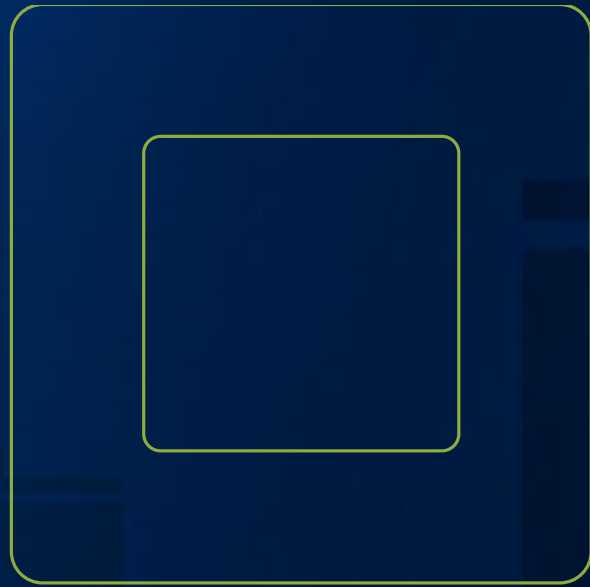




PAST. PRESENT. FUTURE.

BOND 2020 TECHNOLOGY, SAFETY & SECURITY



OVERVIEW





Overview of Technology & Security Bond

TECHNOLOGY

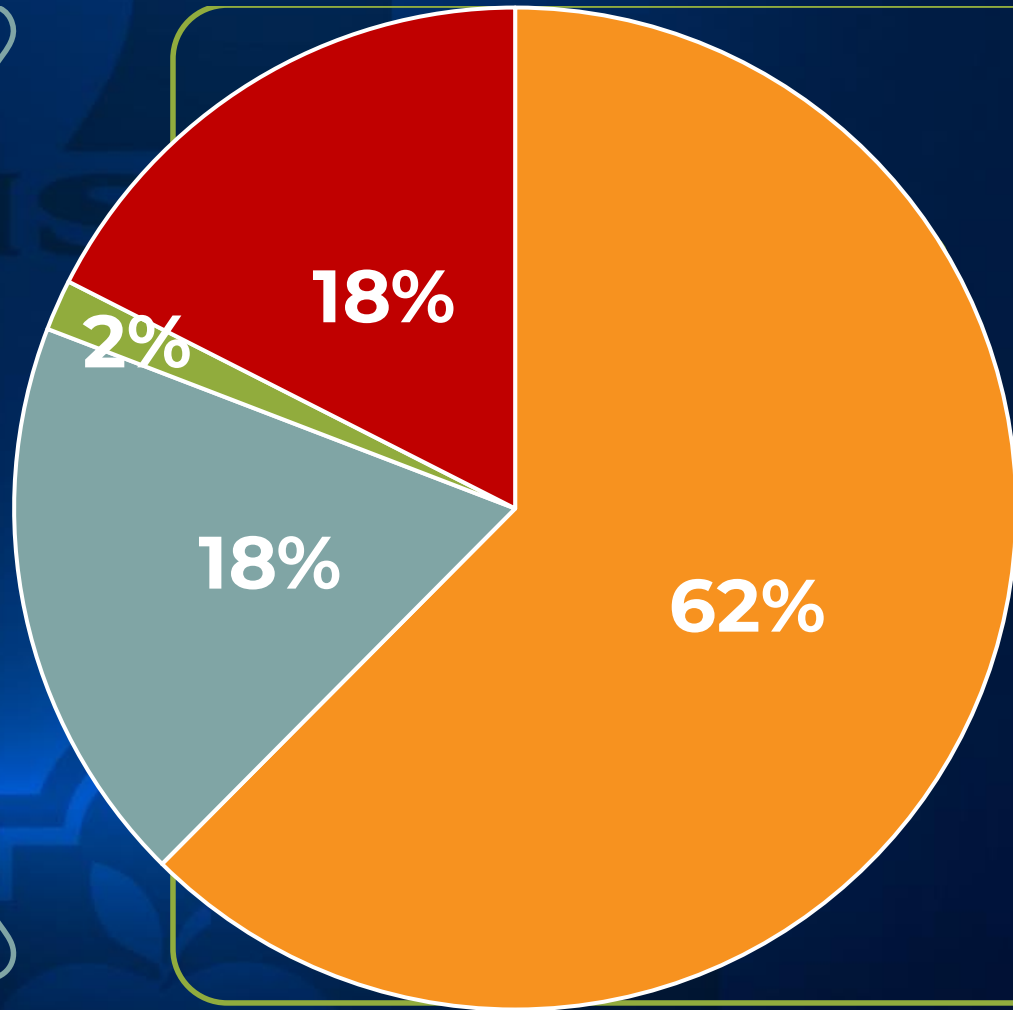
- \$90 million approved under Proposition B
- Public Goal: “Equipping every classroom with high-speed connectivity, audio systems, interactive smart boards, devices, support tools and the necessary infrastructure.”
- Bond funds help schools keep up with the cycle of replacement for modern technology

