

Best Practices for Safer School Facilities

Panelists:

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Agenda:

In this presentation, we will:

- Review the factual context relating to safety concerns on campus
- Describe the fundamental strategies of Crime Prevention through Environmental Design
- Show you some realistic steps you can take, particularly focusing on secure entries
- Equip you with additional suggestions and resources going forward.

Context: *Violent Crime on Campus by Location:*

Parking lots and bus stops: **38%**

Stairs and Corridors: **30%**

Grounds: **23%**

Classrooms: **21%**

Entries: **11%**

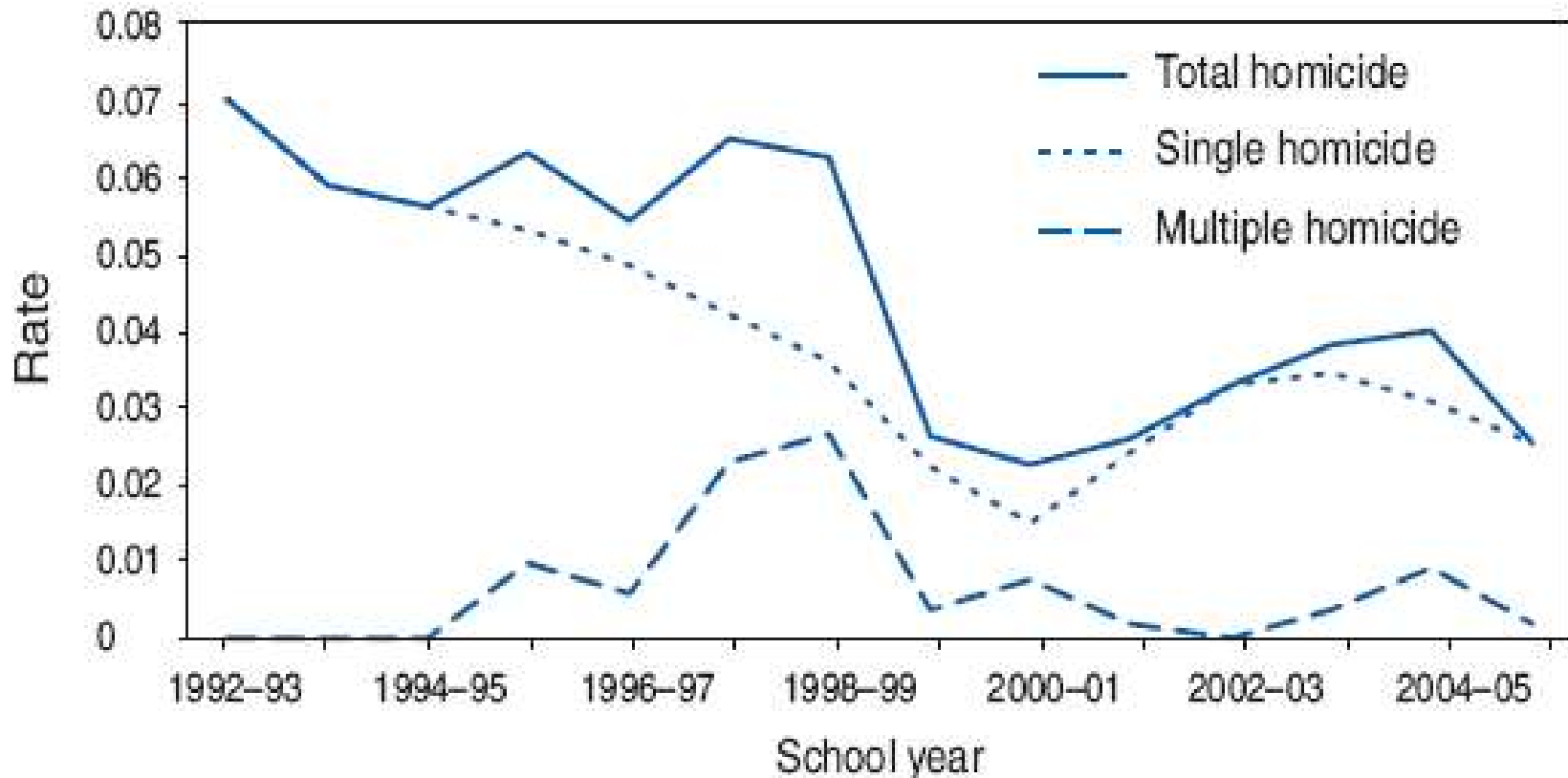
Courtyards or between buildings: **9%**

Bathrooms: **6%**

Cafeterias: **5%**

**Per Kachur et al, 1996*

Context: Trends in School-Associated Violence



* Per 100,000 students.

Per Morbidity and Mortality Report, Center for Disease Control

Context: *From Columbine to Sandy Hook -
School aged violent deaths from 1999 through 2012*

School Age Victims of Homicide:	23,936
School Age Victims of Suicide:	<u>26,589</u>
Total School Age Violent deaths:	50,525
 Total “Mass” Homicides at K-12 schools:	 44
 Proportion of Mass Homicides as compared to total School Age violent deaths:	 0.08%

**“School Age” is here counted as being from 5 through 19 years of age*

*Per FBI, Dept. of Education, and Center for Disease Control (data for certain years
is extrapolated)*

Context: *From Columbine to Sandy Hook -
School aged violent deaths from 1999 through 2012*

