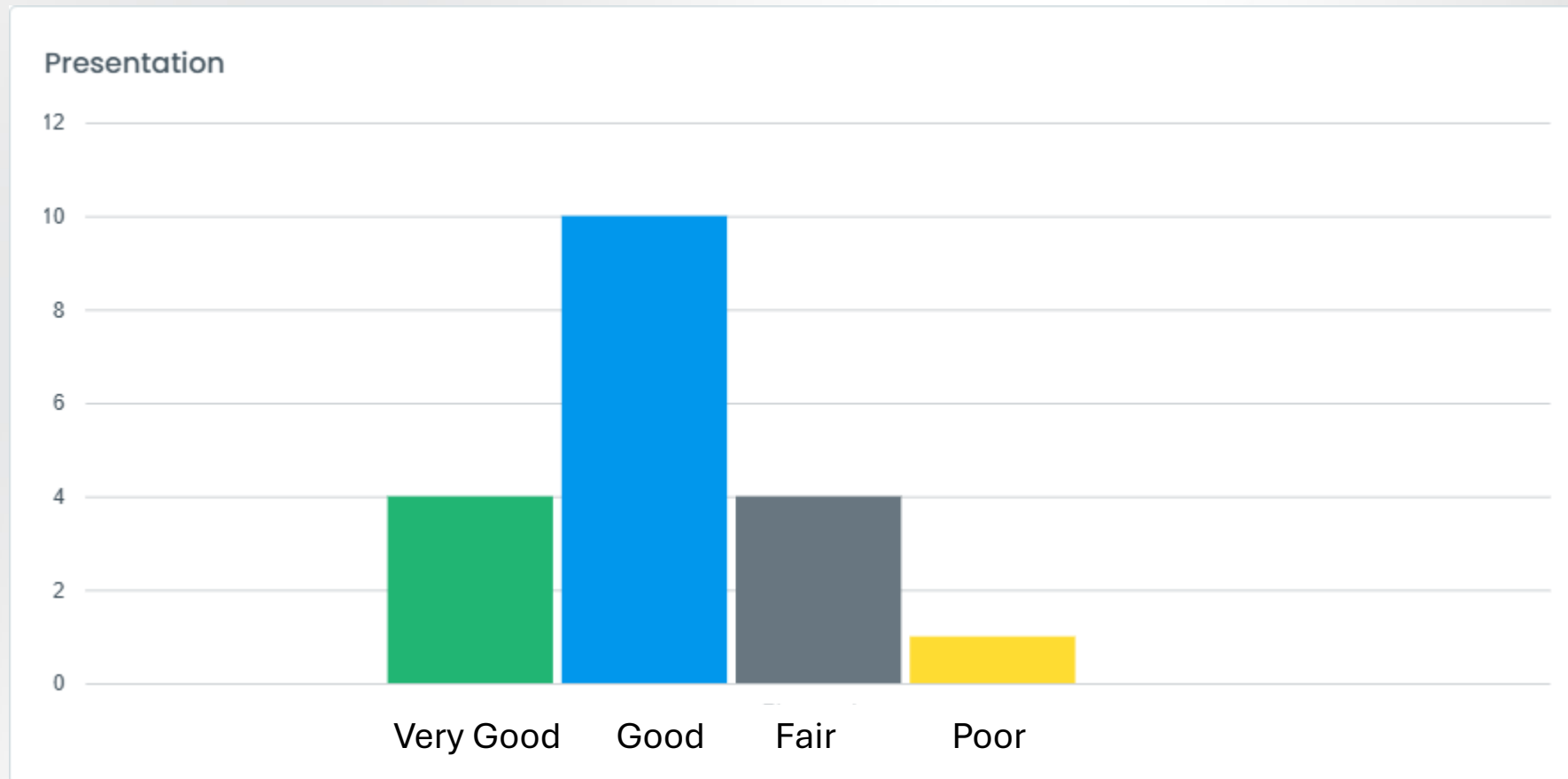


THE *Roadmap* TO AMAZING!

LONG-RANGE PLANNING
COMMITTEE

NOVEMBER 17, 2025

11/5/25 Feedback Form



Do you have any questions that were left unanswered specific to today's topics?

Has there ever been a form to sent to the community, parents and students regarding portables?

Is the committee convinced portables are going to be permanent fixtures in capacity calculations?

What will the impact of virtual learning have on the school populations?

