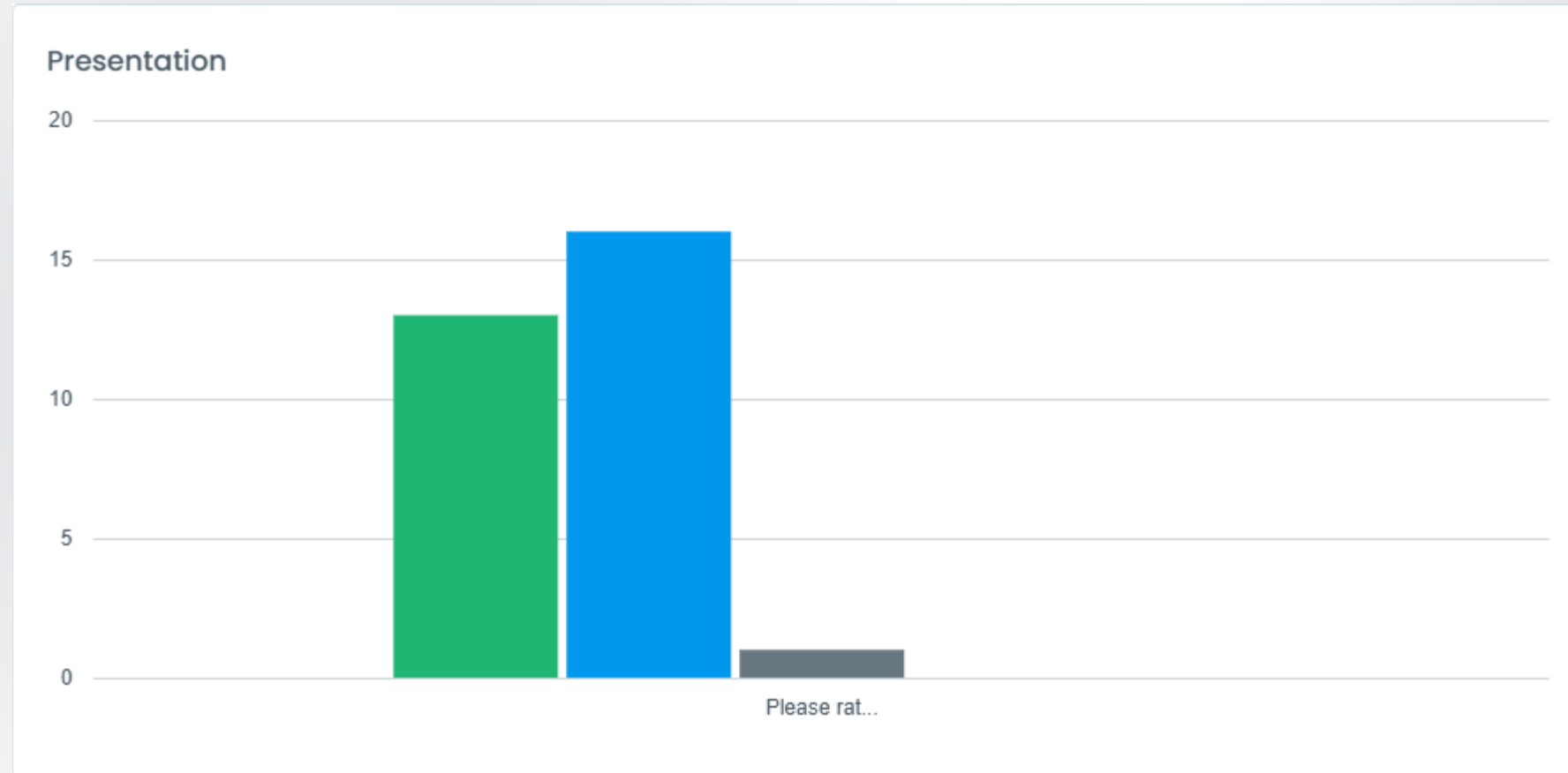


THE *Roadmap* TO AMAZING!

LONG-RANGE PLANNING
COMMITTEE

DECEMBER 3, 2025

Nov. 17 Feedback Form



Executive Summary of Questions and Responses 11-17-25



CRITICAL INFRASTRUCTURE

Cost & Budget

Q: How much do Priority Ones cost? What is the bottom line and budget?

A: Costs will be shared in this evening's presentation.

Bond & Funding

Q: How does a bond work? Tax implications?

A: A potential bond structure and tax implications will be explained in a financial presentation on January 7, 2026.

Q: End result amount for the bond?

A: The committee determines need and final recommended amount.

Project Execution

Q: Order of upgrades: campus-by-campus or district-wide? How long does replacement take?

A: This depends on scope and contractor availability. The projects are packaged for efficiency.

CRITICAL INFRASTRUCTURE

Procurement & Standards

Q: Contractor review process?

A: The district uses the competitive sealed proposal (CSP) method.