Total Violent Deaths on School *Campuses: **328**

**Proportion of violent deaths on campus as
compared to total School Age Violent Deaths:** **0.64%**

**Proportion of Mass Homicides as compared
to total violent deaths on Campus:** **12.83%**

**"On Campus" means on school property (including buses) or while attending
any school supervised activity*

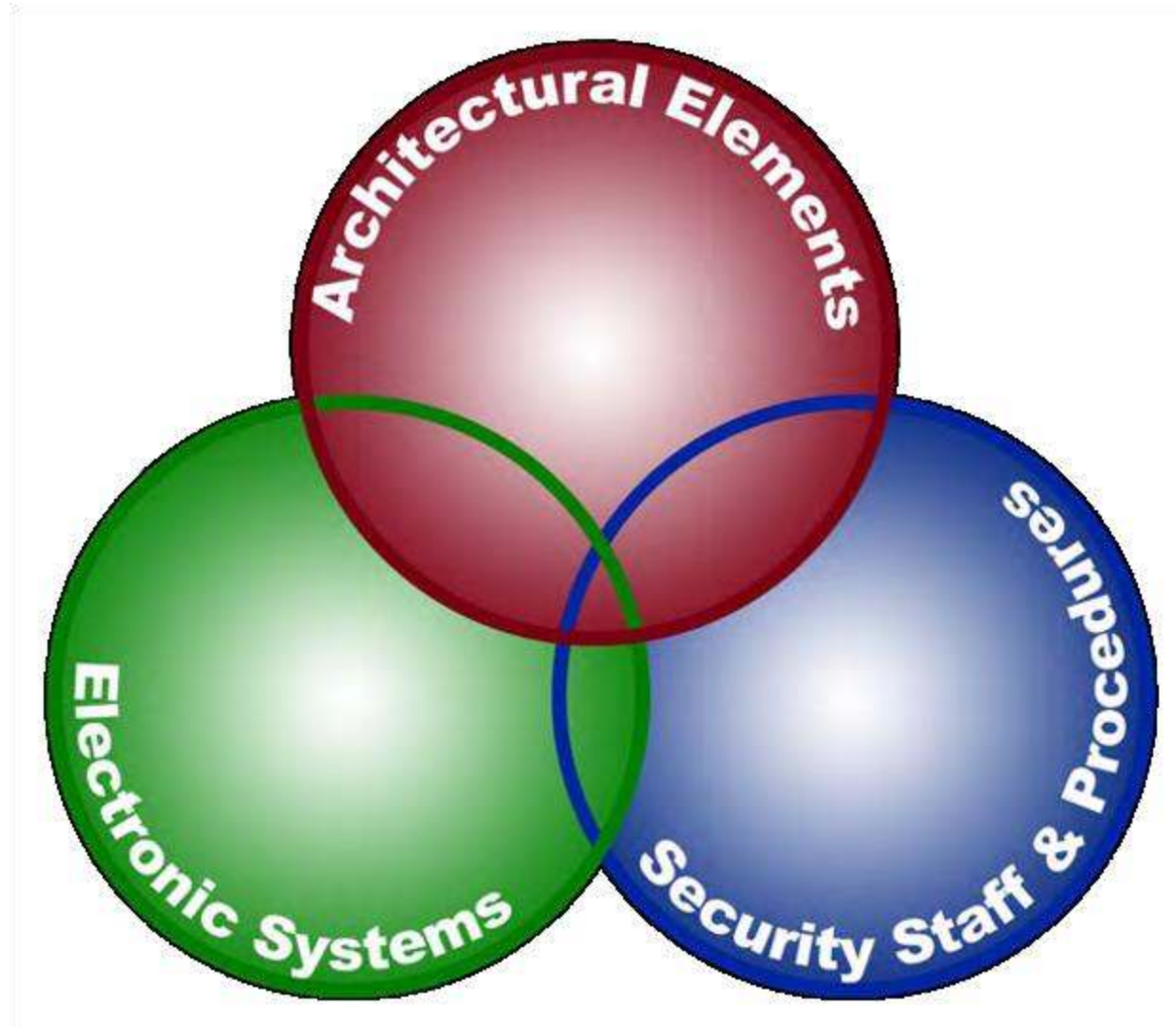
Principles of CPTED (Crime Prevention Through Environmental Design)

- **Natural Surveillance**
- **Natural Access Control**
- **Natural Territorial Reinforcement**