SECURITY

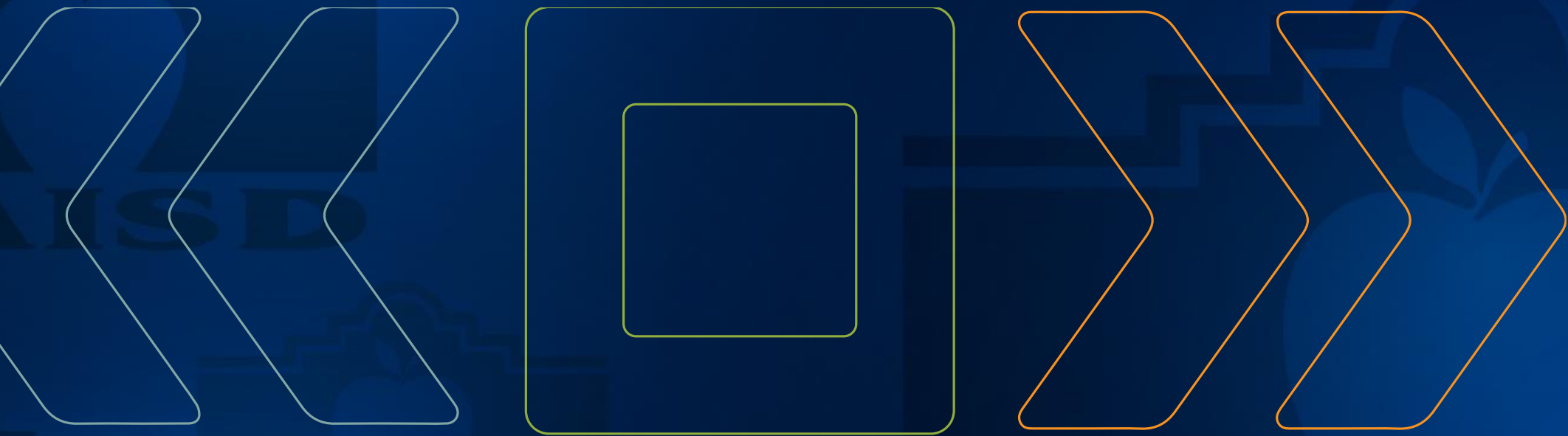
- \$12 million approved under Proposition A
- Public Goal: “Safety upgrades at all schools”



Technology (Prop B) Budget Breakdown



- Students, Teachers, and Classrooms
- The Network
- General
- Future Initiatives



STUDENT, TEACHER, & CLASSROOM TECH

The Lighthouse Initiative
SAISD One Student Program
CTE Computer Labs
Central Office Refresh