Request for Proposals (RFP): The district issues an RFP outlining the scope of work, specifications, evaluation criteria, and submission requirements.

- **Proposal Submission:** Vendors submit sealed proposals by a specified deadline. These proposals include pricing and detailed plans for meeting the project requirements.
- **Evaluation:** A committee evaluates proposals based on published criteria, which include price, qualifications, reputation, references, and sub-contractors.
- **Negotiation:** CSP allows negotiation with the highest-ranked proposer to refine terms before awarding the contract.
- **Award:** The contract is awarded to the proposer offering the “best value,” not necessarily the lowest price.

Q: Same manufacturer for parts?

A: Yes, where possible.

CRITICAL INFRASTRUCTURE

Concerns

Q: Inflation impact?

A: Inflation is added to current cost estimates.

Q: Construction disruption?

A: Acknowledged; shorter summers impact timelines.

Commitments

Q: How confident are we that these end-of-life numbers are accurate?

A: End-of-life numbers are based on industry standards.

Q: Critical infrastructure is non-negotiable. Safety concerns are a priority.

A: Agree; safety and operational needs were prioritized.

SECURITY TECHNOLOGY INFRASTRUCTURE

Emergency Management

Q: Systems for mass-emergency communication?

A: District PD communicates with all first responders; SchoolMessenger is the district's mass notification system (email, phone, and text) for parents/staff. In addition, social media, the website, and Remind may be utilized.

Technology & Infrastructure

Q: Cloud vs. servers?

A: Cloud poses privacy risks; hybrid solutions considered.

Q: Integrated software solution?

A: Exists; minimal customization expected.

Cybersecurity

Q: Training against phishing?

A: We complete cybersecurity training for all staff members. We have over 100,000 trainings completed per year. We implement monthly security awareness training for all staff and quarterly phishing campaigns to test staff vigilance.

SECURITY TECHNOLOGY INFRASTRUCTURE

Redundancy & Reliability

Q: What if integrated system fails?

A: Failover redundancy is in place at second data center.

Q: Server space and security?

A: Minimal space; secure locations.

Concerns

Q: Manual server onboarding unsustainable.

A: Moving toward centralized, unified platform.

Q: Wi-Fi dependency?

A: We have a robust wireless network and maintain a 99% + uptime. However, core systems for safety and security are not solely dependent of our wireless network. Chromebooks work on all wireless networks, and we routinely have over 200,000 devices on our wireless network simultaneously.

SECURITY TECHNOLOGY INFRASTRUCTURE

Commitments

Q: PD response time?

A: Less than 4 minutes for emergencies.

Q: “I Love You Guys” protocol?

A: Standard reunification method and standard response protocol are provided to staff through training annually, and are provided to students through training, such as during lock down and secure drills, each semester

Q: Are there other solutions to security we should consider instead of technology.

A: The district has made a significant investment in hardening our facilities. Technology allows us to monitor the environment, provide/deny access, and alert first responders.

LRPC FEEDBACK

LRPC Feedback Questions

Q: Better ventilation at the rear barns at the exhibit center.

A: We will add these items to the facilities upgrade list.

Q: Is it possible to add a line item for every school to either get analog clocks that tell the correct time or change them out for digital clocks centrally connected to tell the right time? Out of the 5 schools I have been in this year, I could not find one clock which was not at least 5 minutes off.

A: We will add these items to the facilities upgrade list.

Long-Range Planning Committee - Rank the charge

Review and consideration of possible attendance boundary changes to address areas with growth, as well as areas with declining enrollment



1st

Assessment of the critical infrastructure of existing facilities and future needs



2nd

Review of student enrollment and efficiency at each campus



3rd

Assessment of the security infrastructure of existing facilities and future needs



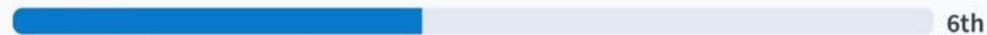
4th

Assessment of technology infrastructure and future needs



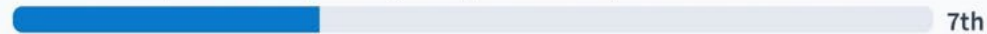
5th

Assessment of facility needs as a result of growth in identified areas of the district and areas of declining enrollment



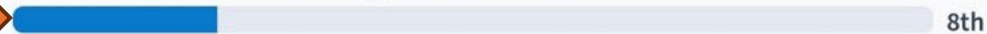
6th

Review of transportation fleet, including buses, police vehicles, and other district vehicles



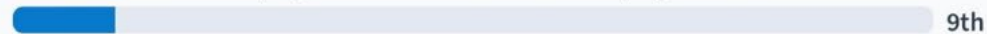
7th

Assessment of instructional technology and future needs



8th

Review of current district programs and identification of future program needs



9th

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LONG-RANGE PLANNING COMMITTEE TECHNOLOGY SERVICES

**21st Century Learners Today
21st Century Leaders Tomorrow**



LONG-RANGE PLANNING COMMITTEE

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

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

The committee should leave this meeting with:

- ❖ A clear understanding of the technology utilization across the district
- ❖ Awareness of projected needs for the next six years
- ❖ Answers to any outstanding questions

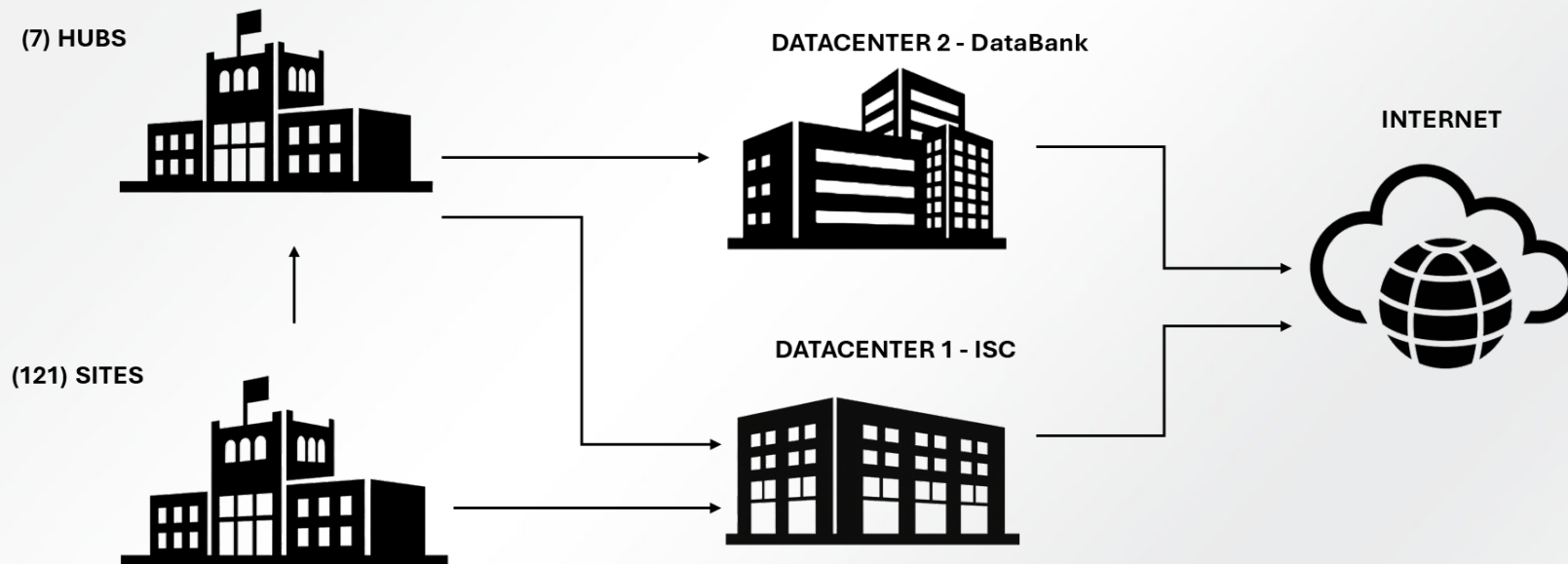


TECHNOLOGY LONG-RANGE PLANNING CATEGORIES



NETWORK INFRASTRUCTURE

- ❖ **Datacenters** - Servers, Storage, Load Balancers, Wireless Controllers, Firewalls, Content Filter
- ❖ **Wide Area Network** - HUB Switches, Core Network, Fiber Optic Links
- ❖ **Local Area Network** - Campus Switches, Wireless Access Points, Phones, UPS, Cabling



NETWORK INFRASTRUCTURE STATISTICS

11,475	Wireless Access Points
13,700	VoIP Phones
3,156	Campus Switches
572	Network Closets
400	Virtual Servers
3 Petabytes	File Storage
4,535	Fiber Optic Miles



**TECHNOLOGY
SERVICES**

NETWORK INFRASTRUCTURE NEEDS



**Server
Infrastructure**



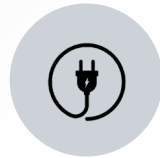
**Telephony
Infrastructure**



Switches



Wireless



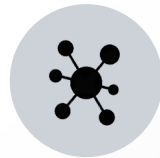
UPS



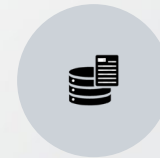
Cabling



Storage



Core Network



Database



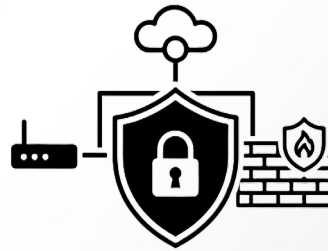
**TECHNOLOGY
SERVICES**

CYBERSECURITY DEFENSE

- ❖ **Endpoint Security** - End Point Detection and Response, Software Updates, and Encryption
- ❖ **Network Security** - Firewalls, Network Detection and Response and Network Access Controls
- ❖ **Data Security** - Training, Password/Multifactor Authentication, Data Privacy and Vendor Compliance



