safety wires?

– Lighting fixtures, ceiling systems, and other overhead components or objects should be mounted to minimize the likelihood that they will fall and injure building occupants.

– Lay-in fluorescent lights should be supported independent of the ceiling grid. Spot lights and track lights should be securely attached to the structure.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In high risk areas, are windows and their framing and anchoring systems designed and located to resist the effects of explosive blasts, gunfire, and forced entry? Windows overlooking or directly exposed to public streets or dangerous areas should be either minimized or protected.

– The greatest risk to occupants from an explosive blast originating near the school or even blocks away is injury from flying glass shards, so window glazing should be laminated or protected with an anti-shatter film. Glass-clad polycarbonate and laminated polycarbonate are two types of alternative glazing material.

– Bullet resistant glazing should meet the requirements of UL 752.

– Security glazing should meet the requirements of ASTM F1233 or UL 972.

– Window assemblies containing forced-entry-resistant glazing should meet the requirements of ASTM F588.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

Additional notes and comments:

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Location _____   **Date** _____

■ Is every passageway from corridors and stairs to the street clear of obstructions or impediments? Examples of violations are empty cardboard boxes, boxes of used fluorescent light tubes, carts, lawnmowers, steel racks, ball racks, stored equipment, and tripping hazards such as electric cords, tools, lumber, and hoses.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are exit doors free of locks, chains, or fastenings that would prevent escape from inside the building?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do areas required by the building or fire code to have two exits have, in fact, two functioning exits?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do exit doors open in the direction of egress travel from areas meant to be occupied by more than 50 people?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are all exits and the routes to them clearly visible, conspicuously indicated and reliably illuminated, with signs in appropriate languages, so everyone readily knows the direction of escape from any point? Are exit signs distinctive in color and easily distinguished from decorations, finishes, and other signs. Is "EXIT" lettering at least 6 inches high with principal strokes not less than 3/4-inch wide?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do decorations or other materials obstruct the view of, or access through, any element of a means of egress? This is prohibited by all building and fire codes.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do exits rely on passage through rooms or spaces subject to locking? All exit ways must be through areas that provide free passage at all times, with doors swinging in the direction of egress.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is storage or use of flammable or combustible materials in exit ways explicitly prohibited and do school staff, contractors, and others using the school understand this?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are exit signs well maintained, easily seen, and pointing in the right direction?

– The maintenance program for corridor, stairwell, and exit sign lighting should ensure functioning under normal and emergency power conditions.

– Expect state or local building codes to be updated to require floor proximity signs, which are needed when heat and smoke drive occupants to crawl along the floor to get out of a building; signs and lights mounted high on the wall or on the ceiling may be of little or no benefit in such situations.

– Consider glow-in-the-dark technology.

– Good quality, consistent exit lighting is cost-effective in the long term and worthwhile from a maintenance perspective.

– Using different exit lighting at different doors makes it harder to efficiently stock, keep track of, and replace parts.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are doors, passageways, or stairways that are neither exits nor leading to exits, but that can be mistaken for exits, marked with a "NOT AN EXIT" sign or similar designation? Supplemental markings could be "To Basement," "To Store Room," "To Mechanical Room," etc.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

Additional notes and comments:

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Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Location _____ **Date** _____

1. Main Entry

■ Is the main point of entry at the front of the school and readily identifiable?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is the main entry, or a supervised and controlled designated secondary entry, the closest entry option for visitors approaching after parking?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are the areas directly outside and inside the main entry well-lit, sheltered from the elements, and spacious enough to avoid becoming overcrowded? Are entry walkways and doors wide enough to avoid overcrowding at peak times?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ If there is covered seating at the main entry, does it obstruct circulation pathways?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do signs spell out behavioral expectations, access-restrictions, and applicable local and state regulations?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Where security screening is warranted, does the entry have adequate space for queuing, equipment, and pulling students aside for more thorough investigation? If built-in metal detectors are going to be used, have manufacturers been contacted to determine space needs?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

2. Secondary Entries and Exits
(See related assessment guide: EXITWAYS)

■ Is the number of building entries and exits kept to a minimum, and are all controlled or supervised?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Where building and stair exit doors are protected from the weather, do they serve as concealed areas for unwanted activity?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

3. Reception Area

■ Are panic or duress alarm buttons installed at the reception desk?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Can doors be electronically locked to block visitors' entry into the building?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do windows facilitate surveillance from the reception area, providing, on the outside, an unimpeded view of the main entry and drop-off and visitor parking areas, and, on the inside, a view of the adjoining halls and stairwells, and, preferably, the closest bathroom entries?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ When the main entry doors are unlocked, can securable internal doors oblige visitors to confer with the receptionist to gain entry beyond the reception area?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Does the reception area include adequate protective features, including a counter or desk to serve as a protective shield, a panic or duress button to call for help, and a telephone, a radio base station if radios are used.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do seating areas for visitors impede foot traffic?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is the school's main administrative area located off the reception area so administrators can see who is coming and going?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Does the school layout require visitors to pass through at least visual screening before they can gain access to bathrooms, service spaces, stairwells, or other amenities inside the school? Can anyone get past the reception area without being seen close enough by staff to be identified?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

4. High Risk Schools

■ Is the reception area protected by a bullet-resistant windows and walls or does it have a rear exit or safe haven into which the receptionist can retreat? A safe haven is a windowless room with a solid door, easily locked from the inside without requiring a key, and in which there is a telephone for calling for help.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are entries designed to mitigate explosive blast hazards? Do they contain design elements that could entrap an explosion, thus amplifying its impact? Are interior and exterior foyer doors offset from one another? Do doors and walls along the line of security screening meet requirements of UL 752, *Standard for Safety: Bullet-Resisting Equipment*?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are windows and their framing and anchoring systems designed and located to resist the effects of explosive blasts, gunfire, and forced entry? Windows overlooking or directly exposed to public streets or dangerous areas should be either minimized or protected.