STUDENT, TEACHER, & CLASSROOM TECH OF THE PAST

- Inequitable Access to technology:
 - Mix of projectors, interactive boards, and nothing at all
 - Some schools with new, others with failing equipment
 - Teachers got whatever laptop their campus could afford
 - IAs had no laptop (or used student Chromebooks)
 - Students had sporadic access to iPads or Chromebooks
- Lack of training and professional development related to instructional technology
- No district hardware repair strategy or funding for devices broken or damaged outside of the warranty
- ESSER provided a one-time influx of 30,000 Chromebooks and 13,000 iPads in 2020



PRESENT

THE LIGHTHOUSE INITIATIVE

- **Interactive Panel** in every SAISD classroom
- Refreshed all **teacher laptops**
- Introduced centrally-funded **laptops for instructional assistants**
- Refreshed **administrator computers** and monitors
- **Charging carts** in every classroom
- **Instructional Technology professional development** for teachers



An elementary school student using a SMART Board, funded by Bond 2020. SAISD focuses on using these Boards as student-led, not teacher-led, instructional tools whenever possible.



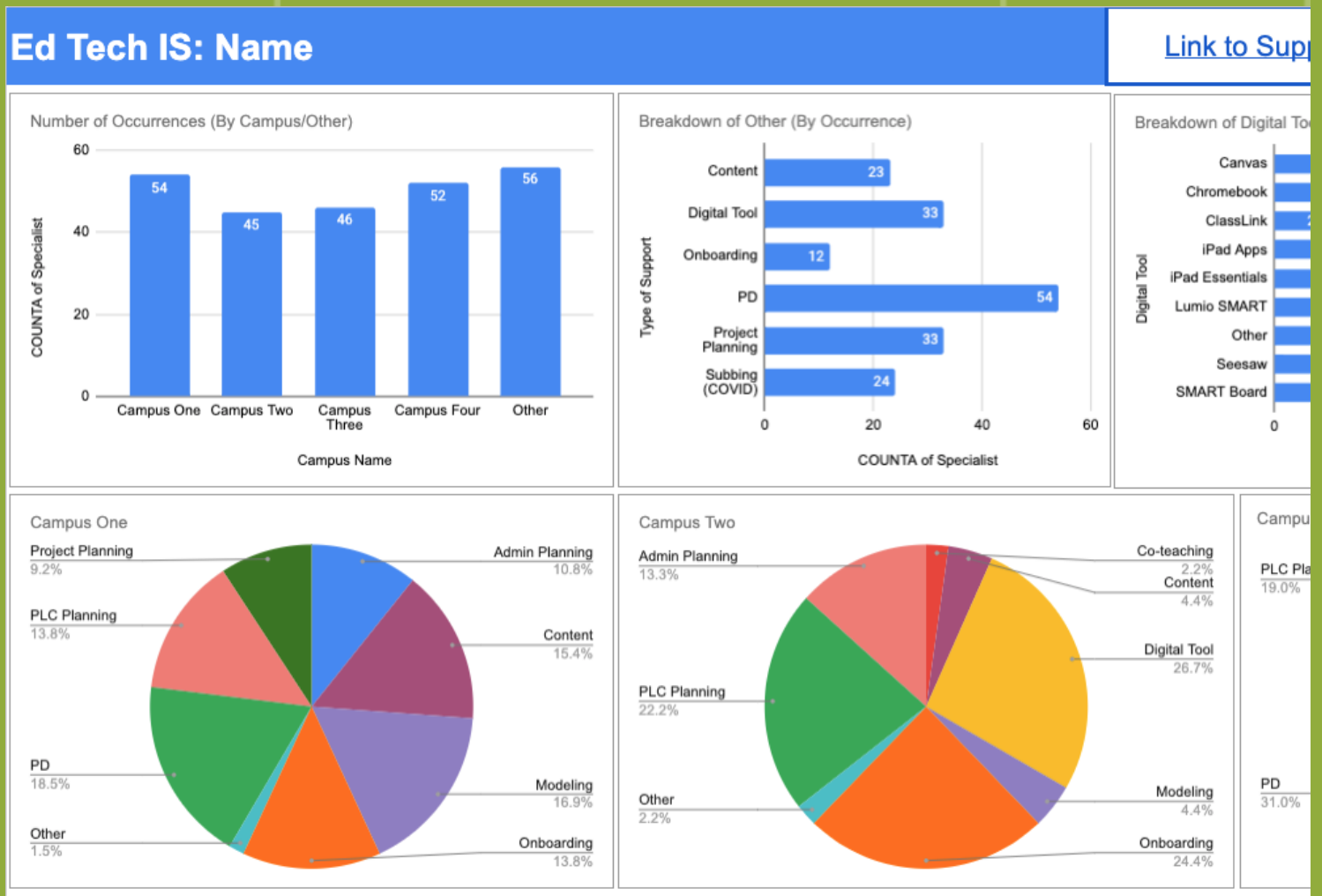
THE LIGHTHOUSE INITIATIVE


Jaime Aquino
 @DrJaimeAquino

I swung by @SAISDHighlands for our Laptopalooza event, where we had the privilege of distributing brand new laptops to our dedicated teachers. At our district, we firmly believe in equipping our staff with the necessary tools to work miracles for our students. #SAISDFamilia