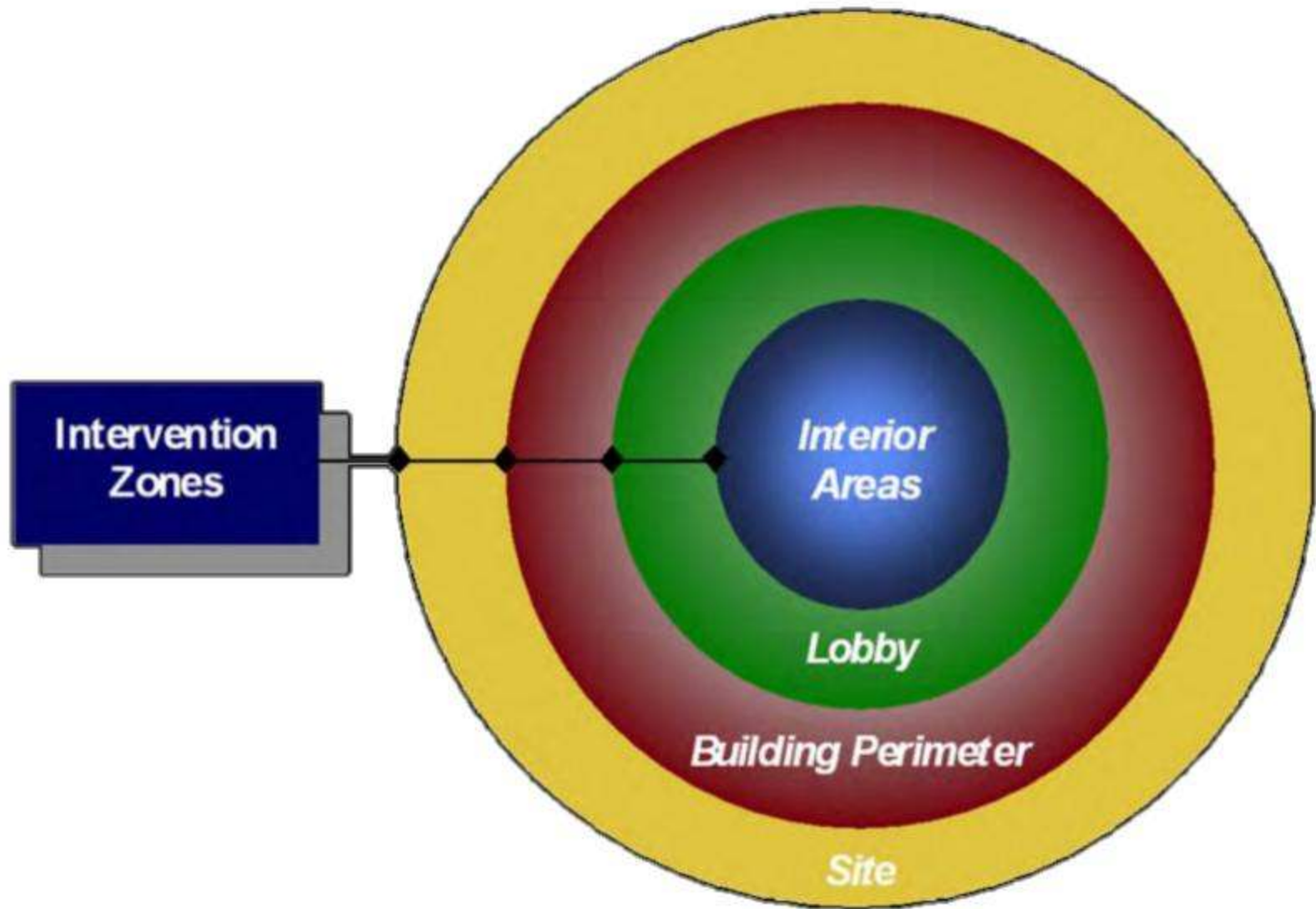
“CPTED is the proper design and effective use of the built environment that can lead to a reduction in the form and incidence of crime and improvement in the quality of life.” - C. Ray Jeffrey, 1971

“CPTED is a tool for identifying, preventing and solving local crime problems. It is a process, a way of thinking about crime and not a "cookie cutter" program to replicate.” - National Crime Prevention Council

Integrated Security Program:



CPTED Strategies: Concentric Circles of Protection



CPTED Strategies: Natural Access Control

- Decreases crime opportunity by denying access to crime targets and creating a perception of risk to the offenders
- Differentiates between public and private space
- Occurs by designing entrances and exits, fencing, lighting and landscape to limit access or control flow
- Tips:
 - Limit number of entrances to your campus
 - Have one main entrance clearly marked that will lead visitors to the main office

CPTED Strategies: Natural Access Control

Roof Access



Roof Access



CPTED Strategies: Natural Surveillance

- Increases the threat of apprehension
- Potential offenders feel increased scrutiny and limitations
- Occurs by designing the placement of physical features, activities and people in such a way to maximize visibility
- Tips:
 - Keep bus drop-off areas, employee parking, and visitor parking separate from each other and away from busy streets
 - Avoid constructing large blank walls, which limit surveillance opportunities and serve as targets for graffiti
 - Use low shrubbery to allow visibility from the classrooms
 - Do not cover entrance windows with posters and announcements