LONG-RANGE PLANNING COMMITTEE

❖ CFISD Strategic Plan:

■ Guardrail 5:

- The Superintendent shall ensure that facilities adequately support the educational program and other operations.
 - Performance Objective 5.5:
 - Develop a long-range plan to address projected enrollment and asset protection, infrastructure needs, and replacement cycles for existing facilities.

LONG-RANGE PLANNING COMMITTEE

The goal of this meeting is to provide the committee with:

- ❖ An overview of the facility assessment process
- ❖ Information on the life cycle of critical infrastructure and security technology
- ❖ Identified facility needs projected for the next six years

The committee should leave this meeting with:

- ❖ A clear understanding of the facility's critical infrastructure
- ❖ Insight into current security technology systems
- ❖ Awareness of projected needs for the next six years
- ❖ Answers to any outstanding questions

CONSENSUS BUILDING GRADIENTS OF AGREEMENT

1	2	3	4	5
Disagree Veto Totally Opposed	Grave Concerns Not Comfortable Many Reservations	Decision is OK Some Concerns Can "Live With" It	Support Decision Basically Like It	Whole Heartedly Support Decision

CRITICAL INFRASTRUCTURE

- ❖ Essential systems that support daily operations, ensure safety, and maintain a functional and resilient environment.
 - Mechanical Systems (HVAC, Elevators, Building Automation Systems)
 - Electrical Systems (Power Distribution, Lighting, Emergency power)
 - Plumbing Systems (Water Supply, Wastewater Management, Fire Suppression)
 - Fire and Life-Safety Systems (Fire Alarm, Access Control, Surveillance Systems, Intrusion Detection)

WHY NOW?

- ❖ 121 District facilities
- ❖ 90 District facilities are 19 years old or older
- ❖ The District has opened 58 facilities since 2001
- ❖ Previous Bond Programs Addressed:
 - ❖ Priority 1 – Life Expectancy 1 to 3 Years
 - ❖ Priority 2 – Life Expectancy 3 to 6 Years
- ❖ The 2019 Bond was intended to address District needs through 2025



LONG-RANGE PLANNING

Facility Assessment Process

- ❖ Demographic Study



LONG-RANGE PLANNING

Facility Assessment Process

- ❖ Demographic Study
- ❖ Previous Bond Projects



LONG-RANGE PLANNING

Facility Assessment Process

- ❖ Demographic Study
- ❖ Previous Bond Projects
- ❖ 5-Year Maintenance Plan



LONG-RANGE PLANNING

Facility Assessment Process

- ❖ Demographic Study
- ❖ Previous Bond Projects
- ❖ 5-Year Maintenance Plan
- ❖ Department Meetings
 - ❖ Career & Technology
 - ❖ Athletics
 - ❖ Fine Arts
 - ❖ Support



LONG-RANGE PLANNING

Facility Assessment Process

- ❖ Demographic Study
- ❖ Previous Bond Projects
- ❖ 5-Year Maintenance Plan
- ❖ Department Meetings
- ❖ Principal/Building Administrator Survey



LONG-RANGE PLANNING

Facility Assessment Process

- ❖ Demographic Study
- ❖ Previous Bond Projects
- ❖ 5-Year Maintenance Plan
- ❖ Department Meetings
- ❖ Principal/Building Administrator Survey
- ❖ CFISD Facility & Maintenance Team



LONG-RANGE PLANNING

❖ Priority Codes

1. Must Do – Legal, safety reason and critical replacements
(life expectancy 1 to 3 years)
2. Should Do – Curricular, instructional, program need and systems replacements
(life expectancy 3 to 6 years)
3. Would Like To Do – Curricular, instructional, program enhancements and systems replacements
(life expectancy 6 to 10 years)
4. Future Consideration – Not required at this time
(life expectancy 10 plus years)



LONG-RANGE PLANNING

❖ 2025 Long-Range Planning

1. Must Do – Legal, safety reasons and critical replacements
(*life expectancy 1 to 3 years*)
2. Should Do – Curricular, instructional, program needs and systems replacements
(*life expectancy 3 to 6 years*)
3. Would Like To Do – Curricular, instructional, program enhancements ~~systems replacements~~
(*life expectancy 6 to 10 years*)
4. Future Consideration ~~Not required at this time~~
(*life expectancy 10 plus years*)



LIFE CYCLE

- ❖ Industry Guidelines (American Society of Heating, Refrigeration and Air-Conditioning Engineers)
- ❖ Age and Condition
- ❖ Repair Frequency
- ❖ Availability of Parts/Support
- ❖ Code Requirements