Endpoint Security



Network Security



Data Security

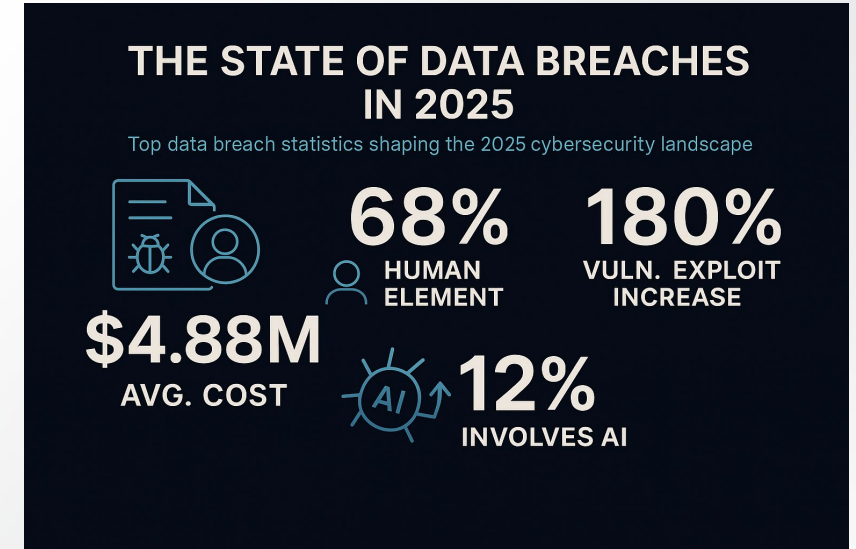


**TECHNOLOGY
SERVICES**

EVOLVING CYBERSECURITY THREAT LANDSCAPE

National research indicates:

- Ransomware recovery costs have doubled to \$4.88M
 - Source: <https://www.hipaajournal.com/>
- Phishing & social engineering is the most exploited vulnerability
 - Source: www.paloaltonetworks.com
- 2023 was a record-breaking year with 954 breaches
 - Source: <https://www.infosecurity-magazine.com/>
- Increased attack frequencies occurring every 85 minutes
 - Source: <https://www.digitalsilk.com/>
- Education organizations highly targeted
 - Source: <https://www.sentinelone.com>
- Sophistication is increasing, 12% of attacks using AI
 - Source: <https://deepstrike.io>
- Restoration can take over 30 days, and recovery can take months
 - Source: www.neumetric.com



CFISD CYBERSECURITY DEFENSE PRIORITIES

- Implement multifactor authentication
- Keep software up to date
- Require strong, unique passwords
- Maintain offline backups
- Practice incident responses
- Evaluate third-party vendors
- Implement network segmentation
- Secure endpoints
- Conduct regular security training
- Perform risk assessments



CYBERSECURITY DEFENSE STATISTICS

67,200	Endpoint Detection Alerts
34,000	Phishing Alerts
84 Million	Blocked Malicious Emails
8.5 Billion	Unauthorized Blocked Websites
600	Network Detection Alerts
1,250	Reset Compromised Passwords
130,000	Annual User Trainings



**TECHNOLOGY
SERVICES**

CYBERSECURITY DEFENSE NEEDS



**Next Generation
Firewall**



**Network Access
Control (NAC)**



Content Filter



Data Governance



**Network Detection
and Response**



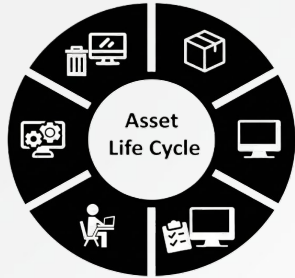
Data Loss Prevention



**TECHNOLOGY
SERVICES**

DISTRICT TECHNOLOGY SUPPORT

- ❖ **Technology Lifecycle** - Tracking all equipment lifecycles to ensure staff and students have well-serviced computers to perform their tasks effectively in the classroom or office
- ❖ **User Support** – Helpdesk, core applications, student information systems, Google, Microsoft and integration systems
- ❖ **Device Support** – Staff computers, audio visual, printers, timeclocks, specialty equipment, peripherals