CPTED Strategies: Natural Surveillance

Open Restroom Vestibules



Open Corridors



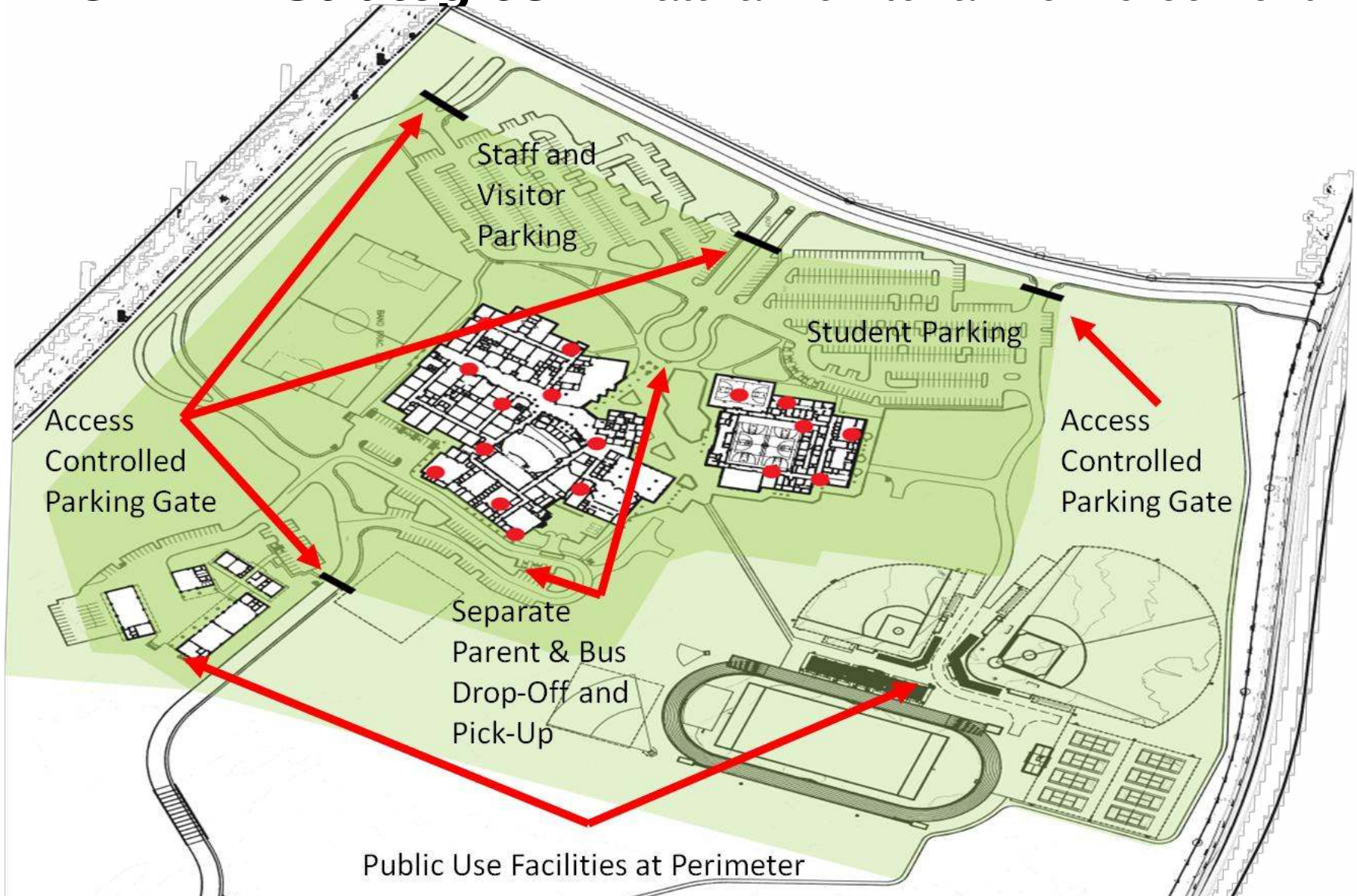
Transparency and Visibility



CPTED Strategies: Natural Territorial Reinforcement

- Promotes social control through increased definition of space
- An environment designed to delineate private space does two things:
 - Creates a sense of ownership
 - Sense of owned space creates an environment where “strangers” and “intruders” stand out
- Occurs by designing buildings, fences, pavement, lighting and landscape to express ownership and define public and private spaces