– The greatest risk to occupants from an explosive blast originating near the school or even blocks away is injury from flying glass shards, so window glazing should be laminated or protected with an anti-shatter film. Glass-clad polycarbonate and laminated polycarbonate are two types of alternative glazing material.

– Bullet resistant glazing should meet the requirements of UL 752.

– Security glazing should meet the requirements of ASTM F1233 or UL 972.

– Window assemblies containing forced-entry-resistant glazing should meet the requirements of ASTM F588.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

5. Nonstructural Hazards

■ Are bookcases, sculpture, or other heavy objects secured from falling due to student misbehavior or natural disasters?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are partitions that terminate at hung ceilings properly braced to the structure above? Heavy partitions are particularly vulnerable to strong earthquake or explosive forces because of their stiffness and mass and are prone to damage.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are plaster and gypsum board ceilings adequately supported and secured to structural framing?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are suspended lighting fixtures, suspended ceiling systems braced and provided with safety wires?

– Lighting fixtures, ceiling systems, and other overhead components or objects should be mounted to minimize the likelihood that they will fall and injure building occupants.

– Lay-in fluorescent lights should be supported independent of the ceiling grid. Spot lights and track lights should be securely attached to the structure.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

Additional notes and comments:

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Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Location _____ **Date** _____
(Make as many copies as needed)

1. System Protection

■ Does an uninterruptible power supply (UPS) provide emergency backup power? A UPS should be located at all computerized points, from the main distribution facility to individual data closets and at critical personal computers/terminals. Critical local area network (LAN) sections also should have uninterruptible power.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In high risk, earthquake-prone, and wind hazard areas, are interior and exterior communication system components adequately braced and supported? Post-event communications are vital for issuing instructions to school administrators, students, faculty, and staff. Some components, such as satellite disc antennas, are easily damaged if not adequately supported.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In high risk areas, is communications system wiring distributed in secure chases and risers, or otherwise secure areas, to prevent tampering?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

2. Radio/Wireless Communication Systems

■ Does the school have the necessary transmitters, receivers, and repeaters to ensure radio communication by EMS personnel everywhere in the building? Radio frequency (RF) communication may not be possible within parts of larger schools, particularly if their construction incorporates many steel components such as structural steel framing, steel bar joists, steel studs, and metal roof and floor decking.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are a sufficient number of hand-held two-way radios or cellular phones available to school staff? The principal, vice principal, front office staff, playground supervisors, bus drivers, custodians, lunch duty staff, crossing guards, and school resource officers should have these devices.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

3. Telephone Systems

■ Is the main telephone distribution room secure?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is the telephone distribution room protected against extreme temperature and humidity, exceeding normal operation limits?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Does the telephone system have an uninterruptible power supply (UPS)? Many telephone systems are computerized and need a UPS to ensure reliability during power fluctuations. The UPS is also needed while waiting for emergency power to come on line or to allow an orderly shutdown.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

4. Emergency Power

■ Are provisions for emergency power throughout the building, and especially for critical areas, in place?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is there an exterior connection for emergency power from sources such as portable generators?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In high hazard areas, does any single critical node allow both the normal electrical service and the emergency backup power to be affected by a single incident? Emergency and normal electrical equipment should be installed at different locations that are as far apart as possible.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

5. Exterior Utility Lifelines Protection

■ In high risk, wind hazard, and flood prone areas, are water supply lines and storage adequately protected? Although bottled water can satisfy requirements for drinking water and minimal sanitation, domestic water meets many other needs, such as flushing toilets, building heating and cooling system operations, cooling of emergency generators, humidification, etc.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are other utility lifelines (power, voice, data and internet communications, fuel, etc.) adequately protected from vandalism and natural disasters, preferably by concealing, burying, or encasing? Are they protected at points of entry into the building and braced as needed?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In high risk areas, are there multiple, redundant locations for the telephone and communications service entering the site and serving the building?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do only authorized personnel have access to exterior utility lifelines and their controls?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

Additional notes and comments:

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Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Location _____   **Date** _____

■ Do elevators have adequate security measures in place to address local conditions? Are elevator cabs and landing areas well lit? Security options include:

– Limiting use and access to authorized individuals.

– Installing elevators in the main lobby or other areas with good visual surveillance.

– Including a 5-foot-deep landing area in front of the elevator, out of hallway traffic, to minimize traffic conflicts.

– Installing video cameras in front of and within elevator cabs.

– Providing elevator recall and emergency message capability.

□ Yes   □ No   □ Not applicable   □ Further study

Additional notes and comments:

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Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Location _____ **Date** _____

■ Are all rooms containing mechanical, electrical, communications, water, fire, security, and other critical equipment identified by number or simply as "Equipment Room" to provide less information to intruders? Check with local emergency responders to ensure they are comfortable with this kind of unspecific designation.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are doors to these rooms made of metal or solid wood, with concealed hinges, pick plates, high quality deadbolt locks, and high security strike plates?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are fire doors tight fitting and in good operational condition?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are chemical storage areas labeled with appropriate NFPA hazard diagrams?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are custodial closets containing cleaning solvents or other potentially toxic materials, potentially hazardous tools, or master keys, able to be securely locked?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are there openings in walls, floors, ceilings, or above-ceiling spaces that would contribute to the spread of fire or smoke from custodial or equipment rooms to other rooms?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is there 18 inches of vertical clearance between sprinklers and items or equipment stored below them?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is there adequate clearance between stored materials and light fixtures or heaters?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities,* *http://www.ncef.org/safeschools/index.cfm* .

