



U.S. Department of Education (ED)
Office of Safe and Drug-Free Schools (OSDFS)
Readiness and Emergency Management for Schools (REMS)



FY 2010 Initial Grantee Meeting ♦ Santa Monica, CA ♦ December 8 – 9, 2010

Concurrent Session

CONDUCTING A SAFETY AUDIT

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Purpose of Session

Present key considerations for school officials to improve the physical environment of a school, which can impact overall security and safety.

Overview of Session

- ♦ Look at how physical design affects school safety
- ♦ Provide data on school facilities
- ♦ Review elements of strong safety-related school design
- ♦ Discuss school vulnerability assessments
- ♦ Highlight solutions that address physical design weaknesses
- ♦ Outline the four elements of Crime Prevention Through Environmental Design (CPTED)
- ♦ Conduct an interactive activity
- ♦ Answer frequently asked questions
- ♦ Provide resources for further planning

Key Messages

- ♦ Most school buildings were not originally constructed based on current safety features, but school officials can address many of the issues with low-cost efforts or new policies
- ♦ Crime Prevention Through Environmental Design (CPTED) is a simple and often inexpensive standard that creates safer physical environments
- ♦ CPTED consists of four elements: natural surveillance, natural access control, natural territorial reinforcement, and maintenance
- ♦ Many changes in physical design are simple and affordable



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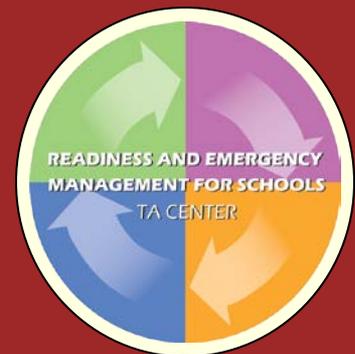
About the Presenters

JON AKERS has served as the Executive Director for the Kentucky Center for School Safety since his appointment in December of 2000. He has over 39 years experience in public education serving 25 years as a school-based administrator/principal. In addition to serving as an Associate Principal in two schools: Lexington Junior High School (1975-81) and Bryan Station Senior High School (1981-84), he became the head principal of both Bryan Station Senior High School (1984-89) and Paul Laurence Dunbar High School (1989-99) in Lexington, Kentucky. Since then and prior to serving as Executive Director of the Kentucky Center for School Safety, he has served as a Kentucky Leadership Academy coach (mentoring 40 principals) and a Scholastic Auditor for the Kentucky Department of Education. Mr. Akers received the designation as one of Kentucky's Distinguished Educators (1996) and was selected as the 1998 High School Principal of the Year by the Kentucky Department of Education.

MICHAEL GANIO currently serves as the senior manager for Security Compliance, Emergency Preparedness and Uniformed Operations for Orange County Public Schools in Orlando, Florida. With over 175,000 students in 188 schools, Orange County is the eleventh largest school district in the United States.

Mr. Ganio has been in the security and law enforcement field for 33 years, serving 13 years at the Kennedy Space Center and for the last 20 years, with Orange County Public Schools. In 1990, Mr. Ganio relocated to Orlando upon being chosen to establish a security program and implement protection measures for the newly constructed headquarters of the Orange County School Board in downtown Orlando. In 1991, Mr. Ganio assumed responsibility for district wide security services. Mr. Ganio published the school district's first Crisis Management Handbook in 1992 and has served as the district's emergency coordinator and liaison with the Orange County Office of Emergency Management.

Mr. Ganio has served on the board of directors for the Florida Association of School Police Chiefs and Administrators, is a past member of the National Association of School Safety and Law Enforcement Officers, a member of the Central Florida Crime Prevention Association and has served on the advisory boards for several organizations including the city of Orlando's Citizen Corps Council, Orange County SRO/DARE, Orange County Juvenile Crime and Violence Prevention board and the Mid-Florida Tech Security Officer Academy.