LIFE CYCLE

❖ Mechanical

- ❖ Air Cooled Chiller – 15 years
- ❖ Water Cooled Chiller – 25 years
- ❖ Cooling Tower – 20 years
- ❖ Elevator – 20 years

❖ Electrical Systems

- ❖ Switchgear – no longer supported
- ❖ Emergency Generator – 20 Years
- ❖ Lighting Controls – no longer supported

❖ Life Safety

- ❖ Fire Alarm – code
- ❖ Fire Sprinkler Heads – code
- ❖ Intercom – no longer supported

❖ Building Envelope

- ❖ Roof – 20 years
- ❖ Skylight – age and condition
- ❖ Window – age/single pane

121 Facilities (19.3 million square feet)

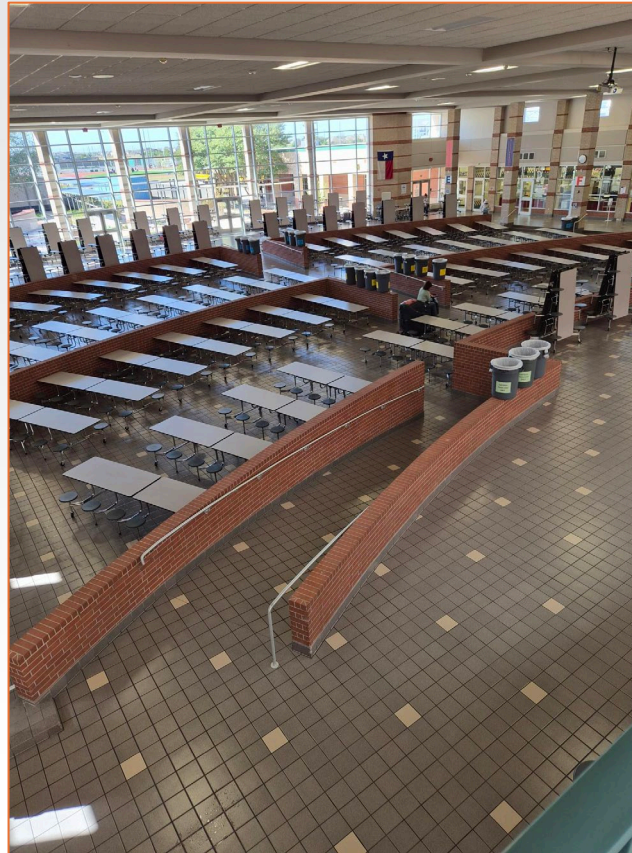
End of Life (EOL)

- Chillers – 62
- Cooling Towers – 45
- Boilers – 62
- Roofs – 55
- Switchgears – 46
- Elevators – 9



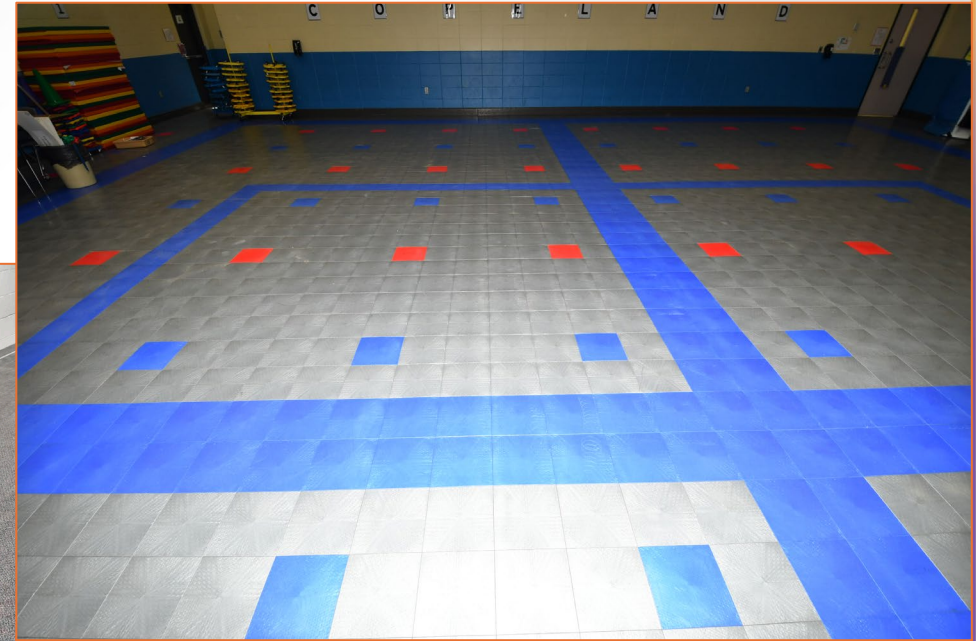
Safety & Life-Safety (Code/EOL)