CPTED Strategies: Natural Territorial Reinforcement



CPTED Strategies: *Natural Territorial Reinforcement*

Main Public Entrance and Control Point

Secure Courtyard

Secondary Exists Limited Access

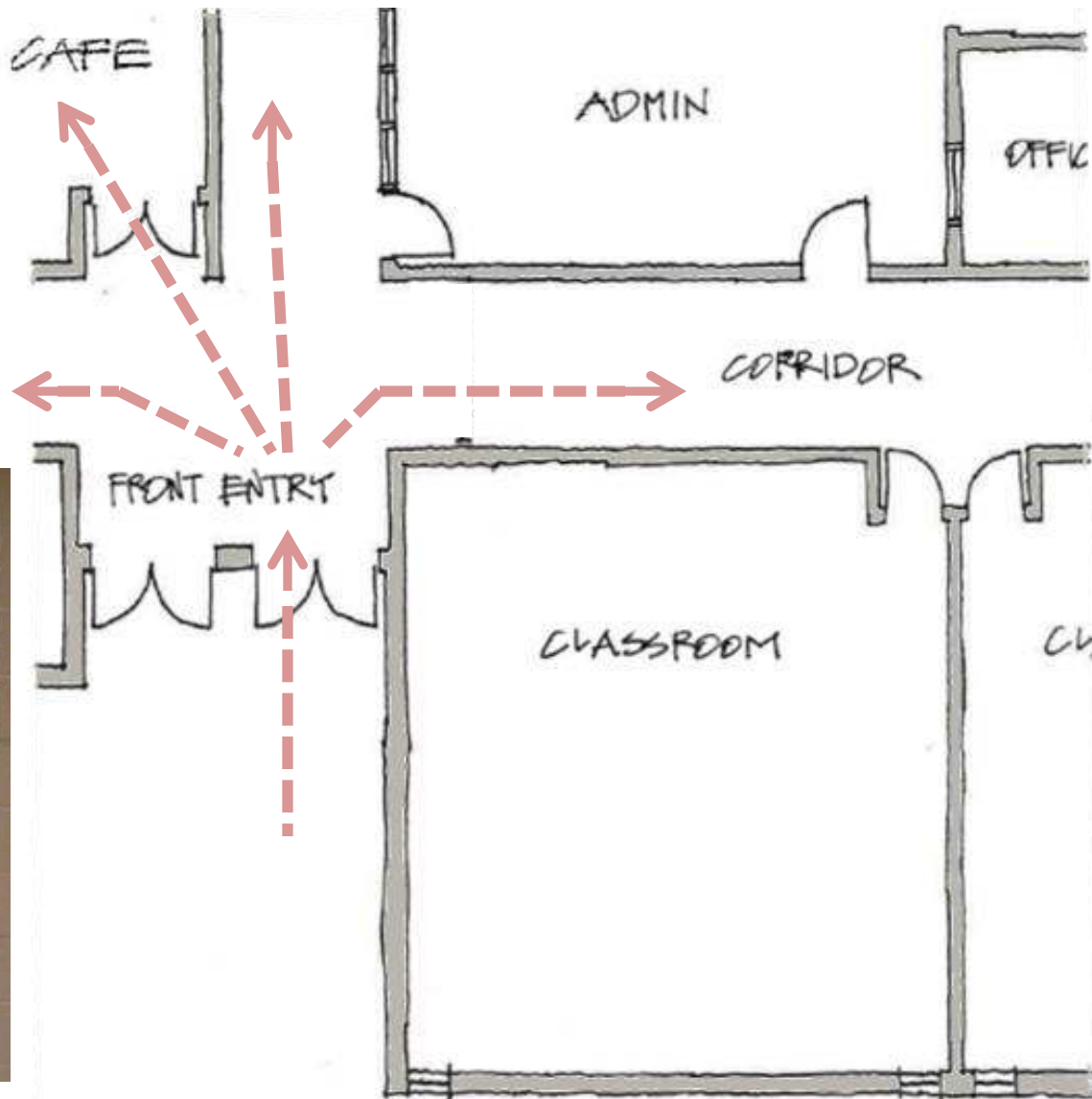


Secure Entries: The Basics

- **Checkpoint Traffic Flow**
- **Visibility**
- **Emergency Communications**

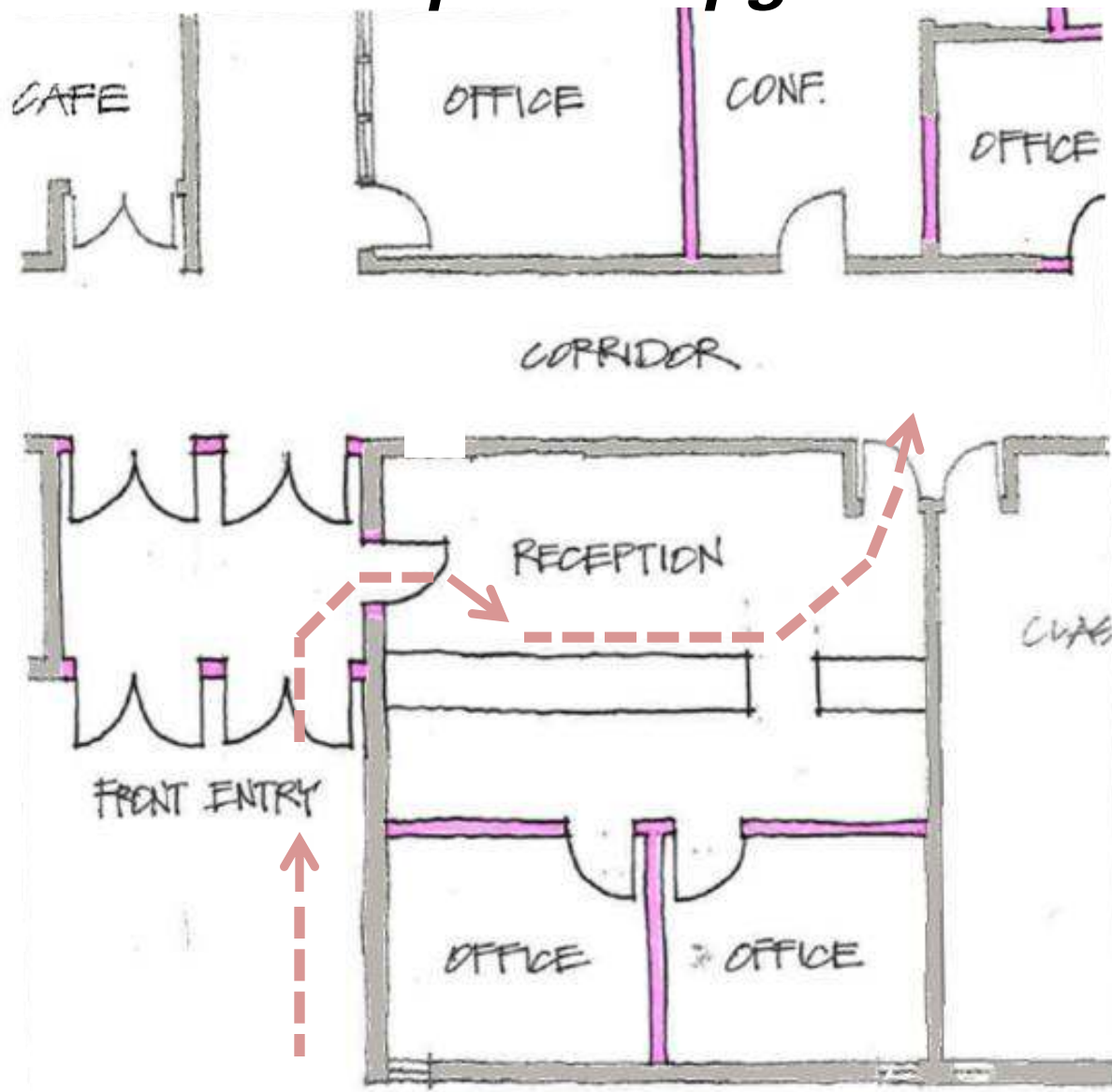
Checkpoint Traffic Flow: Existing Conditions

- No Visibility from Office to front entry
- Visitors can freely go in multiple directions