Conducting a Safety Audit

Fiscal Year 2010 Initial Grantee Meeting
December 8 – 9, 2010, Santa Monica, California



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Presentation Goals

- 1. Examine how physical design affects school safety.**
- 2. Review elements of strong safety-related school design.**
- 3. Discuss school vulnerability assessments.**
- 4. Highlight solutions addressing physical design weaknesses**
- 5. Outline the four elements of Crime Prevention Through Environmental Design (CPTED).**



School Facilities Data

Number of schools in the U.S.

- 98,706 - Public elementary and secondary schools (2008/09)
- 33,740 - Private elementary and secondary schools (2007/08)
- 4,694 - Public charter schools nationwide (2008/09)

Number of new school buildings in 2008/09

- 1,806 new public schools opened
- 535 “future” schools planned to open within two years



School Facilities Data (Cont'd.)

Number of portable facilities

- Based on a 2005 survey, principals reported:
 - 37 % portable buildings
 - 33 % classrooms in portable buildings

Age/renovation of existing school buildings

- In 1999, average age of the main building(s) 40 years
- Most major renovations occurred 13 years ago



School Safety Components

The four phases of emergency management

- Strategic design can prevent or reduce damage
- Safety features can alert the school of an impending emergency
- Accessible floor plans can make it easier for first responders
- Repairing/remodeling a school after an incident may speed the return to learning



Elements of Strong Safety-Related School Design

Schools should be designed, built and remodeled to be:

- Valued as relevant by the local community facility users;
- Easily monitored
- Easily secured
- Safe
- Constructive environments that foster positive culture and climate



Elements of Strong Safety-Related School Design (Cont'd.)

Architect's Point of View

- Five key school safety components when designing a school building
 - Location
 - Access control
 - Supervision / surveillance
 - Americans with Disabilities Act standards
 - Flow control



Vulnerability Assessments

What is a vulnerability assessment?

- Process of identifying, evaluating and prioritizing risks and areas of weakness
- It includes designing a system of accountability with measurable activities and timelines to address risks



Vulnerability Assessments (Cont'd.)

Why conduct vulnerability assessments?

- Vital part of an emergency planning process
- Focuses on specific threats and potential mitigation efforts
- Identify and prioritize school site weaknesses
- Opportunity to work with partners
- Foster communication with stakeholders
 - students, school personnel, first responders



Vulnerability Assessments (Cont'd.)

What are key elements of vulnerability assessments?

- Involves a team approach
- Considers all potential hazards
- Understand and inventory existing resources and strengths
- Conduct walk-through of school grounds and facilities
- Survey school population and community
- Examine existing crime and school incidence data
- Report findings
- Develop corrective actions and timelines
- Use findings to inform and update emergency management plans



Vulnerability Assessments (Cont'd.)

Common problems identified by assessments:

- Too many entrances/exits not secured
- Hidden areas
- Poor indoor and outdoor lighting
- Broken or damaged doors and/or windows
- Covered classroom windows



Vulnerability Assessments (Cont'd.)

- Emergency lighting not functional
- Emergency generator not properly maintained
- Exit lights that are burned out
- Trip hazards on steps
- Trip hazards on sidewalks
- Vehicular traffic pattern drop-off and pick-up zones



Solutions That Address Physical Design Weaknesses

Address and prioritize weaknesses:

- Compile and report results of all hazards assessed.
- Use a risk matrix to determine which would have the greatest consequences for each school.
- Develop a written plan for addressing identified vulnerabilities and hazards.



Solutions That Address Physical Design Weaknesses (Cont'd.)

Perceived barriers:

- Design weaknesses
- Lack of awareness or concern about weaknesses
- Lack of adequate leadership on the issue
- Lack of funds



**What obstacles do you anticipate
in your district, and how can they
be overcome?**



Solutions That Address Physical Design Weaknesses (Cont'd.)

The cost of solutions can range from:

- No- to low-cost
 - keeping rooms locked when unoccupied
- Moderately costly
 - adding numbering to all interior and exterior doors
- Expensive
 - Structural enhancements (e.g., reconstruction of building entrance)



Solution 1

Institute strict procedures for key control.