- Fire Alarm
- Fire Sprinkler
- Emergency Generators
- Welding Classroom Exhaust
- Cy Springs Commons
- Bridgeland Bottleneck
- Jersey Village Bottleneck



Architectural (Age or Condition)

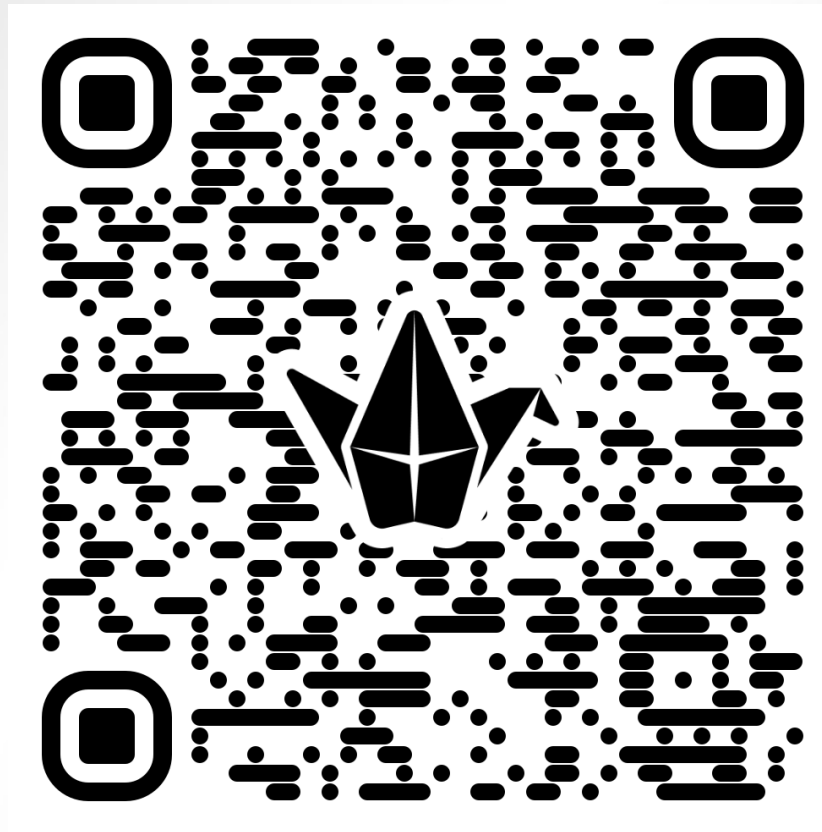
- Carpet
- Casework
- Elementary Gym Floors
- Furniture Replacement
- High School Auditorium Seating



2025 LONG-RANGE PLANNING

BIRKES ELEMENTARY SCHOOL:		YEAR BUILT: 2003
CRITICAL 1: Critical Infrastructure life cycle by 2029		
SYSTEM TYPE:	CFISD COMMENTS:	NOTES:
• Water-Cooled Chillers	Replace	29 Years Old in 2032
• Cooling Tower	Replace	29 Years Old in 2032
• Switchgear	Replace	No Longer Supported
• Fire Sprinkler Heads	Replace	Code
ARCH 1: Architectural life cycle by 2029		
SYSTEM TYPE:	CFISD COMMENTS:	NOTES:
• Flooring - ES Gym	Replace gym floor	Condition
BLACK ELEMENTARY SCHOOL:		YEAR BUILT: 2006
CRITICAL 1: Critical Infrastructure life cycle by 2029		
SYSTEM TYPE:	CFISD COMMENTS:	NOTES:
• Roof System	Recover Roof	Warranty Expires 2026
• Boilers	Replace	26 Years Old in 2032
• Cooling Tower	Replace	26 Years Old in 2032
• BAS Controls	Replace	26 Years Old in 2032
• Fire Sprinkler Heads	Replace	Code
• Switchgear	Replace	No Longer Supported
CRITICAL 2: Critical Infrastructure life cycle by 2032		
SYSTEM TYPE:	CFISD COMMENTS:	NOTES:
• Water-Cooled Chillers	Replace	26 Years Old in 2032