Location _____   **Date** _____

1. Corridors

■ Are corridor sight lines maximized for natural surveillance and safety?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are corridors well lit with artificial or natural lighting and have no dark or shadowed recesses?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are corridor lighting controls protected from unauthorized use?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are recesses, niches, or blind corners visually exposed with windows, convex mirrors, chamfered (angled) corners, or surveillance cameras? Are they shallow enough in depth not to serve as hiding areas or sealed off against illicit use?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are lockers, vending machines, trash containers, fire extinguishers, display cases, cabinets, and water coolers mounted flush with walls to avoid injury and allow natural surveillance, or do they have a low enough profile not to provide hiding places?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do otherwise hidden corridors and stairwells receive visual surveillance through the placement of windowed administrative offices or other spaces occupied by adults or through the use of video surveillance equipment?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are freestanding objects that could be toppled intentionally or fall during earthquakes or other natural disasters adequately secured?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ If corridors double as lockdown or emergency shelter locations, can windows be readily blocked with shutters?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are decorative materials, streamers, and fabrics flame resistant?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is wall space used well, with interior glazing to improve surveillance? Are walls (but not interior windows) covered with or made of materials that make it easy to display student artwork and posters as a means of promoting territoriality, ownership, and connectivity? Note that Section 14.7.3.3 of NFPA 101, Life Safety Code, 2003, prohibits teaching materials and artwork from covering more than 20 percent of the wall area.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are corridors wide enough to prevent crowding and provide adequate room for maneuvering wheelchairs?

– Corridors are usually cited as the second most common indoor location for school fights (cafeterias are first), primarily because of crowding. Wide corridors prevent crowding and jostling.

– During class changes, corridors also serve as commons areas, and spacious corridors help reduce undesirable behavior.

– North Carolina recommends the following corridor widths:
   a) Corridors serving classroom feeder corridors and large-group spaces such as cafeterias, media centers, gyms and auditoriums: elementary and middle schools, 10 feet; high schools, 12 feet.
   b) Classroom corridors serving more than 2 classrooms, 8 feet.
   c) Classroom corridors serving more than 8 classrooms, 9 feet.
   d) Corridors with lockers along one wall, add 2 feet; with lockers along both walls, add 3 feet.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are exit signs well maintained, easily seen, and pointing in the right direction?

– The maintenance program for corridor, stairwell, and exit sign lighting should ensure functioning under normal and emergency power conditions.

– Expect state or local building codes to be updated to require floor proximity signs, which are needed when heat and smoke drive occupants to crawl along the floor to get out of a building; signs and lights mounted high on the wall or on the ceiling may be of little or no benefit in such situations.

– Consider glow-in-the-dark technology.

– Good quality, consistent exit lighting is cost-effective in the long term and worthwhile from a maintenance perspective.

– Using different exit lighting at different doors makes it harder to efficiently stock, keep track of, and replace parts.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are clear and precise emergency evacuation maps posted at critical locations? Are they customized or posted to match their positions in the building and protected from vandalism or removal?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are water fountains wheelchair accessible?

– Water fountains should be located on an accessible path.

– The spout should be at most 36 inches off the floor, with at least 27 inches of clearance for wheelchair users' legs beneath the apron of the fountain.

– Avoid foot-operated fountains, which don't work for wheelchair users. Push-bar or lever designs work well.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do water fountains impede traffic flow or lead to overcrowding or conflicts? Options include:

– Fountains placed in gathering areas that are typically monitored, or in an area of natural surveillance.

– Fountains placed in recessed areas that can be closed off by a roll-down security grill.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are water fountains vandal resistant in materials and placement, solidly mounted, and well secured. Are splash guards made of soft, bendable material?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are small water fountains integrated into sinks in classrooms? This keeps students from leaving the classroom for water and reduces the avoidable expense of supplying paper cups adjacent to sinks.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are vending machines and public telephones located in well-monitored activity areas rather than in isolated areas?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are vending machines recessed flush in alcoves that do not provide hiding places?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do vending machines and public telephones impede natural surveillance or cause foot traffic conflicts?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

2. Interior Doors
(See related assessment guide: CLASSROOMS)

■ Does door hardware allow staff to quickly lock rooms from the inside without having to step into the hallway? Dual cylinder, ANSI F88 locksets are recommended for all classroom doors. They allow doors to be locked from either side to prevent entry into the classroom from the corridor side, but they cannot be locked (in accordance with building and fire code requirements) to prevent egress from the classroom. The capability to quickly lock the door from either side is the fastest solution for "lockdown" situations. Additionally, F88 locksets meet all ADA requirements. Installation costs are a few hundred dollars per door.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do door access devices such as master keys or proximity cards allow staff to gain quick entry to any room where students have secured themselves?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Does door hardware permit criminals or vandals to lock or chain corridor doors as a way of significantly slowing down security officers in pursuit?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Can classroom doors always be opened from the inside for emergency egress purposes?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are recessed door entries angled or chamfered? Chamfered door entry recesses are inset at 45 rather than 90 degrees to reduce opportunities for concealment and to minimize pedestrian collisions and conflicts.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do recessed doors project more than 7 inches into the corridor? Section 1005.2 of the International Building Code does not permit a fully opened door to project into a corridor (a path of egress) by more than 7 inches.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are doors sized and arranged to reduce congestion and avoid crowding?

– Multiple single doors reduce congestion and are recommended over double doors.

– Wider-than-normal (oversize) doors accommodate movement of large items and are recommended for accessible areas, music rooms, vocational development spaces, kitchens, and receiving areas.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

3. Lockers

■ Are lockers locked with school-owned padlocks or electronic pass cards? If locks are used, does the school retain ownership?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do locker locations and designs cause crowding or security problems? Options to consider are:

– Lockers are easiest to supervise if they are in controlled classrooms, such as homerooms.

– Lockers in hallways should be mounted flush to the wall so that they don't narrow the hallway.

– Single lockers lead to less conflict than over and under designs.

– Spreading lockers out can help avoid congestion and conflict.

– Unused lockers should be locked.

– If the supply of lockers is excessive, locking every other locker can help avoid congestion.