Solution 2

Display classroom number on windows so they are readily visible from the street.



Solution 3

Doors should be examined monthly and repaired as necessary and be instantly lockable.



Solution 4

Secure unused lockers to prevent contraband storage, and provide locks to students for their own lockers.



Solution 5

Secure gas tanks and consider fencing.



Solution 6

Restrict access to all rooms and spaces containing building wiring, equipment, and controls.



Solution 7

Keep all unoccupied classrooms and other rooms locked when not in use.



Solution 8

Secure janitorial closets.



Solution 9

Locate the school's fresh air intakes and ensure that idling vehicles do not park near them.



Solution 10

Restrict access under mobile classrooms.



Solution 11

Fire hydrants on or near school grounds should be visible and unobstructed.



Solution 12

Secure roof hatches, operable skylights and rooftop equipment doors and access panels.



Crime Prevention Through Environmental Design

Four fundamental elements to Crime Prevention Through Environmental Design (CPTED):

1. Natural access control;
2. Natural surveillance;
3. Territoriality; and
4. Maintenance.



1. Natural Access Control

Restrict who enters or exits an environment:

- Use a single, clearly identifiable, point of entry.
- Use fencing and gates to separate play areas from traffic.
- Eliminate design features that provide access to roofs or upper levels.
- Use low, thorny bushes beneath ground-level windows.



2: Natural Surveillance

Easily see what is occurring in a particular setting:

- Create landscape designs using the “4, 7” rule
 - Shrubs no taller than 4 feet
 - Tree limbs no lower than 7 feet
- Leave window shades open
- Use convex mirrors to improve surveillance in hallways or around corners
- Provide proper lighting



3: Territorial Reinforcement

Demonstrate ownership of property:

- Maintain landscaping.
- Use signs and plantings to denote boundaries.
- Place amenities, such as art work, seating or refreshments, in common areas.



4: Maintenance – Physical Plant

Demonstrate respect for property:

- Inspect regularly.
- Clean regularly.
- Document and report problems.
- Repair graffiti as soon as possible using the 3 R's approach
 - Record, Report & Remove



4: Maintenance – Policies & Procedures

Carry out established policies and procedures:

- Meet with first responders annually to:
 - Conduct walk-through building/campus inspections; and
 - Review the school's emergency response plan.
- Immediately report any building modifications to first responders.
- Establish policies and accountability criteria for building/campus inspections.
- Establish policies that shorten time frame for addressing needed repairs
 - liability is mitigated with a timely response



Interactive Assessment



Identify both positives and negatives aspects of the building designs.



Interactive Assessment



Interactive Assessment (Cont'd.)