2025 LONG-RANGE PLANNING Activity





BOND 2019 Safety



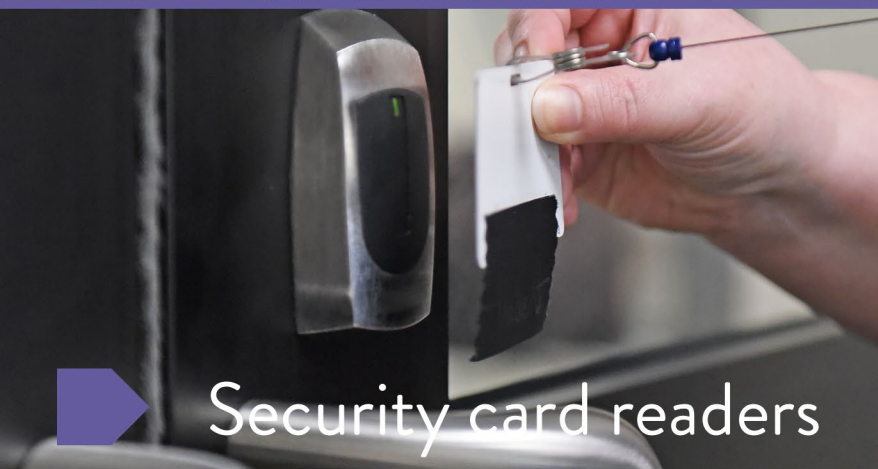
Campus segmentation



Security fencing



Secured front entries



Security card readers



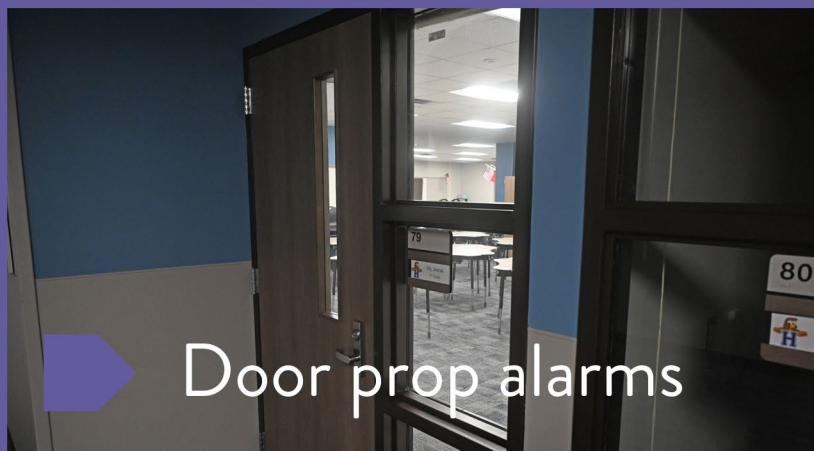
Video intercom systems



Lockdown buttons



Classroom phones



Door prop alarms



Door numbering

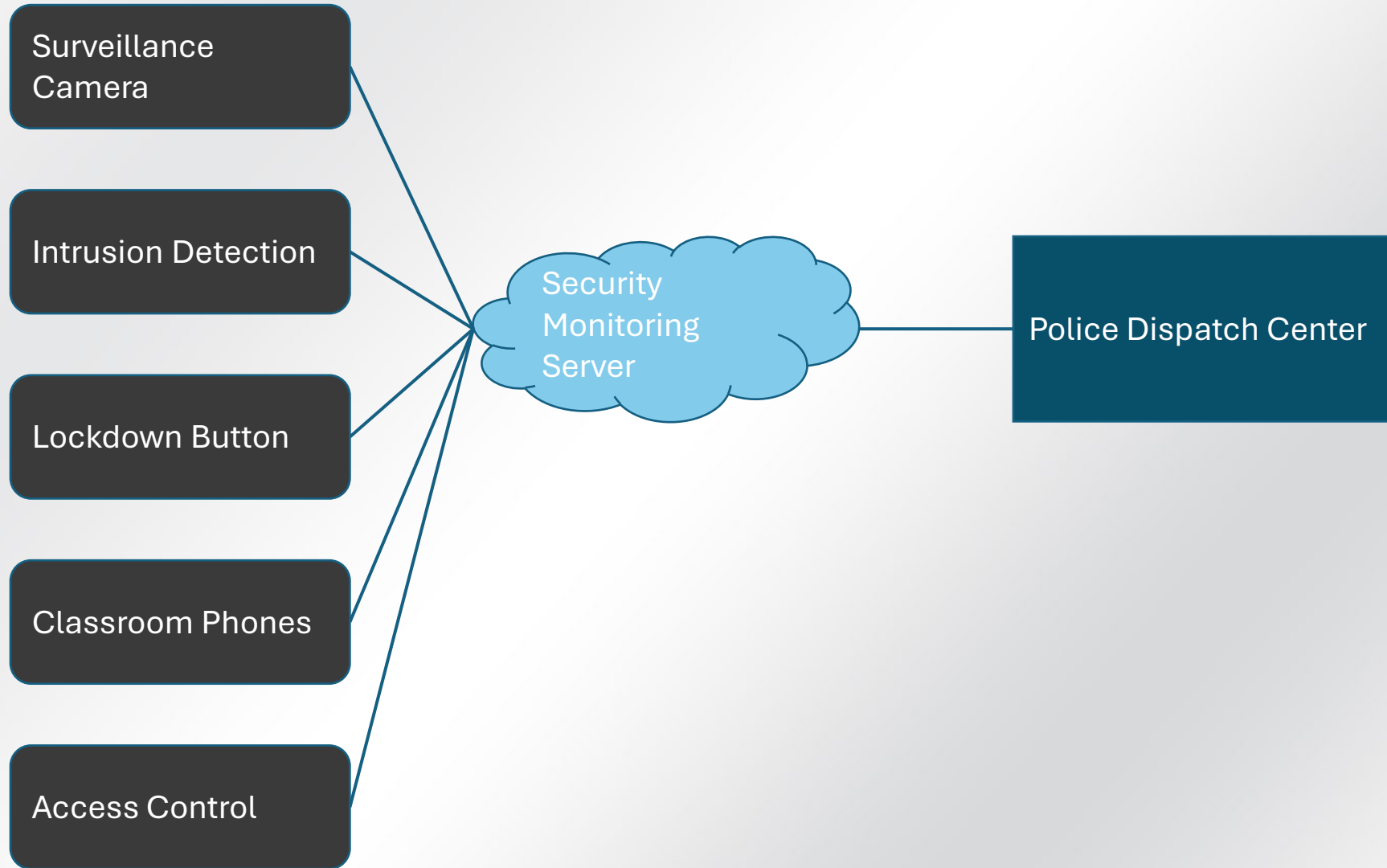
SECURITY TECHNOLOGY INFRASTRUCTURE



Swiss cheese analogy

Layering of security measures

SECURITY TECHNOLOGY COMMUNICATION FLOW



SECURITY TECHNOLOGY INFRASTRUCTURE

Strategic Goals

- ❖ Student and staff safety
- ❖ Streamline operations across all facilities
- ❖ Maintain cybersecurity standards
- ❖ Ensure forward compatibility

SECURITY TECHNOLOGY INFRASTRUCTURE



Project Definition

Objective 1: Assess the Current State

Objective 2: Identify Risks and Limitations

Objective 3: Evaluate Modernization Options

Objective 4: Recommend a Roadmap

SECURITY TECHNOLOGY INFRASTRUCTURE



Scope of Evaluation

- ❖ Video Surveillance (servers, cameras, and storage used to monitor campuses and facilities)
- ❖ Access Control (door panels and controllers, card readers, and locking hardware)
- ❖ Intrusion Detection (intrusion monitoring across campuses and support facilities)
- ❖ Bell, Clock, and Public Address (PA) Systems
- ❖ Emergency Communications
- ❖ Network Infrastructure
- ❖ Financial Planning and Lifecycle Management

SECURITY TECHNOLOGY INFRASTRUCTURE



Deliverables

- ❖ Observations - Narrative detailing CFISD's current environment, system configurations, and needs assessment.
- ❖ Detailed options for updated/refreshed security systems/devices.
- ❖ Best practices and recommendations for District-wide standards.
- ❖ Probable cost estimate associated with the recommendations.
- ❖ Detailed recommendations for upgrades with a recommended migration strategy.
- ❖ GANTT chart with a recommended District-wide migration plan/schedule.

CFISD Security Technology SWOT Analysis

Evaluating strengths, weaknesses, opportunities,
and threats clearly

Strengths

Robust Network Architecture

Enterprise-grade network with redundant paths ensures reliable connectivity for all security systems.