Technology
Lifecycle



User Support



Device Support
& Maintenance

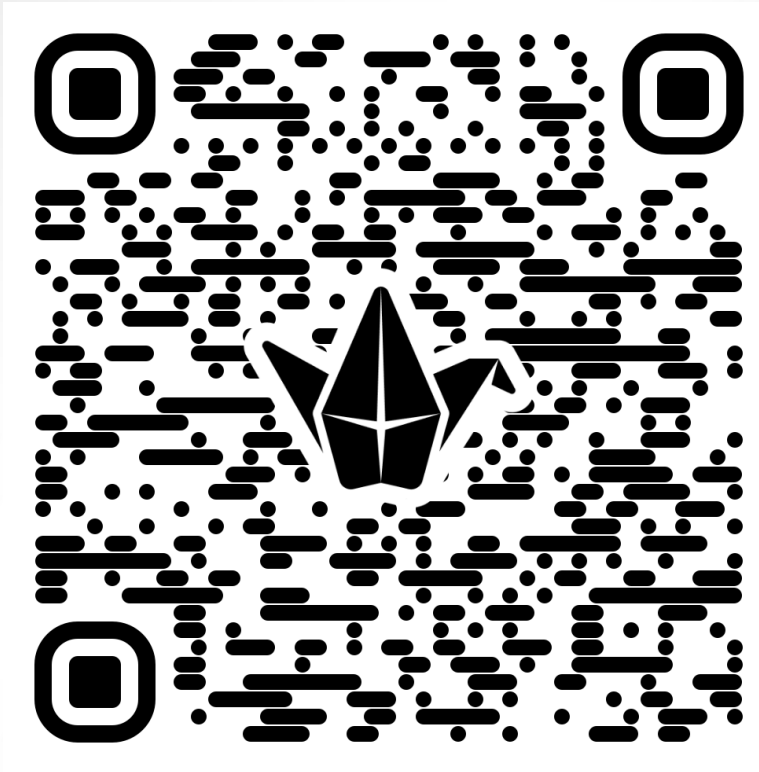
NETWORK INFRASTRUCTURE AND CYBERSECURITY KEY TAKEAWAYS

- Technology touches every corner of CFISD
- Technology long-range planning = lifecycle replacement every 5–7 years
- Cybersecurity threats continue to evolve
- Maintaining our technology supports operations and learning



2025 LONG-RANGE PLANNING

Activity 1

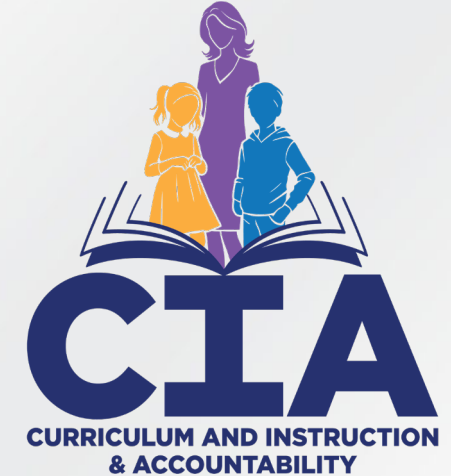


LONG-RANGE PLANNING COMMITTEE INSTRUCTIONAL TECHNOLOGY

**21st Century Learners Today
21st Century Leaders Tomorrow**



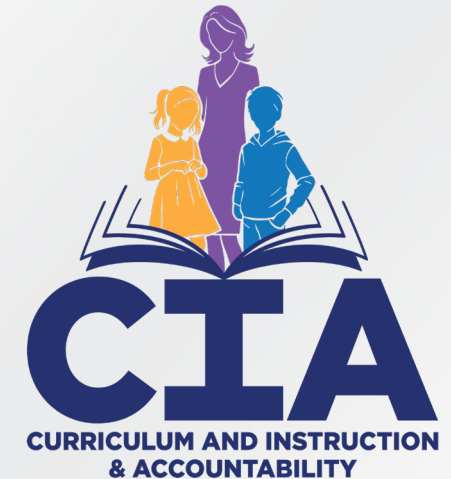
LONG-RANGE PLANNING COMMITTEE INSTRUCTIONAL TECHNOLOGY CURRICULUM & INSTRUCTION



OBJECTIVE:

The LRPC will...

- Learn why technology is an integral part of the CFISD classroom.
- Understand what is the standard classroom technology setup.
- Understand the life cycle of classroom and other district technology.