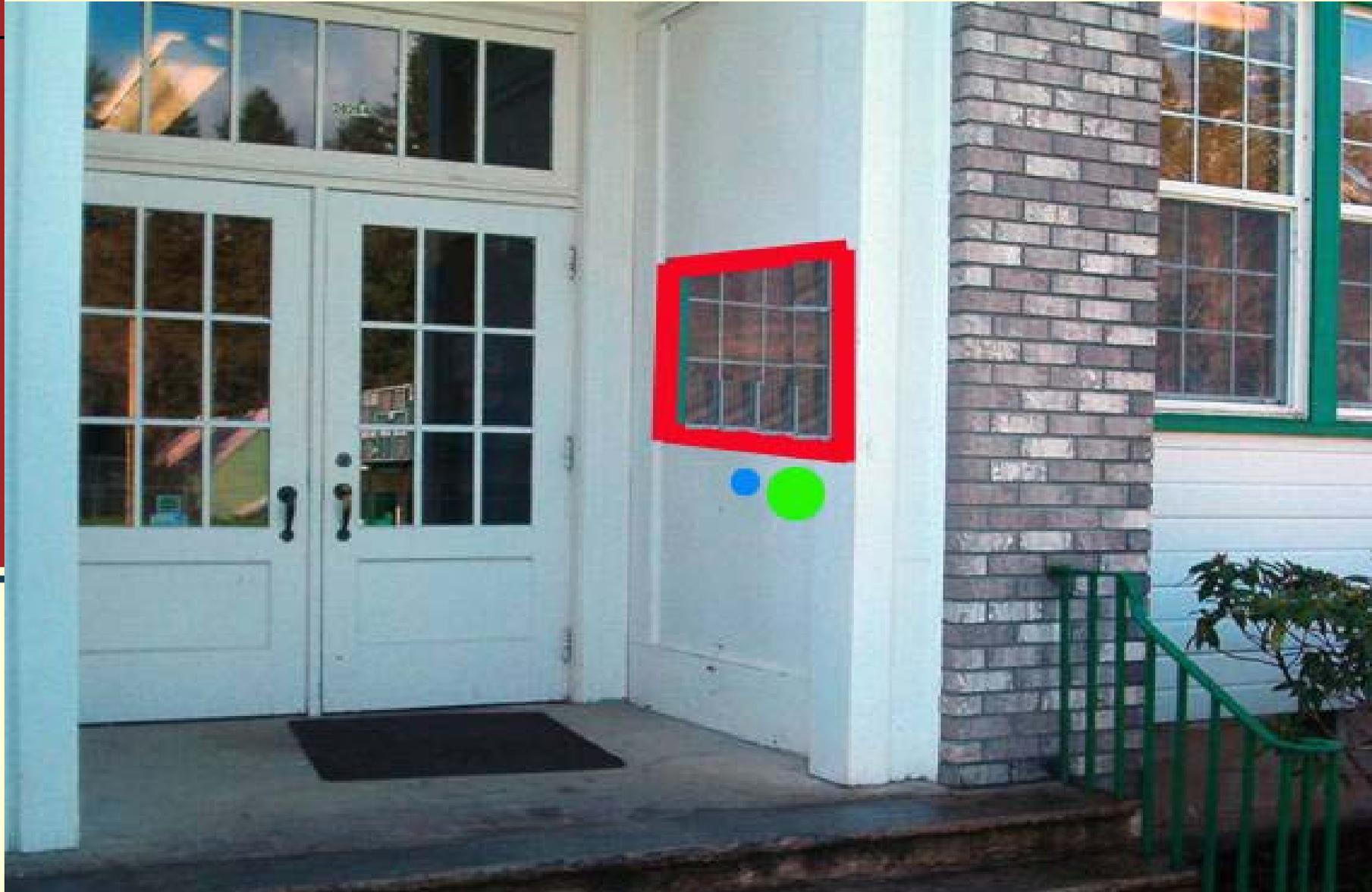
Interactive Assessment (Cont'd.)



Interactive Assessment (Cont'd.)



Interactive Assessment (Cont'd.)



Frequently Asked Questions

Q. What role does the school district's liability insurance carrier play in safe physical management?



Frequently Asked Questions

Q. Should schools create vulnerability assessment teams?



Frequently Asked Questions

Q. Who should be involved in the team?



Frequently Asked Questions

Q. What are some of the key factors in maintaining a safe and healthy learning environment?



Frequently Asked Questions

Q. What is the first step schools should take before conducting an assessment?



Frequently Asked Questions

Q. How do schools get buy-in from administrators to conduct a vulnerability assessment and follow-up appropriately?



Frequently Asked Questions

Q. What if a school conducts an assessment but it is not able to implement the suggested change? Does that have liability implications?



Summary

- 1. The primary elements of strong safety-related school design**
- 2. Importance of school vulnerability assessments**
- 3. Solutions that address physical design weaknesses**
- 4. Four elements of Crime Prevention Through Environmental Design (CPTED)**



Resources

REMS Technical Assistance Center

- **Guide to School Vulnerability Assessments**
- http://rems.ed.gov/views/documents/VA_Report_2008.pdf

National Crime Prevention Institute, Crime Prevention Through Environmental Design

- <http://www.cpted-watch.com/>

Local volunteer organizations, PTA/PTO

- Assist with minor repairs, beautification, landscaping, etc.