Superintendent's social media post regarding Laptopalooza 2023, which was funded by Bond 2020



Sample of the Training Dashboards used for Professional Development by the Department of Educational Technology & Extended Learning. These Specialist positions were funded by Bond 2020.



PRESENT

SAISD ONE PROGRAM

- Purchased 37,000 Chromebooks to expand the access to all students, switch our second graders from Chromebooks to iPads, and (most recently) replace the aging pandemic fleet.
- Purchased 19,000 iPads to expand iPad access to all PK-8 libraries, PK-3 teachers, and then replace the pandemic fleet.
- Leveraged federal Emergency Connectivity Fund to offset device costs by \$400/device for nearly 30,000 devices.
- Implemented a districtwide Hardware Repair team to keep our fleet running, and rolled out Student Tech Teams at 10 schools



An SAISD technician helping prepare the 17,000 brand new touchscreen Chromebooks delivered to over 60 campuses in summer 2024.



PRESENT

CTE COMPUTER LABS

- Partnered with Career and Technical Education (CTE) department for a sustainable CTE Computer Lab Refresh.
- Bond invests ~\$200,000 / year, replacing CTE computer labs with modern equipment on a steady schedule.
- CTE department funding takes care of the remaining CTE labs.



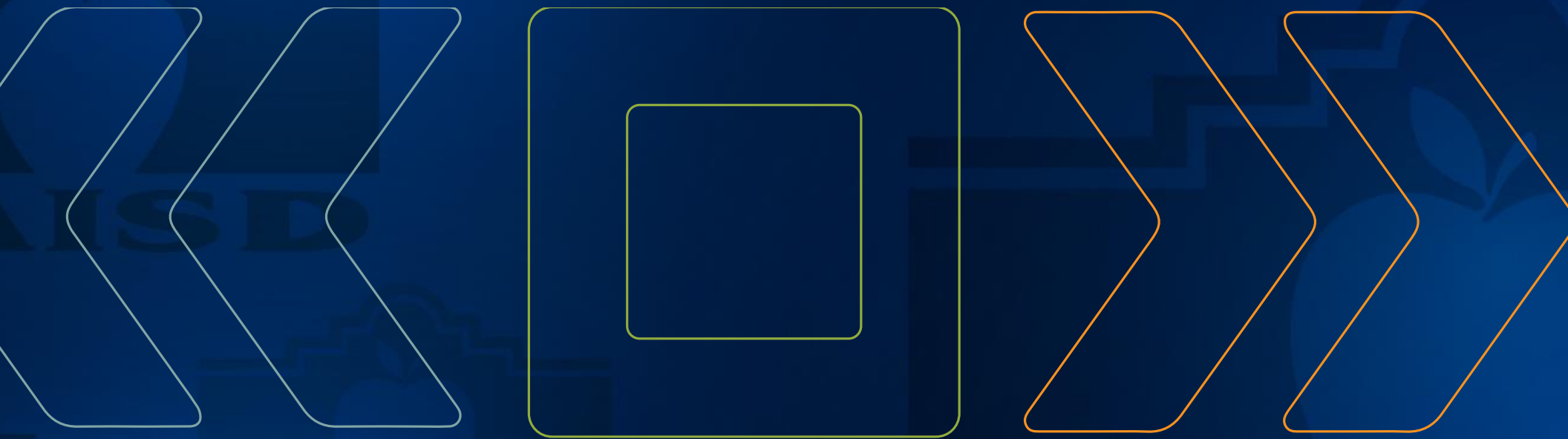
An SAISD technician helping prepare the 17,000 brand new touchscreen Chromebooks delivered to over 60 campuses in summer 2024.