Security Platforms

Video surveillance, access control, intrusion detection, and public address systems with operational reliability.

Layered Safety Approach

Combines cameras, access control, PA systems, and emergency phones for comprehensive protection.



Weaknesses



Aging Security Infrastructure

Many servers and intrusion systems are outdated and nearing end-of-life, risking cybersecurity and reliability.

Fragmented Technology Integration

Standalone security solutions limit real-time situational awareness and complicate incident responses.

Operational Complexity

Distributed servers and manual credentialing increase administrative burden and operational challenges.

Opportunities

Centralized Server Infrastructure

Centralizing and servers reduces costs and streamline cybersecurity management.

Advanced Analytics and Storage

Offers scalability and strong disaster recovery for data management.

Unified Security Platforms

Integrating video surveillance, access control, and emergency communications streamlines operations.



Threats

Cybersecurity Vulnerabilities

Unsupported operating systems and outdated firmware increase risks of cyberattacks and data breaches.

Regulatory Compliance Pressure

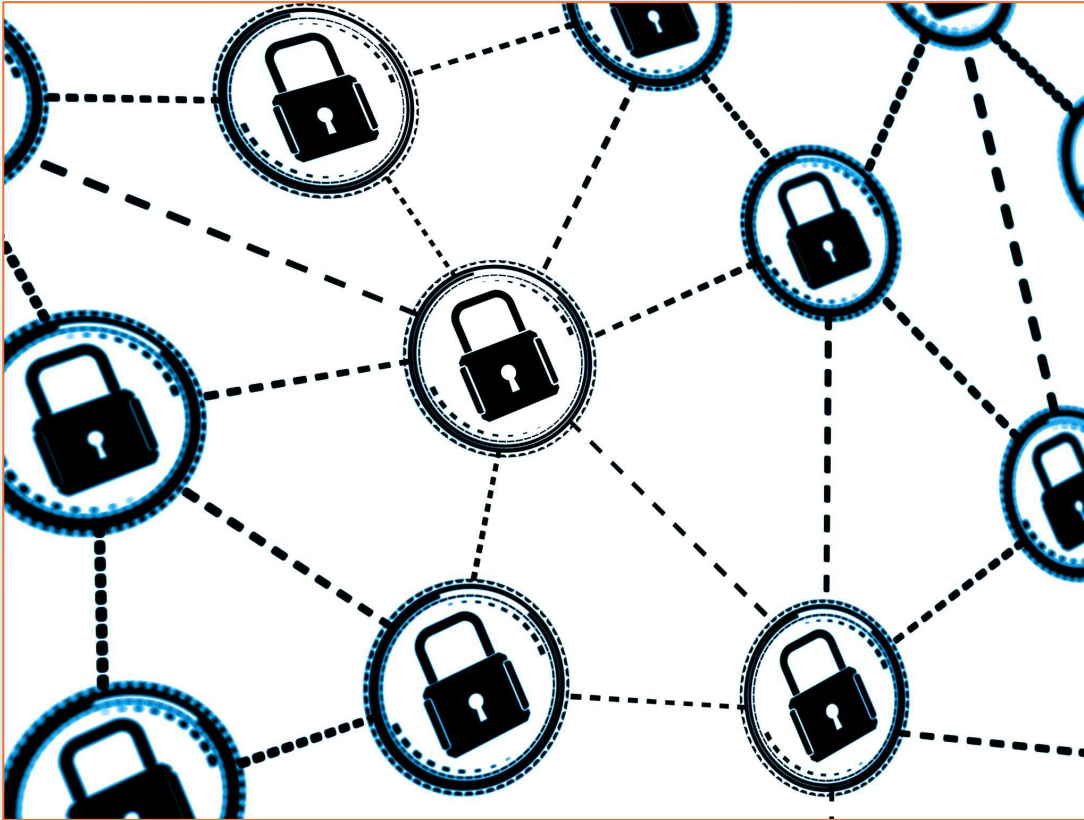
Evolving laws require timely system upgrades to meet strict security and safety standards.

Funding Constraints

Funding limitations delay modernization, increasing security gaps over time.

Environmental and Network Risks

Storms, flooding, and network outages threaten physical infrastructure and critical safety systems.