Resources

National Clearinghouse for Educational Facilities

- **Low-Cost Security Measures for School Facilities**
http://www.edfacilities.org/pubs/low_cost_measures.pdf
- **Mitigating Hazards in School Facilities**
http://www.ncef.org/pubs/mitigating_hazards.pdf
- **School Safety Assessment Guides**
http://www.ncef.org/pubs/pubs_html.cfm?abstract=mitigating2
- **School Safety and Security PK-12 Facilities Issues**
http://www.edfacilities.org/rl/safety_security.cfm



Resources (Cont'd.)

National Institute of Justice

- **The Appropriate and Effective Use of Security Technologies in U.S. Schools Guide**
<http://www.ojp.usdoj.gov/nij/pubs-sum/178265.htm>
- **Crime Prevention Through Environmental Design and Community Policing**
<http://www.ojp.usdoj.gov/nij/pubs-sum/157308.htm>

The Virginia Department of Education's Checklist for the Safety and Security of Buildings and Grounds

- <http://www.pen.k12.va.us/go/VDOE/Instruction/schoolsafety/safetyaudit.pdf>



Presentation Credits

Thank you to the following persons for their role as lead authors of this presentation:

- **Jon Akers**, Executive Director, Kentucky Center for School Safety, Eastern Kentucky University (Richmond, KY);
- **William Brenner**, Former Director, National Clearinghouse for Educational Facilities (Washington, D.C.);
- **William Lassiter**, Director of Communications, North Carolina Department of Juvenile Justice and Delinquency Prevention (Raleigh, NC);
- **Steven McElroy**, Director of Safety and Security, Columbus City Schools (OH); and
- **Todd Schnieder**, School Safety Consultant (Eugene, OR).





Conducting a Safety Audit Frequently Asked Questions

Q. What role does the school district's liability insurance carrier play in safe physical management?

A. Most insurance carriers have a risk management specialist who could assist schools in addressing physical plant safety practices.

Q. Should schools create vulnerability assessment teams?

A. Yes. Vulnerability assessment teams are an important part of creating a unified and comprehensive effort for assessing risks and hazards. Teams can be used to establish goals and objectives for assessment, develop a timeline for assessments, assign roles and responsibilities for next steps, monitor progress on action items, and update and revise assessments as needed.

Q. Who should be involved in the team?

A. Administrators can serve as leaders in vulnerability assessment efforts and facilitate formation of teams by selecting and coordinating or supporting team members. Such as general and special educators, school resource officers and/or security officers, administrators, school nurses, clerical and reception staff, paraprofessionals, guidance counselors, coaches, cafeteria and facilities staff, and bus drivers. Involve members of the community outside of the school. Consider involving students and family members in the vulnerability assessment process.

Q. What are some of the key factors in maintaining a safe and healthy learning environment?

A. Some of the key factors include supervision of:

- The physical plant;
- The students; and
- Visitors who come on campus.

Q. What is the first step schools should take before conducting an assessment?

A. Determine what assessment tool best fits the needs of the school (or school district). As schools continue to plan and prepare for critical events that could have severe consequences, identifying the appropriate vulnerability assessment tool(s) is an important step for helping schools to understand from what they are at risk and just how seriously they could be impacted.

Q. How do schools get buy-in from administrators to conduct a vulnerability assessment and follow-up appropriately?

A. Vulnerability assessments demonstrate to parents and the school community that district administrators are concerned about the safety of students and staff and they are taking steps to address vulnerabilities. Buy-in usually is enhanced when liability enters the picture. Not to conduct frequent assessments is negligent. Once concerns have been identified the onus falls upon the school district to address the identified concerns.

Q. What if a school conducts an assessment but it is not able to implement the suggested change? Does that have liability implications?

A. It is incumbent on the school district to address any critical safety need immediately. In cases such as this, the superintendent/school board will need to make the decision whether to address identified safety issues or not. Such decisions need to be made in collaboration with the school board's legal counsel.