FUTURE

STUDENTS, TEACHERS AND CLASSROOMS

- Chromebook & iPad Charging carts are being rolled out to the remaining cohort of schools
- CTE Lab refreshes will continue annually
- Student device repairs and replacements are ongoing
- Central Office device refreshes are ongoing



SAFETY & SECURITY TECH

Officer and Dispatch Systems

Cameras

Alarm and Access Control

SAFETY & SECURITY TECH – SOME NOTES

- There may have been other Bond Prop A Security dollars spent. This section only represents safety and security upgrades with a significant technology component.
- These slides do not capture all of the district's investments in safety and security technology, only those funded by Bond. Investments funded by other sources include:
 - New visitor management system
 - New crisis communications system
 - Panic buttons in all school offices
 - Upgraded officer vehicles and in-vehicle laptops





THE SAFETY & SECURITY TECH OF THE PAST

- 2 camera systems, complicating incident response
- Dozens of cameras districtwide were offline due to camera failure or bad cabling
- SAISD Police dispatchers had limited visibility due to old and aging cameras
- Alarm and access badge systems that utilize unreliable phone line technology



PRESENT

SAFETY & SECURITY: CAMERAS

- Introduced a modern, cloud-based camera system at all but 16 campuses
- Added cameras to several campuses that had no cameras at all
- Cameras can function as alarm sensors, expanding monitoring
- Improved ease of use for campus administrators



A newly installed security camera, funded by Bond 2020. New cameras are high resolution, smart, and use the latest cloud-based technology. They're also easier for school admins and police to use.



SAFETY & SECURITY: OFFICERS & DISPATCH

- Relocated the Police Dispatch to a fully modern facility at new SAISD Headquarters
- Upgraded police dispatcher workstations and created a dispatch center video wall
- Implemented a new dispatch system that connects with other local emergency responders' systems for coordinated response
- Converted many alarms from unreliable phone lines to cellular backup units



SAISD police officers outside vehicles equipped with new ruggedized public safety laptops, wearing radios that utilize the new dispatch system.