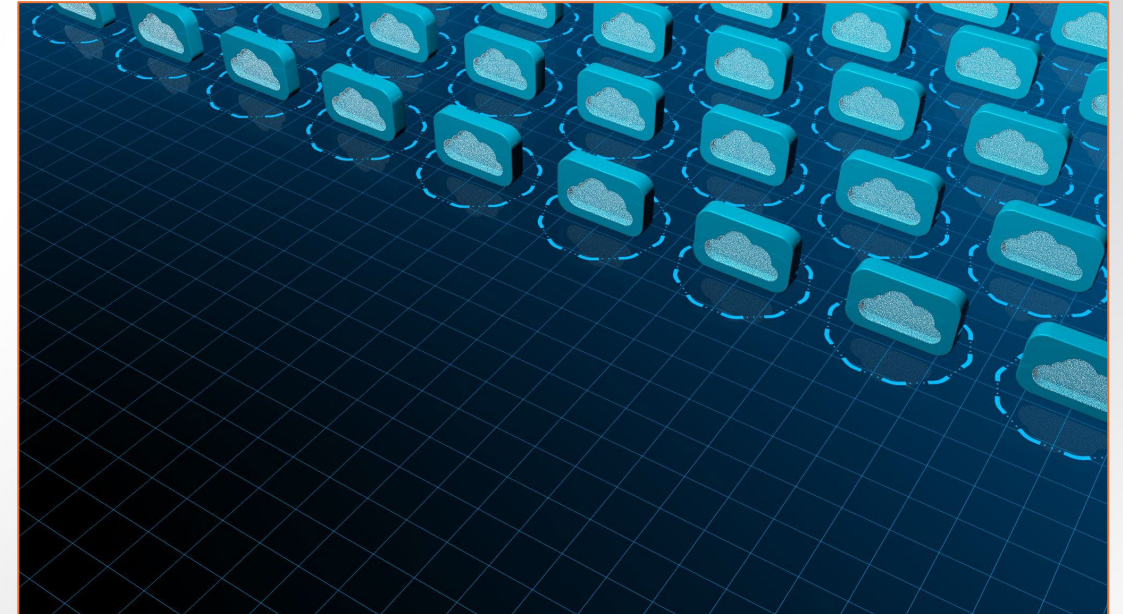
Key Takeaways

Strategic Goal

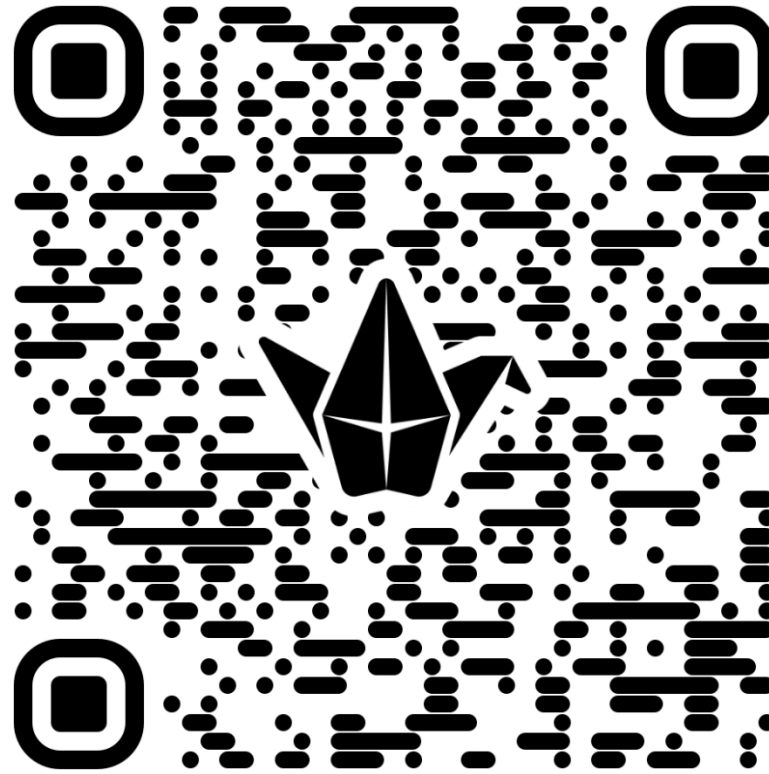
- Replace end-of-life hardware and stabilize operations.
- Consolidate servers for better security.
- Explore integrated software platforms and hybrid-cloud solutions for scalability and compliance.

Unified System Integration

Integrate systems into one platform, streamlining operations and enhancing safety.



2025 LONG-RANGE PLANNING Activity



Next Meeting – Wednesday, Dec. 3

Today's Feedback Form:

