TECHNOLOGY BOND PROGRAM - 2022

CHRIS WOEHL - EXECUTIVE DIRECTOR FOR TECHNOLOGY & INFORMATION SERVICES
Bond Planning Timeline

● 5 Year Bond Cycle

● Planning Technology expenditures 6yrs and beyond, bond funding may take 3 - 6 months

● Capital equipment & Cloud Services

● Shorten repayment term of the debt to match the lifecycle of the Technology being purchased
Internal review

• Current state of Technology
• Equipment replacement lifecycle
• Capital replacement costs
• Determine future needs
Independent Audit & Program Review

Request for Proposals (RFP)
- May/June 2021
- Current state of Technology
- Equipment replacement lifecycle
- Capital replacement costs
- Needs Assessment

Results used for:
- Budgetary projections for a future bond election
- Organizational staffing
Audit & Review Process

Raw Data:
- Physical inventory (campus/site walks)
- Current inventories (end-user devices, network, DC, etc.)
- Wireless site survey
- Classroom visits

Input
- Surveys (Staff, Student, Parent)
- Focus groups
- 1 on 1 interviews
- Presented the budget recommendations to the Long Range Facilities Planning Committee April 12th
Life Cycles of Equipment in years (K12) - TNC 2022
VMS/Cameras

Campus Safety

Replace legacy cameras
New cameras have a larger viewing area and high resolution
Optimized camera feed for reduced storage needs

Access Control

Campus Safety

Additional Door Badge Reader installs, power supplies, and controllers/sub-controllers, servers
Unified Communications

Campus Safety

- Call Manager (Call control, Extension management, Directory Services)
- Unity Server (Voicemail)
- Voicemail to email service
- Voice gateways (failover 911)
- E911 (location information)
- Emergency alerting system (Email, Phone, text)
- Redundant Calling pathways - SIP trunks
- Digital fax system
Bell, Clock, PA (BCPA) - Campus Safety

- IP-Based systems
- Server
- UPS
- Classroom & Campus Speakers
- Bells & Schedules
- Legacy & Digital Clocks
- Unified Communications system integrated
Classroom AV & Multimedia

Teaching & Learning

Systems used to project, interact, and collaborate inside the classroom (Laser light source interactive projector, whiteboard, voice lift, cabling, and inputs)

Campus AV & Multimedia

Teaching & Learning

Large venue systems used to project, interact, and collaborate in common spaces (Cafeterias, Gyms, Libraries, etc.)
Teacher & Student Devices

Elementary - 1: Learning Classroom Sets of Chromebooks

Secondary - 1:1 Individually assigned Chromebooks

Teacher Workstation and/or Teacher mobile devices
Cabling & Wired Network (LAN)

Operational Delivery

Essential infrastructure for VMS/Cameras, Access Control, Unified Communications, Data access, and internet access - Higher throughput with MGig to support wireless infrastructure up to 10GB

Wireless Network

Operational Delivery

Upgrade from Wi-fi 5 to Wi-Fi 6/6e or beyond, Wi-fi 7 (2024)

Support higher data rates, lower latency, higher reliability, higher classroom device density, reducing congestion, with better security
Campus & Internet Connectivity (WAN)

- Essential infrastructure for campus connectivity
- Redundant pathways
- Upgrades to support higher bandwidth requirements
Data Center Technologies

Operational Delivery

- Upgrades hyper-converged infrastructure
- Servers & storage
- DR infrastructure
- Backup solution
- Load balancers
- Data Center UPS replacement
- DNS/DHCP Appliances
- Firewall, Content-Filtering
- Cybersecurity & Threat prevention
Elementary Schools 8 & 9

High School #2

District Growth

New Facilities

New Facilities

Additional facilities

All essential infrastructure
- Cabling, wired & wireless networks, VMS/Cameras, Access Control, BCPA, Classroom & Campus AV, Computers, Phones, MFDs
Bee Cave Middle School

Opened Aug. 2019

Technology is 3+ years into its lifecycle

5 Year bond, planning for 5-6 years lag in bond funding making device 8-9yrs into their lifecycle

Wired & Wireless hardware, Cameras and access controls, Classroom & Campus AV, BCPA

2022 Bond or Next Bond Program
Network Delivery
- Cabling and Wired Network (LAN)
- Wireless Network Equipment
- Campus & Internet Connectivity (WAN)

Enterprise Resources
- Data Center Technologies

Teaching & Learning
- Classroom AV / Multimedia
- Campus AV / Multimedia
- Teacher & Student Devices

Campus Safety
- VMS/Cameras
- Access Control
- Unified Communications (Voice Services)
- Bell/Clock/PA (BCPA)

New Facilities
- ES #8
- ES #9
- HS
- Other
Questions?