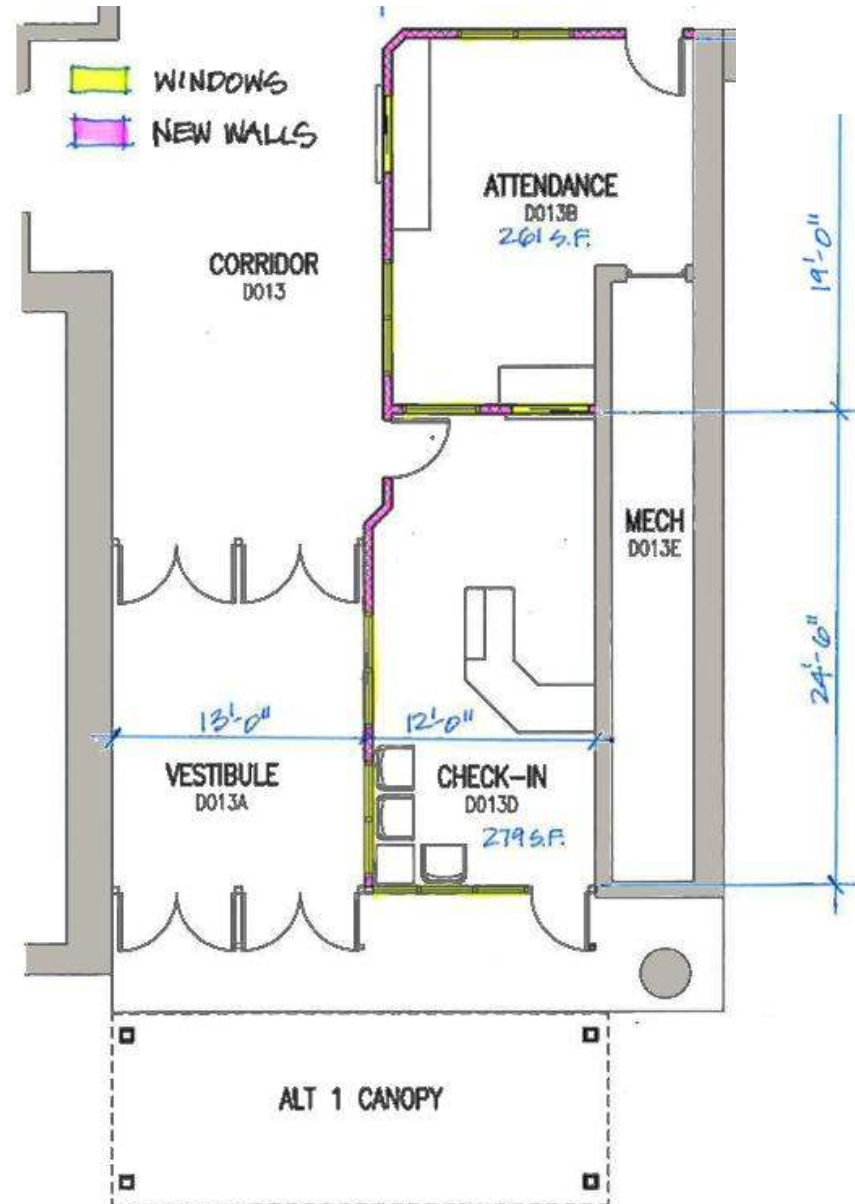
Checkpoint Traffic Flow: Proposed Upgrades

- Two sets of doors to create locking vestibule
- Re-arrange rooms to put reception up front
- Visitors are forced to go through checkpoint