– Locker bays should not block natural surveillance into or around the bays, or the bays should be electronically monitored.

– Metal mesh doors allow natural surveillance into the lockers.

– Locker bays should be well lit and allow ample room for circulation.

– Lockers should be bolted in place.

– Assign locker privileges selectively and revoke them for related abuse, such as for storing contraband.

– If nothing else works, consider removing or locking all lockers against any use, even temporarily.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

Additional notes and comments:

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Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Location _____ **Date** _____

■ Do all fire alarm and control system components meet local code and emergency responder requirements, are they maintained by qualified personnel, and are they in good working order?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are fire extinguishers, pull stations, and standpipe cabinets located where they can be easily monitored? Pull stations chronically used for false alarms can be put under electronic surveillance.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Can alarms be perceived and recognized as evacuation signals above ambient noise or light levels by everyone in the area?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are sprinkler heads mounted flush with ceilings? This makes them less susceptible to damage from vandalism.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are fire extinguisher cabinets mounted flush with walls?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do fire alarm pull stations have tamper-deterrent covers that emit warning sounds when lifted?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are fire alarm panels inaccessible to unauthorized personnel?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is there redundant off-premises fire alarm reporting, such as to a fire station or a monitoring center?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is fire-detection equipment reasonably protected from an incapacitating mechanical or physical impact?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are outdoor fire detection and response systems protected against vandalism, corrosion, and the elements?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Can the alarm system's backup battery or emergency generator operate the system for 24 hours? This protects occupants if the power goes out or the school is used as an emergency shelter.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities,* http://www.ncef.org/safeschools/index.cfm and related assessment guides: *ART, MUSIC, AND DANCE ROOMS and LABS, SHOPS< AND COMPUTER ROOMS.*

Room No _____   **Location** _____   **Date** _____

1. Natural Surveillance

■ Are all parts of the classroom visible from the classroom door, with no parts of the classroom hidden from sight? This aids natural surveillance and reduces opportunities for misbehavior.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do interior windows between classrooms and corridors promote visual surveillance in both directions? Are they obstructed by posters, pictures, or other posted materials?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do classroom windows enhance visual surveillance of the school grounds?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do retractable classroom partitions fully recess into permanent, lockable niches to eliminate hiding places?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do retractable classroom partitions contain windows or otherwise provide visual access into adjoining spaces when they are in use?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are classrooms well lit, with as much natural light as possible? Well lit classrooms are safer classrooms, and natural light does not depend on a power source.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are small water fountains integrated into sinks in classrooms? This keeps students from leaving the classroom for water and reduces the avoidable expense of supplying paper cups adjacent to sinks.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

2. Windows in High Risk Areas

■ In high risk areas, are windows and their framing and anchoring systems designed and located to resist the effects of explosive blasts, gunfire, and forced entry? Windows overlooking or directly exposed to public streets or dangerous areas should be either minimized or protected.

– The greatest risk to occupants from an explosive blast originating near the school or even blocks away is injury from flying glass shards, so window glazing should be laminated or protected with an anti-shatter film. Glass-clad polycarbonate and laminated polycarbonate are two types of alternative glazing material.

– Bullet resistant glazing should meet the requirements of UL 752.

– Security glazing should meet the requirements of ASTM F1233 or UL 972.

– Window assemblies containing forced-entry-resistant glazing should meet the requirements of ASTM F588.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

3. Electrical Lighting

■ Are lights easy to clean and bulbs and tubes easy to replace? Are light levels appropriate and uniform, creating minimal glare or pockets of shadow? Are they well maintained? Well lit classrooms are safer classrooms.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Fluorescent lighting fixtures manufactured before 1979 contain both mercury and PCBs. Have they been replaced with PCB-free models and been disposed of as required by law? Most types of high-intensity discharge (HID) lamps (mercury vapor, metal halide, and high-pressure sodium) also contain mercury. (See http://www.epa.gov/Region9/cross_pr/p2/projects/pcbs.html)

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

4. Communications

■ Are all classrooms, including portable classrooms, on the public address system? Do intercoms, phones, or radios allow for two-way verbal communication between all classrooms and the school's administrative or security offices?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Can cell phones be used to communicate within the building and to the outside world?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

5. Doors and Secondary Escape Routes

■ Does door hardware allow staff to quickly lock down classrooms from the inside without having to step into the hallway? Dual cylinder, ANSI F88 locksets are recommended for all classroom doors. They allow doors to be locked from either side to prevent entry into the classroom from the corridor side, but they cannot be locked (in accordance with building and fire code requirements) to prevent egress from the classroom. The capability to quickly lock the door from either side is the fastest solution for "lockdown" situations. Additionally, F88 locksets meet all ADA requirements. Installation costs are a few hundred dollars per door.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do door access devices such as master keys or proximity cards allow staff to gain quick entry to any room where students have secured themselves?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Does door hardware permit criminals or vandals to lock or chain classroom doors as a way of significantly slowing down security officers in pursuit?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Can classroom doors always be opened from the inside for emergency egress purposes?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are exterior classroom doors made of metal or solid wood, with heavy duty, vandal-resistant locks?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Does door and window security hardware allow egress from classrooms at all times?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do all classrooms have secondary escape routes where required by the building code? Does the room layout help teachers maintain surveillance and control over these routes?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are egress paths along the secondary escape route at least 28 inches wide? Examples of violations include a space of only 17 inches between a desk and wall in an egress path or only 14 inches between rows of desks or tables.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are windows designated for escape readily operable and not blocked by grills or screens?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are classrooms for mobility-impaired students on the first floor, or are they otherwise easy to evacuate without relying on elevators?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

6. Fire Safety

■ Are heat-producing appliances properly guarded? As a fire safety measure, heat-producing appliances should be avoided in elementary classrooms and controlled via a "kill switch" with pilot light in middle and high schools.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do teaching materials and children's artwork cover more than 20 percent of the wall area? Section 14.7.3.3 of the NFPA 101 *Life Safety Code* prohibits greater than 20 percent coverage for reasons of fire safety.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are decorative materials, curtains, draperies, streamers, and fabrics flame resistant?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

7. Nonstructural Hazards

■ Are bookshelves, aquariums, file cabinets, wall- or ceiling-mounted televisions, projectors, screens, and other heavy objects secured from falling due to student misbehavior or natural disasters?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are partitions that terminate at hung ceilings properly braced to the structure above? Heavy partitions are particularly vulnerable to strong earthquake or explosive forces because of their stiffness and mass and are prone to damage.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are plaster and gypsum board ceilings adequately supported and secured to structural framing?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are suspended lighting fixtures, suspended ceiling systems braced and provided with safety wires?

