Designing and Implementing Low-Cost, High-Impact Solutions for Safety and Security

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Comal ISD
Background and Strategy
Background – Comal ISD

• Fast-growing public school district in central Texas
  – About 23,800 students
  – Adding approximately 1,000 students a year

• 31 campuses; 2 being built
• 589 sq. miles
• Varying age, condition, and design of current facilities
Safety and Security Strategy

• From a facilities standpoint, our focus is on creating a “delay” or “barrier” for those wishing to do harm when entering our facilities.

• Main strategies are in line with CPTED:
  – Territoriality
  – Natural surveillance
  – Access control
  – Target hardening
Establishing Standards

• With our overall strategy in mind, we set out to develop standards for facilities related to safety.

• The builds consistency and uniformity not only in the actual facility itself, but also our procedures.

• This involves bring all current facilities up to these standards as well as building new facilities with these in mind.
Establishing Standards

• Once all current facilities are up to the set of standards in all areas, moving forward we can provide architects and contractors specific specs on what we need in a specific area.

• Again, consistency across campus in design is critical for adopting uniform safety procedures.
Major Upgrades in 2015 Bond...

- Cameras
- Vestibules
- Door handles
- Security / motion alarm
- Door access hardware
- Fencing

- Started to develop standards in these areas as upgrades were made
Areas for Improvement

• Recently conducted assessments of all campuses and found areas for improvement:
  – Perimeter/interior fencing
  – Lighting
  – Glass (visibility and hardening)
  – Access control
Lockdown Alert System

• Design
  – Use of current PA system
  – Strobe lights and buttons
  – Tied into alarm system/police dispatch

• Policy and Procedure
  – Supports efforts to empower anyone to initiate protective actions
  – Allows for procedures to be initiated from various points in the building
Lockdown Alert System
Access Control

• Several projects related to access control:
  – Classroom door locks
  – Glass hardening
  – Glass tinting/frosting
  – Vestibule door buzzer system
Classroom Door Locks

• Simple, and relatively inexpensive, but major impact

• Staff no longer have to step into the hallway and use keys to lock the door, or pull magnetic strip.
Classroom Door Locks

- The door remains locked, and closed, when occupied, which speeds up lockdown procedures.
  - This is a procedural challenge to achieve in reality

- Training, believe it or not, is key!
  - How to operate new lock must be widely shared or use will be low
Glass Tinting/Hardening

• Tinting of glass allows us to control sight lines into campus areas where students/staff might be.

• Interior frosting of glass allows us to create “safe spaces” for lockdown procedures.

• Hardening reinforces areas that are glass so that improved locks and other access control measures can be effective.
Glass Tinting/Hardening

VIDEO
Vestibule Door Buzzer System

• Design
  – Need to control access into office as well as from the office into the campus
  – Still need to allow for direct access into campus for first responders and other staff in an emergency
  – Access cards allow for tracking and monitoring of who opened what doors and when
  – Must consider egress points
Secure Vestibule Access Control

Key

- △ Badge Access
- ○ Control Point
- ⬤ Access Control

Areas:
- Corridor
- Secure Vestibule
- Office
Vestibule Door Buzzer System

• Policy and Procedure
  – It does create an “inconvenience” for front office staff
  – Ensuring the system is used, and doors are not propped open are critical
  – System should create a balance between a welcoming environment for a school, but also one that can effectively control access.
Questions