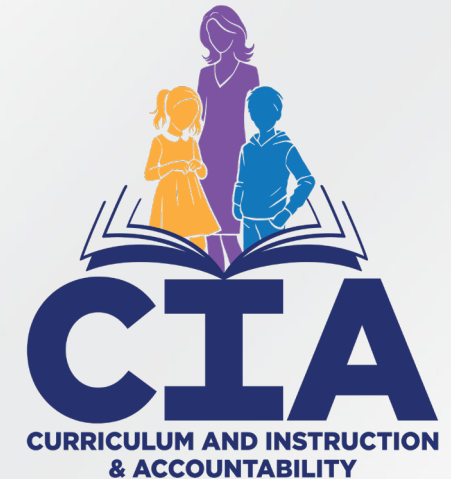


DISTRICT IMPROVEMENT PLAN

GOALS 1-8 = INSTRUCTION



Standards



TECHNOLOGY APPLICATION TEKS - K

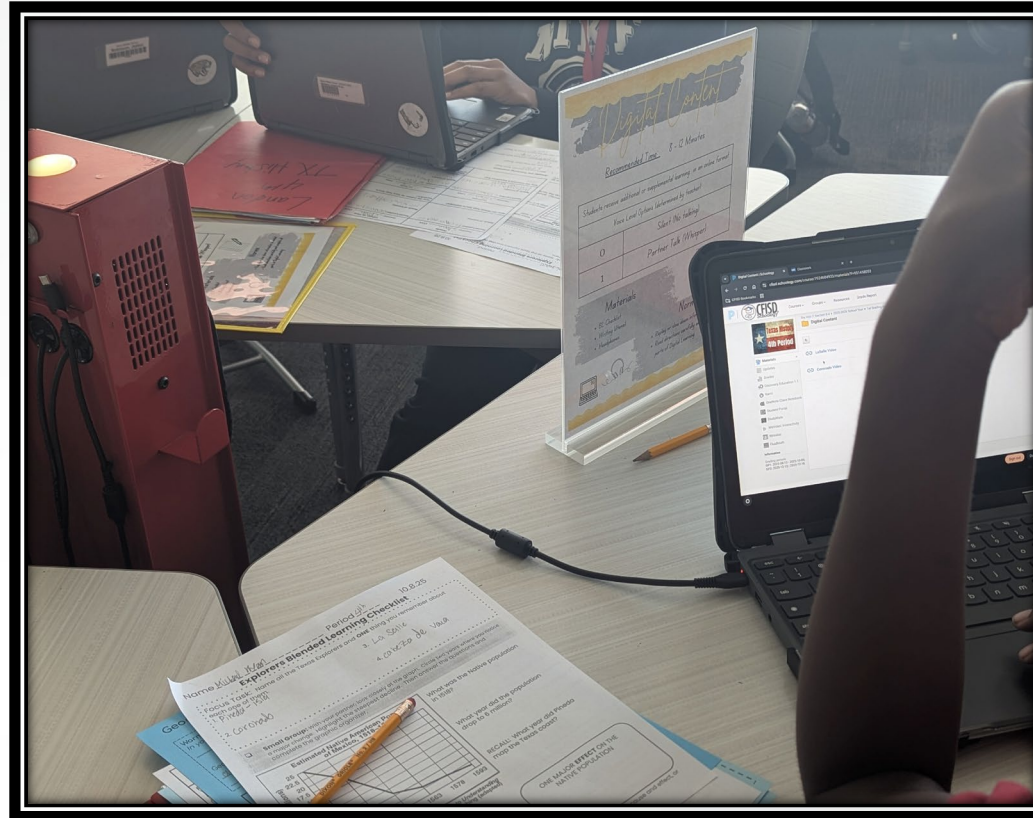
(1) Computational thinking--
foundations. The student explores the core concepts of computational thinking, a set of problem-solving processes that involve **decomposition, pattern recognition, abstraction, and algorithms**.

LONG-RANGE
PLANNING
COMMITTEE
INSTRUCTIONAL
TECHNOLOGY



HOW DO STUDENTS ACCESS TECHNOLOGY IN CFISD?

- Daily Assignments
- Textbooks
- Assessments
- LMS
- AP Classrooms
- Dual Credit Courses
- CTE Certifications
- Digital Art
- Coding and Robotics
- Assoc. Degrees



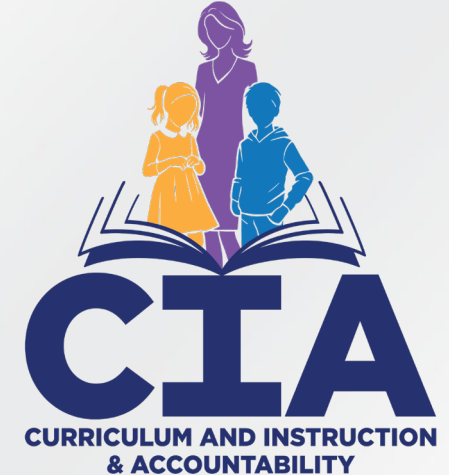
LONG-RANGE
PLANNING
COMMITTEE
**INSTRUCTIONAL
TECHNOLOGY**



2014 FLASH BACK

2014 Standard Classroom Technology

- Interactive Digital Displays
- Document Cameras
- Teacher Devices
- 7-8 Student Devices
- Audio Enhancement System



2019 FLASH BACK



2019 Standard Classroom Technology

REPLACEMENTS

- Interactive Digital Displays
- Document Cameras
- Teacher Devices
- 7-8 Student Devices
- Audio Enhancement System