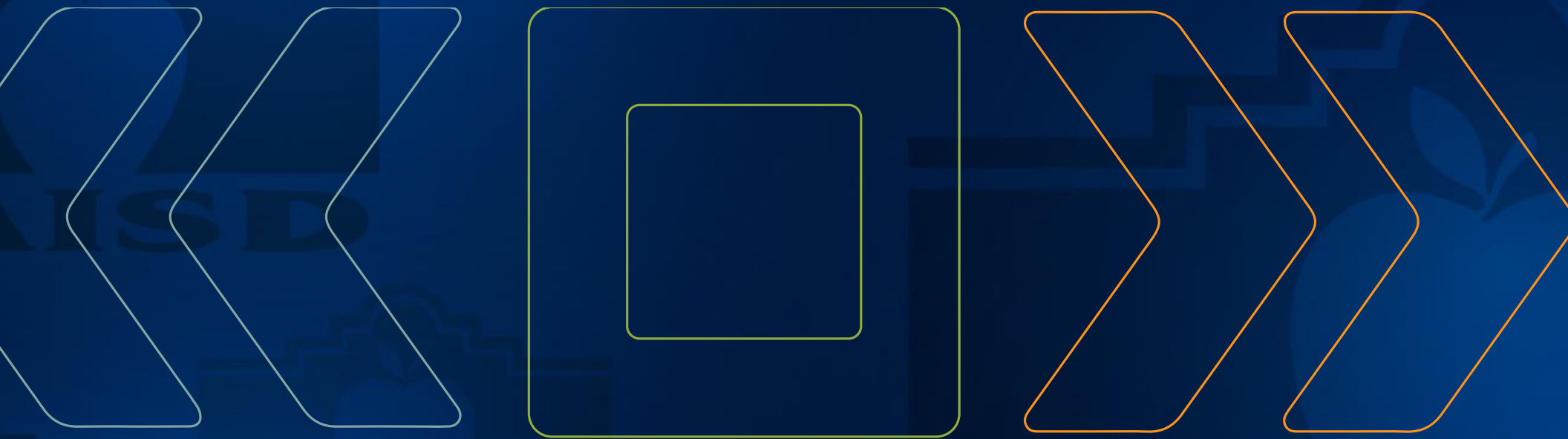
FUTURE

The Future of Security Tech

PROJECT “SPOT”

- Upgrade the technology for the panic buttons to improve response time
- Upgrade all campuses that still have legacy cameras (1 for 1 replacement)
- Replace aging school alarm systems and badge reader systems
- Provides a unified, “single pane of glass” system for emergency responders and other administrators





THE NETWORK

Wi-Fi

Core Network

Data Center



THE NETWORK OF THE PAST

- Outdated equipment at dozens of schools
- Not all networks met our standards in one or more areas:
 - Coverage
 - Stability & reliability
 - Performance (speed)
- The main data center for the district had several deficiencies:
 - Single point of failure
 - Outdated equipment
 - At max capacity (no ability to increase speed)



PRESENT

WIRELESS NETWORK

- Replaced aging Wi-Fi equipment with modern, high-speed Wi-Fi that covers all learning spaces.
- All schools were ready for the huge influx of devices after the pandemic
- Campuses were able to hit the ground running with mandated computer-based STAAR and EOC testing.
- Expanded Wi-Fi to nontraditional learning spaces
- Stretched Bond dollars by leveraging federal E-Rate funds
- Additional upgrades are occurring this fall; when complete, 100% of SAISD schools will be on updated Wi-Fi



PRESENT

DATA CENTER

- Relocated data center to a commercial data center facility
- Replaced outdated equipment
- Added a second data center to improve resiliency for outages
- Upgraded equipment that allowed us to significantly increase speeds and capacity



An SAISD technology administrator standing in one of our 2 data centers with all new equipment. Data centers help run the servers and route the traffic for the entire district.



CORE NETWORK INFRASTRUCTURE

- Removed 50-80% of original network infrastructure (switches, 1500+). 1:1 program, plus wireless improvements, means significantly fewer switches needed.
- Removing 1000 this school year, adding ~100 as part of current refresh
- 2021: 58 schools new
- 2022: High schools, academies, and middle schools



FUTURE

THE FUTURE OF THE NETWORK

- Ongoing Support of networking needs at Bond (Proposition A) Construction projects
- Developing the next Long-Term Plans for equipment refresh & upgrade
- Implement more manageable wireless cohorts (not 30 schools in 3 months)
- Replacing battery backups to be more resilient to short outages



THANK YOU

QUESTIONS?