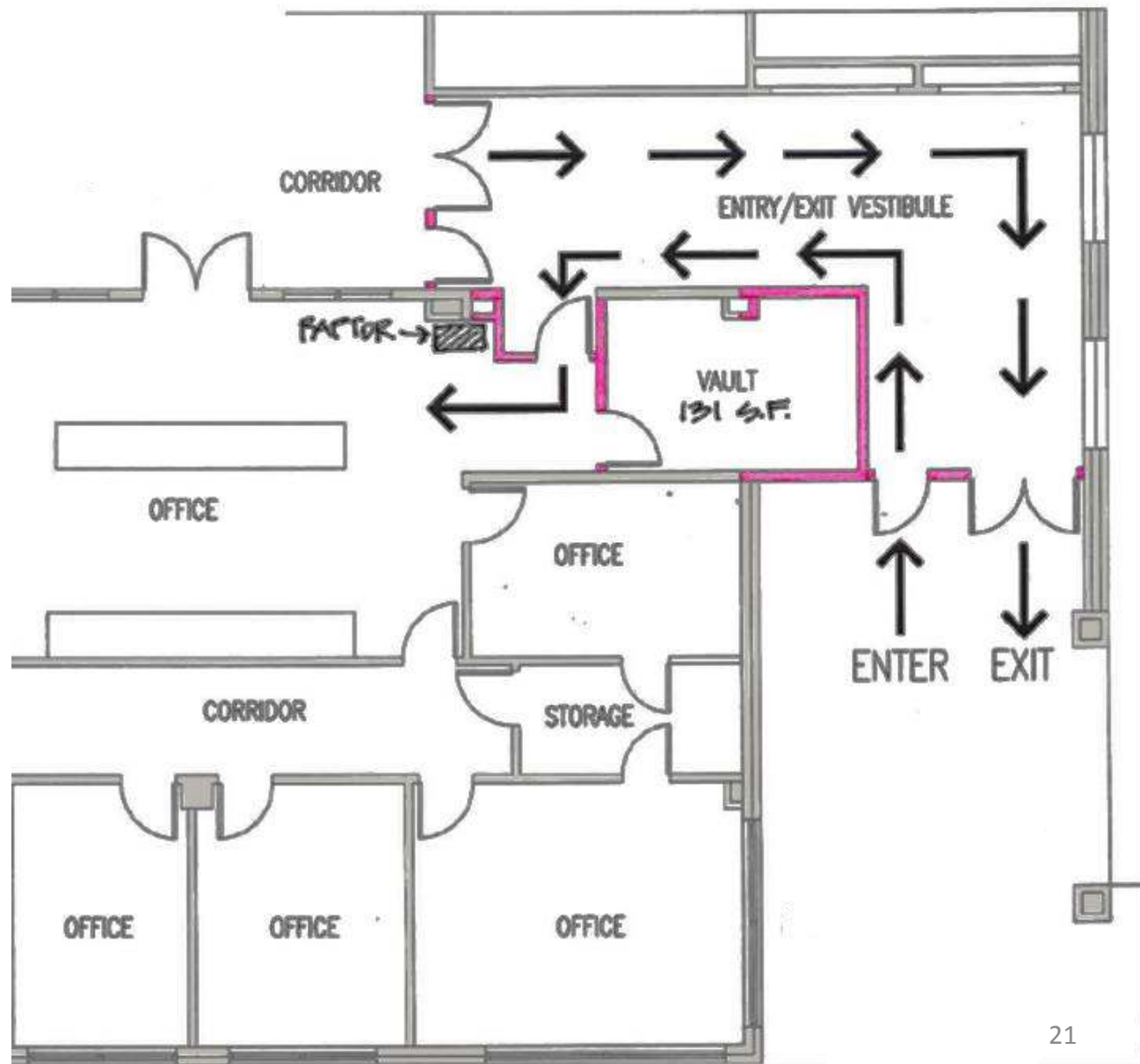
Costs: order of magnitude figures

- **\$160,000** – included sidewalk, handicapped parking, canopy



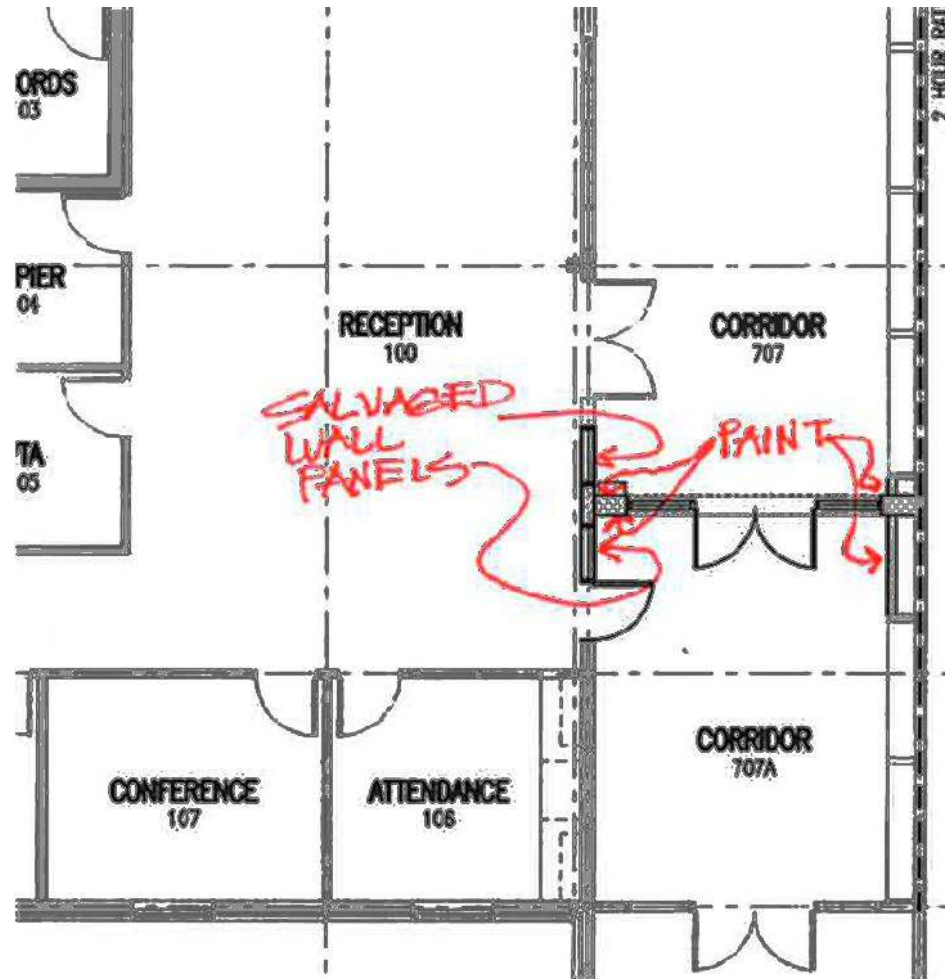
Costs: order of magnitude figures

- **\$100,000**
 - included new vestibule doors, moving a room, new door into office, repair/replace flooring in Office and Corridor, modify casework



Costs: order of magnitude figures

- \$40,000
- Included new doors, windows, adjacent finish patching and repair



Costs: order of magnitude figures

- | | |
|------------------------------|-------------------|
| • New Double doors | \$3,000 – \$5,000 |
| • Add card reader to door | \$500 - \$2,500 |
| • Add security camera | \$500 - \$2,000 |
| • New door in wall | \$2000 |
| • New vision window in wall | \$1000 |
| • Security Check-in window | \$2500 |
| • Intrusion detection sensor | \$200 |



Mitigating School Safety through CPTED:

Starting at the Front

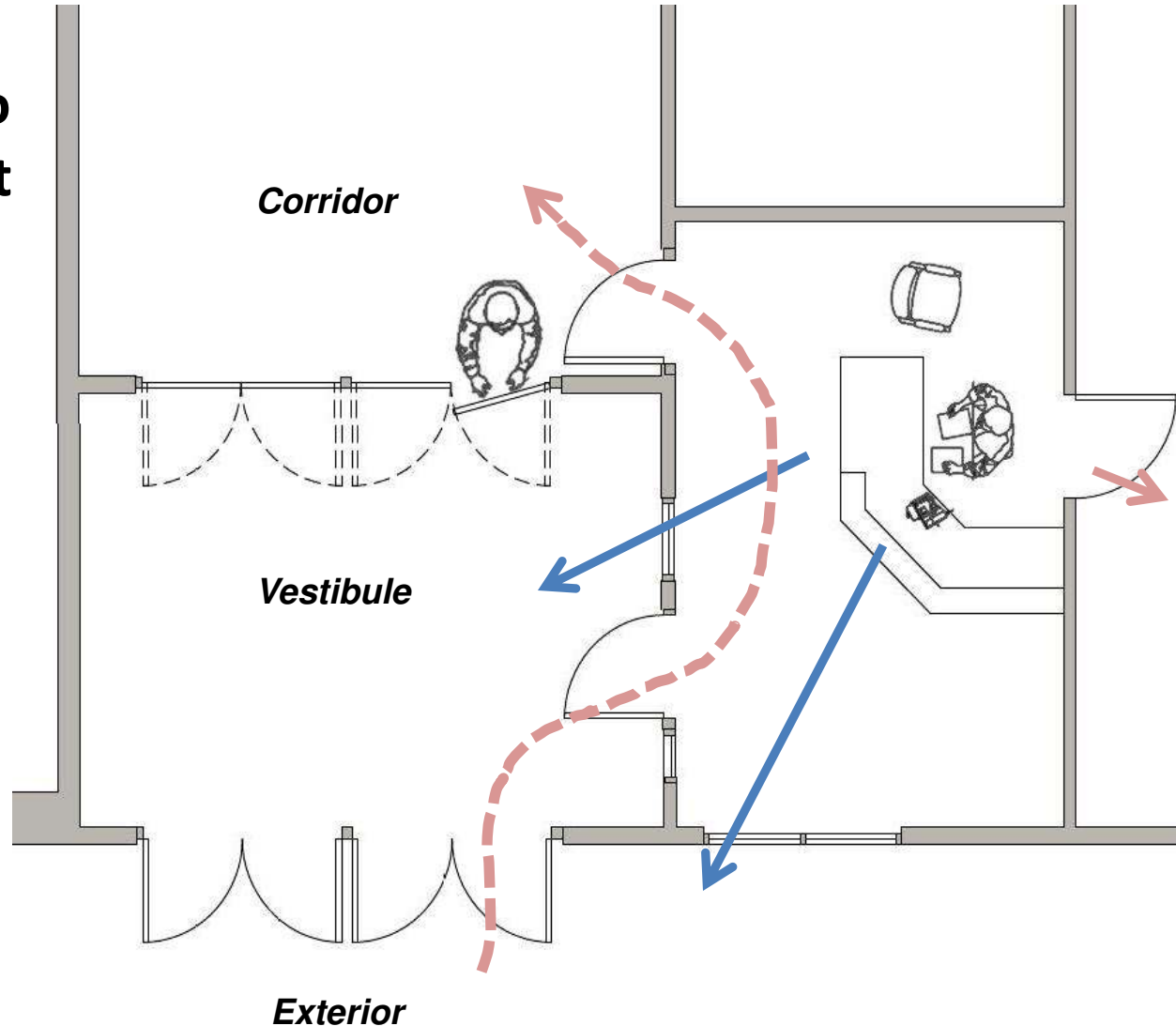
- Mitigating school safety should always be considered in the design of new schools and renovations.
- Require contracted architects to fully engage those end users such as principals, teachers and support staff.
- The first security priority for schools should always be student and staff safety, with entry control as the main focus.

Target Hardening

- Target hardening or mitigation is an approach to making your school a less attractive target for anyone with "bad intent."
- This can be directed at denying or limiting access to a crime target through the use of physical barriers such as fences, gates, locks, electronic alarms, and security patrol.

Checkpoint Traffic Flow: Basic Diagram

- Inner doors locked, visitors forced to go through Checkpoint
- Visibility from Checkpoint
- Emergency Communication activated at Checkpoint
- Escape Route from Checkpoint



Culture:

- **Proactively reach out to key stakeholders prior to an emergency**
 - **Parents**
 - **News media**
 - **First Responders**
- **Place more emphasis on prevention and mitigation**
- **Allow solutions/best practices to take on the flavor of your organization and community**

Assessment: where can you go for help?

- ***Your Workers' Comp Provider***
- ***Independent Security Consultant***
- ***Targeted Scope***

***TOP TEN LIST: some answers to the question,
“What are you doing to make your school safer?”***

- 1. Policies and Priorities*
- 2. Door position sensors at all exterior doors*
- 3. Card Readers*
- 4. Surveillance Cameras*
- 5. Cameras – Recording vs. Monitoring*
- 6. Visitor Accountability System*
- 7. Panic Button/Emergency Communication*
- 8. Lockdown Button*
- 9. Wayfinding*
- 10. Coordination with Emergency Responders*

Further Resources:

Texas State University, San Marcos – Texas School Safety Center

www.txssc.txstate.edu

Office of the Attorney General, State of Texas - School Safety Guide

www.oag.state.tx.us

US Department of Education, Office of Safe and Healthy Students, Emergency Planning

www2.ed.gov/admins/lead/safety/emergencyplan

FEMA, Multi-Hazard Emergency Planning for Schools

<http://training.fema.gov/EMIWEB/IS/is362a.asp>

U.S. Department of Homeland Security, School Safety

<http://www.dhs.gov/school-safety>

U.S. Secret Service and U.S. Department of Education, THREAT ASSESSMENT IN SCHOOLS

http://www.secretservice.gov/ntac/ssi_guide.pdf

Texas Education Agency

<http://www.tea.state.tx.us/>