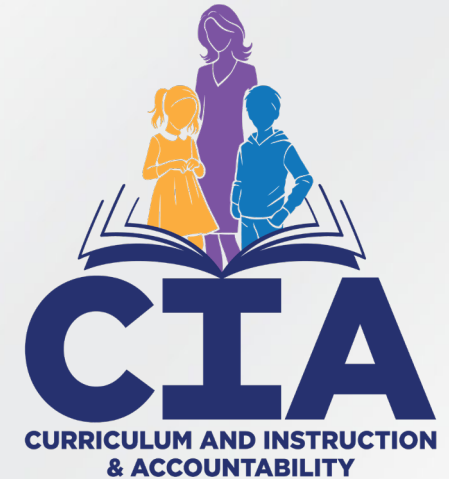
The Bond funds also covered ClassFlow software,

2019 FLASH BACK

2019 Standard Classroom Technology

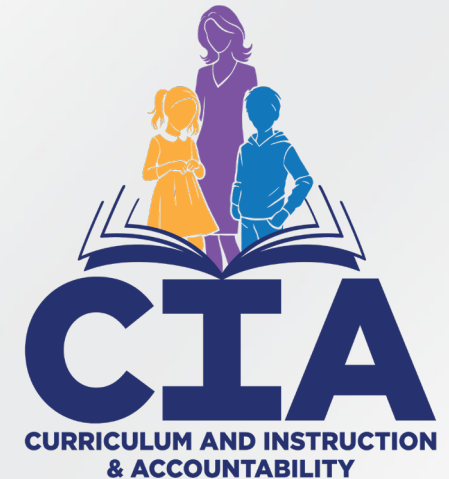


COVID 1:1 Chromebooks



Standard Classroom Technology Today

- Interactive Digital Displays
- Document Cameras
- Teacher Devices
- Audio Enhancement Systems
- Student Devices



WHY CLASSROOM AUDIO IS IMPORTANT?

Distance



75%



Teacher's
voice level
drops

12 + feet

Comprehension



Young listeners VS Adults
90-100% 50-60%



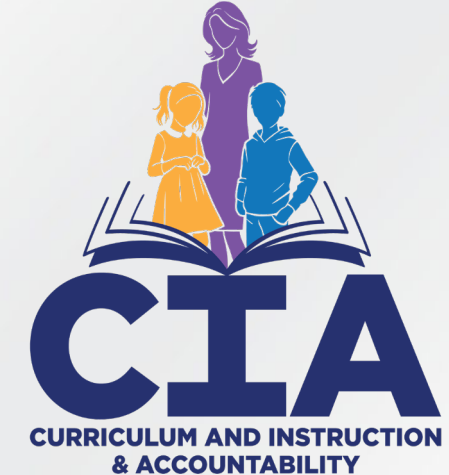
Teachers spend 80% of the day talking

LONG-RANGE
PLANNING
COMMITTEE
**INSTRUCTIONAL
TECHNOLOGY**



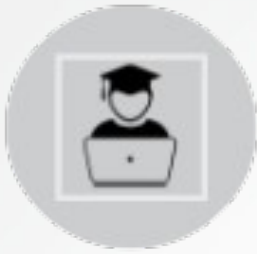
CTE & DIGITAL ART & MEDIA

- Audio/Visual Productions
- Drafting
- Business
- Computer Science
- Digital Art & Media
- Photography (Digital)
- Journalism/Yearbook



INSTRUCTIONAL TECHNOLOGY

- ❖ **Student Chromebooks** – Allow students to access curriculum, assessments, certifications, dual credit courses, AP classes and more. They ensure that students can access our modern world.
- ❖ **Advanced Computer Labs** – Allow our students to gain experience with industry-like software and earn certifications that are recognized in the workplace.
- ❖ **Standard Classroom Technology** – Allows our teachers to deliver instruction in a modern way and helps students stay engaged as we meet them where they are in a technology advanced world.



**Student
Chromebooks**



**Advanced
Computer Labs**



**Standard Classroom
Technology**

INSTRUCTIONAL TECHNOLOGY STATISTICS

118,000+	Student Chromebooks
10,000	Teacher Devices
8,000	Interactive Flat Panels
8,000	Classroom Audio
4,980	Advanced Computers Labs
8,400	Document Cameras