– Lighting fixtures, ceiling systems, and other overhead components or objects should be mounted to minimize the likelihood that they will fall and injure building occupants.

– Lay-in fluorescent lights should be supported independent of the ceiling grid. Spot lights and track lights should be securely attached to the structure.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

Additional notes and comments:

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Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Location _____   **Date** _____
(Make a copy for each space)

■ Are there separate, secure, controllable entrances to the auditorium, theater, or center for after-hours activities? Is attendee access to the rest of the school controlled?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do clear sight lines allow for visual surveillance?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do seating and circulation layouts reduce or eliminate traffic flow conflicts?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is there a secure and fireproof storage for stage equipment, props, costumes, and tools?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is suspended lighting equipment and cabling safe and in good repair?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is lighting and scenery hoisting equipment in good repair?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is access to catwalks, scaffolding, and upper level platforms limited and controlled?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are stage lighting and electrical equipment controls located in locked panels?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Does the auditorium, theater, or center layout avoid features that could contribute to accidental falls? An alternative to an orchestra pit is to provide several rows of removable seats at the front of the auditorium.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are stage and other draperies or hangings non-flammable or fire-retardant?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ If there are dressing rooms, are they safe and easily supervised?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are wall- or ceiling-mounted televisions, projectors, screens, or other heavy objects secured from falling due to student misbehavior or natural disasters?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are partitions that terminate at hung ceilings properly braced to the structure above? Heavy partitions are particularly vulnerable to strong earthquake forces because of their stiffness and mass and are prone to damage.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are plaster and gypsum board ceilings adequately supported and secured to structural framing?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ In earthquake-prone areas, are suspended lighting fixtures, suspended ceiling systems braced and provided with safety wires?

– Lighting fixtures, ceiling systems, and other overhead components or objects should be mounted to minimize the likelihood that they will fall and injure building occupants.

– Lay-in fluorescent lights should be supported independent of the ceiling grid. Spot lights and track lights should be securely attached to the structure.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

Additional notes and comments:

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Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Room No _____ **Location** _____ **Date** _____

1. Art Rooms

■ Do faculty have a clear view of the entire art room area, including the kiln room entry?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are electrical outlets protected by ground fault circuit interrupters (GFCIs) to guard against electrical shock?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are kilns located in separate rooms with adequate exhaust fans or ducts that vent directly to the outside?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do kiln rooms contain stored goods other than clay products? Only clay products should be allowed.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Does the kiln room wall or door contain a view window so faculty can observe activities within?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is there proper ventilation in areas where spraying, kiln firing, or photographic developing takes place?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ If photography is included, is there a lockable room for storing valuable equipment and hazardous supplies? Is the room alarmed?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

2. Music Rooms

■ Do faculty have a clear view of the entire music room area, including practice and storage room entries?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are there lockable rooms for storing equipment and instruments?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Does the music room have an alarm system to deter breaking and entering?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ If there are risers or raised platforms for choral singing, are they safe?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are windows in practice rooms burglar resistant or alarmed?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

3. Dance Room

■ Do faculty have a clear view of the entire dance room area?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is there a lockable room for storing music equipment?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ If there are dressing rooms, are they safe and easily supervised?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Does the dance room have a suspended wood floor or resilient floor covering system that reduces impact injuries?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are mirrors in the dance room shatterproof?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

Additional notes and comments:

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Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Location _____ **Date** _____

1. General

■ Is access into the building(s) 100 percent controllable through designated, supervised, or locked entry points, including windows and service entries?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is entry granted by supervising staff or through the use of proximity cards, keys, coded entries, or other devices?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Can portions of the school that are not being used be readily secured? This can be accomplished by locking wing doors or accordion-style gates or other means, provided emergency egress is not blocked.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are there entry signs, in all relevant languages and with simple maps or diagrams where needed, to direct visitors to designated building entrances?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Where appropriate, do signs warn in a friendly but firm way about trespassing and illicit behavior and cite applicable laws and regulations?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

2. Exterior Doors

■ Is the number of exterior doors minimized? Can they be?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are all exit doors and gates equipped with emergency exit hardware and not locked or secured by any other means? Under no circumstances may exit doors be otherwise locked or chained shut. See Section 15.2.2.2 of the NFPA *Life Safety Code* for existing educational buildings (for new educational buildings, see the *International Building Code*, Section 1008.1.8, and the NFPA 101 *Life Safety Code*, Section 14.2.2.2).

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are all exterior doors designed to prevent unauthorized access into the building?

a) Exterior doors should have as little exposed hardware as possible.

b) Exterior doors should be equipped with hinges with non-removable pins.

c) Exterior exit-only doors do not need handles and locks protruding on the outside. However, it should be possible to open the doors from outside during an emergency in some manner, such as with a proximity card.

d) Exterior doors should be constructed of steel, aluminum alloy, or solid-core hardwood.

e) Exterior door frames should be installed without excess flexibility to deter vandals from prying them open.

f) Exterior glass doors should be fully framed and equipped with breakage-resistant tempered glass.

g) Exterior door locks used as the primary means of security should be mounted flush to the surface of the door.

h) Exterior doors should not rely on key-in-knob or other protruding locking devices.

i) Exterior swinging doors should have a minimum 1-inch deadbolt lock with a 1-inch throw bolt and hardened steel insert, a free-turning brass or steel tapered guard, and, if glass is located within 40 inches of the locking mechanism, double cylinder locks.

j) Panic bar latches on exterior doors should be protected by pick plates to prevent tools and plastic cards from releasing the bolt.

k) Exterior doors with panic push-bars should be equipped with tamper-proof deadbolt locks to prevent easy exit after school hours by criminals or vandals. They should also be equipped with an astragal (metal plate) covering the gap between the doors.

l) The armored strike plate on exterior doors should be securely fastened to the door frame in direct alignment to receive the latch easily.

m) Key-controlled exterior doors can be equipped with contacts so they can be tied into a central monitoring and control system.

n) Exterior double doors should be equipped with heavy-duty, multiple-point, long flush bolts.

o) Doors that are vulnerable to unauthorized use, when students open them from inside the building, can be made more secure by installing door alarms, delayed opening devices, or sensors or cameras monitoring doors from the central office.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are exterior doors sized and arranged to reduce congestion and avoid crowding? Multiple single doors reduce congestion and are recommended over double doors. Wider-than-normal (oversize) doors accommodate movement of equipment and supplies and are recommended for accessible entries and for music, vocational technology, kitchen, and receiving areas.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do exterior doors have narrow windows, sidelights, fish-eye viewers, or cameras to permit seeing who is on the exterior side?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are windows and sidelights sized and located so that if they are broken, vandals cannot reach through and open a door from the inside?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are exterior doors airtight? Airtight doors not only improve energy efficiency but they retard interior contamination during a hazardous chemical or other harmful outdoor release.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are exterior doors designed and certified to resist thrown or wind-blown objects?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

3. Exterior Walls

■ Do exterior walls provide niches or blind spots that provide places to hide?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are building niches and recesses fenced off, well lit, or observable from inside the building?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do walls provide footholds, or are the top 3 to 4 feet nearest the roof non-climbable?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

4. Windows

■ Are windows used to enhance natural surveillance of courtyards and school grounds and parking lots, especially from classrooms and administration areas? Windows in administrative areas are particularly important for helping staff monitor the main entrance area and the school grounds around it.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do all windows lock securely? Do sliding windows have lift and slide protection? California suggests avoiding sliding and casement windows, which are associated with security problems, and any operable windows with crank and worm-gear openers, which tend to break or jam.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are window hardware and frames in good condition, and are transom windows or other window configurations that have clear security weaknesses either permanently closed (provided they are not to be used as a means of emergency egress) or reinforced with slide bolts or other security devices?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are windows located strategically, providing natural light and natural surveillance, while providing sufficient stand-off distance and the means to deter vandalism and forced entry?

– Glass replacement is the highest routine maintenance cost for some schools.

– Consider incorporating skylights (but only if roofs are fully protected from climbers), solar light tubes, clerestory windows, and light shelves in lieu of normal-height windows in exposed or vulnerable locations. Some school districts prohibit skylights because they are considered impossible to protect from climbers.

– Clerestory windows allow for ventilation, light, and privacy while minimizing wall penetrations, but do not allow for natural surveillance.

– California suggests that ground floor windows be eliminated where possible on the building perimeter, but this must be weighed against the need for natural light and ventilation in occupied areas and the loss of visual surveillance of school grounds.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are windows designed to serve as a secondary means of escape blocked by screens, security grills, louvers, awnings, or other devices, and are they readily opened from the inside? In Florida, security grills or louvers may be used if they open in one operation with the secondary means of egress.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are second-floor windows inaccessible or protected against entry?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are basement windows protected from unauthorized entry by security grills or window well covers?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Does tempered and wired glass meet the building code and Consumer Product Safety Commission's requirements when used in doors, sidelights, locations near the floor, and other "hazardous" locations? The 2003 edition of the International Building Code no longer permits wired glass to be used in K-12 facilities, but newer fire-rated glass products may be used in its place.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

5. Windows in High Risk Areas

■ In high risk areas, are windows and their framing and anchoring systems designed and located to resist the effects of explosive blasts, gunfire, and forced entry? Windows overlooking or directly exposed to public streets or dangerous areas should be either minimized or protected.

– The greatest risk to occupants from an explosive blast originating near the school or even blocks away is injury from flying glass shards, so window glazing should be laminated or protected with an anti-shatter film. Glass-clad polycarbonate and laminated polycarbonate are two types of alternative glazing material.
– Bullet resistant glazing should meet the requirements of UL 752.
– Security glazing should meet the requirements of ASTM F1233 or UL 972.
– Window assemblies containing forced-entry-resistant glazing should meet the requirements of ASTM F588.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

6. Roofs

■ Is built-in roof access from inside the building only? Is the access point locked and located inside a secure room? Some schools apply slippery finishes or coatings to exterior pipes and columns to block unauthorized access to the roof. (In new buildings, the use of permanent exterior roof access ladders or exterior building materials and architectural elements that allow climbing to obtain roof access should be avoided.)

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are mechanical equipment enclosures on the roof protected from unauthorized access or vandalism?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is access into the school through skylights blocked by security grilles or other devices?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are roof parapets low enough to allow visual surveillance of the roof from the ground?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are heavy roofing materials such as tile and slate securely attached to the structure, especially over points of egress?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are falling roof tiles a safety hazard?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

7. Canopies, Awnings, Breezeways, and Covered Walkways

■ Do covered walkways and adjoining posts, structures, walls, planters, or other building features provide climbing access to adjoining windows, roofs, or other upper-level areas?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are covered walkways and their surroundings adequately lit to promote visual surveillance while in use?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do windows in occupied areas of the building overlook walkways for natural surveillance?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are exterior entrance canopies and walkways engineered to withstand high winds and seismic activity?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

8. Courtyards

■ Are lines of sight across courtyards unobstructed so one person can supervise the entire area?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are entries into courtyards from the exterior of the school controlled and lockable?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are courtyard entries next to administration or staff spaces, with windows permitting visual surveillance?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are courtyards configured to eliminate unauthorized after-hours access?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do windows in occupied areas of the building overlook courtyards?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are courtyard entry doors wide enough to prevent congestion? Avoid using swinging doors that must be held open by students. Mishaps at swinging doors are a common cause of fighting, especially in middle schools.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are outer courtyard walls climbable and are outside seating, planters, and landscaping features far enough from courtyard enclosures to eliminate climbing opportunities?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

9. High Value Targets

■ Are high-value targets for theft, such as offices, computer rooms, the media center, music rooms, shops, and chemical storage areas, protected by high security locks and an alarm system, or is at least one all-purpose storage room available for storing valuables? Note that chemicals must be stored separately.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Location _____   **Date** _____

■ Are stairs adequately located and designed to avoid congestion and accidents? For efficiently moving large numbers of students, additional sets of stairs may function more safely and effectively than very wide stairs. North Carolina requires single stair runs not to exceed 8 feet without a landing and a minimum stair width of 6 feet for grades 6 through 12.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are stairwells adequately lit, including exit signs?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do stair handrails and guardrails allow visual surveillance from either side of the stairs?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do stair handrail designs discourage sliding, climbing, or skateboarding?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are stair risers enclosed to prevent persons under the stairs from grabbing the ankles of others using the stairs, or are under-stair areas completely blocked off?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do windows or openings provide natural surveillance into stairwells located on outer walls?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Where natural surveillance is inadequate, are enclosed stairwells electronically monitored?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In high risk areas or areas subject to earthquakes or high winds, are stairwell materials and designs adequate to prevent their collapse and limit the extent of falling debris that would impede safe passage and reduce the flow of evacuees?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

Additional notes and comments:

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Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Location _____   **Date** _____

■ In high risk or wind hazard areas, are shelter spaces – such as school gymnasiums, hallways, or other windowless areas – identified, with special consideration given to egress, lockdown ability, and emergency supply storage?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are shelter spaces either windowless or do they have readily available shutters or equivalent protective devices with which to cover windows and block projectiles or flying glass?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are all standing or wall- or ceiling-mounted objects secured from falling?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do shelter spaces have the necessary provisions to ensure cell phone or radio communication by EMS personnel? Radio frequency (RF) communication may not be possible without the use of repeaters in parts of larger schools, particularly if the school's construction incorporates many steel components such as structural steel framing, steel bar joists, steel studs, and metal roof and floor decking.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do shelter spaces have provisions for emergency power? Is there an exterior connection for emergency power from sources such as portable generators?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do shelter spaces have access to drinking water and, if needed, water for cooking, washing, and toilet facilities?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are all necessary exterior utility lifelines (power, voice, data and internet communications, fuel, and water) adequately protected from attack or natural disaster, preferably by concealing, burying, or encasing? Are they protected at points of entry into the building and braced as needed? Do only authorized personnel have access to exterior utility controls?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In earthquake-prone or high wind areas, do large shelter spaces such as gyms have adequately reinforced roofs? Spaces with long-span-construction may be not be safe for shelter use and should be checked by a structural engineer.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In earthquake-prone areas, do any shelter area walls terminate at hung ceilings? If so, are they properly braced to the structure above? Heavy partitions are particularly vulnerable to strong earthquake forces because of their stiffness and mass and are prone to damage.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In earthquake-prone areas, are plaster and gypsum board ceilings adequately supported and secured to structural framing?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In earthquake-prone areas, are suspended lighting fixtures, suspended ceiling systems braced and provided with safety wires?

– Lighting fixtures, ceiling systems, and other overhead components or objects should be mounted to minimize the likelihood that they will fall and injure building occupants.

– Lay-in fluorescent lights should be supported independent of the ceiling grid. Spot lights and track lights should be securely attached to the structure.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

Additional notes and comments:

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Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Location _____ **Date** _____

1. Building Security Systems

■ Is basic security alarm system installed throughout hallways, administrative offices, exit doors, and rooms containing high-value property such as computers, shop equipment, laboratory supplies, and musical instruments? As needs and budgets allow, use room alarm, motion detection, and electronic surveillance systems at primary and secondary entry points, stairwells, courtyards, unsupervised or hidden areas inside the building and along the building perimeter, rooms containing valuable equipment or student records, and in rooms containing dangerous chemicals such as chemistry labs and maintenance supply areas. Have expert contractors install and maintain these systems?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are card access systems installed throughout the campus for use by students and staff? Card access systems greatly simplify access control and eliminate problems associated with lost keys and massive re-keying.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Where keyed locks are used, is a master key control system in place to monitor keys and duplicates?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are devices used for physical security integrated with computer security systems? For example, are they used in place of or in combination with user ID and system passwords?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In high risk areas, are magnetometers (metal detectors) and x-ray equipment installed? Where installed, are they used effectively?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is access to information on building operations, schematics, procedures, detailed drawings, and specifications controlled and available only to authorized personnel?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

2. Building Surveillance Systems

■ Do CCTV camera systems cover appropriate areas of the school and record to digital or tape devices? Are these devices set up to send images to printers or be downloaded onto disks? Do the pictures printed from this equipment provide clear enough images to identify suspects in a court of law?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do CCTV cameras use lenses that capture useful images under existing lighting conditions? Is infrared used if needed for dark areas or at night?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are cameras triggered by motion or intrusion?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are camera housings designed to protect against tampering, vandalism, and exposure to extreme temperature or moisture?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do cameras have an uninterruptible power supply, and are they connected to the building's emergency power supply?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are camera servers located in a secure location so they can't be tampered with?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is the surveillance system protected with adequate firewalls so it can't be broken into?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

Additional notes and comments:

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Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Room No _____ **Location** _____ **Date** _____

■ Is the restroom located to maximize visual surveillance, such as near administrative areas?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is the restroom bright, well lit, and easy to supervise? Restrooms are the fourth biggest problem area in schools, primarily because they are difficult to supervise. The most common concerns are vandalism, bullying, fighting, disorderly conduct, and alcohol and drug use.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Is the restroom well maintained, with no offensive smells and no graffiti? Is everything operable? Are mirrors intact and unbroken? Well maintained restrooms promote orderly behavior by demonstrating respect for and ownership of property. They draw legitimate users, boosting safety through their presence in larger numbers. Poorly maintained restrooms repel legitimate users, including school staff, thereby reducing supervision.

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do restroom lighting fixtures have protective, vandal-proof covers?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Can restroom entry/exit doors be locked only from the outside and not be readily blocked from the inside?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are stall doors and partitions limited to no more than 5'-6" in height and do they have 12" clearance above the floor for surveillance? Are partitions bolted to the floor, wall, and ceiling? Do all stall doors have operable latches?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are sinks and hand dryers located in publicly exposed or semi-exposed areas to deter vandalism and encourage hand washing?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Do restroom smoke detectors have vandal-resistant features, such as protective cages or tamper alarms?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ If the restroom is intended for use by people engaged in after-school activities, is it conveniently located and able to be used without providing access to the rest of the school?

☐ Yes ☐ No ☐ Not applicable ☐ Further study
Note:

■ Are restroom fixtures and hardware made of vandal-resistant, readily cleanable materials?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are exposed hot water pipes insulated and protected with an insulating cover, as required by accessibility criteria? Particularly look for under-sink hot water pipes that might come into contact with wheelchair users' legs.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Does the restroom have a hard ceiling that prevents hiding contraband in above-ceiling spaces?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Does the restroom have windows? California advises against using windows for ventilation in bathrooms because windows can serve as passageways for weapons, people, or contraband.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are hand dryers, vending equipment, and trash containers heavy duty, recessed, and fire-resistant? Is access to trash containers lockable?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are electrical outlets protected by ground fault circuit interrupters (GFCIs)?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are paper towel, liquid soap, and toilet tissue holders of a see-through design, making it hard to use them as hiding places for contraband? Have unused holders been removed from the walls for similar reasons?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are the restroom mirrors shatterproof?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ If it's a single user bathroom with a locking door, is access to and natural surveillance adequately controlled, requiring keys, passes, or other means?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ If it's a group restroom, does it have visually screened, door-less "maze" entryways that allow acoustic surveillance from adjacent areas?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ If it's a large-event restroom, does it have two means of entry/egress and can they be locked or restricted during normal school operations? Does door hardware permit the restroom doors to be locked in the open position during designated events unless the door is in a fire-rated wall?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

Use the following questions to think about ways of increasing safety and security in your school. For more information, see *Mitigating Hazards in School Facilities, http://www.ncef.org/safeschools/index.cfm* .

Portable No _____ **Location** _____ **Date** _____

■ Has the location of the portable units been carefully thought out to optimize security?

a) Windows from the main building overlook the school's portable classrooms and the pedestrian paths to them.

b) Portables are placed together as much as possible to prevent avoidable sprawl, but are sufficiently separated from one another and from permanent structures to meet fire code requirements.

c) Portables are gathered within security fencing, but have direct access to the main school.

d) Portables are reasonably close to the main school so students aren't forced to walk long distances between buildings.

e) Evacuation paths are pre-determined to avoid unreasonable time or distance requirements.

f) Power and computer cabling are run in a manner that makes them resistant to vandalism, such as underground.

g) Ramps meet ADA requirements, running 1 foot in length for every inch of rise.

h) Positioning, lighting and screening decisions maximize natural surveillance between and under portables.

i) Walkways to portables are direct, logical and well indicated with signs or markings.

j) Isolated portables are monitored by CCTV cameras.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Do the portables have adequate internal security features?

a) Windows or fisheye viewers permit people inside the classroom to see people outside the classroom.

b) Communication devices, including the PA system, allow teachers and the office to reach each other.

c) Classrooms can be locked and unlocked from inside the classroom by the teacher.

d) Sliding windows have lift and slide protection against burglars.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Does site planning include identifying locations for expansion, either with portables or with new wings that fit into an overall site security plan?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are the portables clearly and consistently identified with numbers, words, icons, or colors, without contradictory markings?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are the portables adequately tied down, consistent with local wind resistance requirements and building regulations?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Have trailer hitches and tongues been removed to prevent accidental injuries?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is access beneath portables is restricted with grates, fencing, siding, or other material? Are there spaces suitable for hiding people, contraband, weapons, or incendiary or explosive devices? In high risk locations, see-through fencing may be best because nothing can be hidden behind it.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Is all shelving securely fastened to walls or floors or otherwise designed to keep from tipping or falling? Book shelving is a particular hazard in earthquake areas.

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ Are aquariums, file cabinets, wall- or ceiling-mounted televisions, projectors, screens, and other heavy objects secured from falling due to student misbehavior or natural disasters?

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

■ In earthquake-prone areas, are suspended lighting fixtures, suspended ceiling systems braced and provided with safety wires?

– Lighting fixtures, ceiling systems, and other overhead components or objects should be mounted to minimize the likelihood that they will fall and injure building occupants.

– Fixture and ceiling system mountings should resist forces of 0.5 times the component's weight in any direction and 1.5 times its weight in the downward direction. This does not preclude the need to design equipment mountings for forces required by other seismic standards.

– Lay-in fluorescent lights should be supported independent of the ceiling grid. Spot lights and track lights should be securely attached to the structure

☐ Yes   ☐ No   ☐ Not applicable   ☐ Further study
Note:

Additional notes and comments:

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