**TECHNOLOGY
SERVICES**

INSTRUCTIONAL TECHNOLOGY KEY TAKEAWAYS

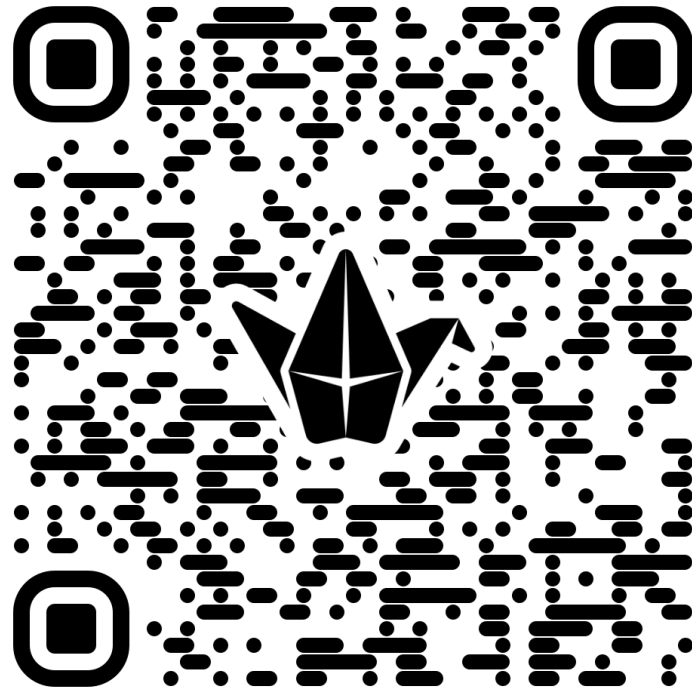
- The main reason we are here is for students and providing them the best education possible.
- The State of Texas is requiring more technology in K-12: Technology Application TEKS (K-12), STAAR and EOC Tests and Online Textbooks.
- Students are entering a world that looks very different than adults have experienced and will need technology skills to be successful.
- Classroom, student and staff devices all have an End-of-Life date and will require replacements.

TECHNOLOGY LIFE CYCLE

Major Asset Category	Lifecycle Expectation	Replacement Due
Student Chromebooks	5 years	Priority 1 (12 months)
Advanced Computers Labs	5 years	Priority 1 (12 months)
Staff Laptops	5–7 years	Priority 1 (12 months)
Telephones	7–10 years	Priority 1 (24 months)
Classroom Audio	5–7 years	Priority 1 (24 months)
Document Cameras	5–7 years	Priority 1 (24 months)
Network Switches	5–7 years	Priority 2 (36 months)
Wireless Access Points	5–7 years	Priority 2 (36 months)
UPS Units	5–7 years	Priority 2 (36 months)
Network Cabling	15–25 years	Priority 2 (36 months)
Firewalls	5–7 years	Priority 2 (36 months)
Data Loss Prevention Tools	5 years	Priority 2 (36 months)
Audio-Visual Equipment	5–7 years	Priority 2 (36 months)
Interactive Flat Panels	5–7 years	Priority 2 (36 months)
Printers	7–10 years	Priority 2 (Replace when no longer repairable)
Time Clocks	5-7 years	Priority 2 (Replace when no longer repairable)

2025 LONG-RANGE PLANNING

Activity 2



CRITICAL INFRASTRUCTURE

Priority	Current Projected Cost
Priority 1: Critical Infrastructure life cycle by 2029	\$620,128,006
Priority 1: Architectural life cycle by 2029	\$67,361,205
Priority 1: Industrial & Ag Tech Ventilation Improvements	\$12,437,161
Priority 1 Total	\$699,926,372
Priority 2: Critical Infrastructure life cycle by 2032	\$98,614,097
Priority 2 Total	\$98,614,097
Total	\$798,540,469

SECURITY TECHNOLOGY INFRASTRUCTURE

Priority	Current Projected Cost
Priority 1: Security Technology Infrastructure life cycle by 2029	
VMS (Integrated Solution)	\$5,250,000
Servers	\$12,600,000
Cameras	\$25,602,700
Access Control	\$19,074,900
Intrusion Detection	\$12,780,000
PA	\$59,145,161
Total	\$134,452,761

TECHNOLOGY INFRASTRUCTURE & INSTRUCTIONAL TECHNOLOGY

Priority	Current Projected Cost
Priority 1: Technology Infrastructure life cycle by 2029	\$92,382,357
Priority 1: Cybersecurity Measures life cycle by 2029	\$16,896,816
Priority 1: Instructional Technology life cycle by 2029	\$241,298,772
Priority 1 Total	\$350,577,946
Priority 2: Technology Infrastructure life cycle by 2032	\$83,560,773
Priority 2: Cybersecurity Measures life cycle by 2032	\$4,497,807
Priority 2: Instructional Technology life cycle by 2032	\$22,822,638
Priority 2 Total	\$110,881,218
Total	\$461,459,164

LONG-RANGE PLANNING COMMITTEE

PROCESS	TIMELINE
Review of technology infrastructure and instructional technology needs	Wednesday, Dec. 3, 2025
Update Board of Trustees	Thursday, Dec. 11, 2025
Review of athletics, instructional programs, and transportation needs	Wednesday, Dec. 17, 2025

LONG-RANGE PLANNING COMMITTEE

PROCESS	TIMELINE
Discuss the potential financial impact of identified needs and funding options	Wednesday, Jan. 7, 2026
Update Board of Trustees	Monday, Jan. 12, 2026
Prioritize long-term needs	Wednesday, Jan. 14, 2026
Discuss the financial impact of priority needs and finalize recommendation	Wednesday, Jan. 28, 2026
Final Recommendation to Board of Trustees	Thursday, Feb. 5, 2026

Next Meeting – Wednesday, Dec. 17

Today's Feedback Form:

