CHAPPAQUA
Central School District

2024-2025 Budget Proposal

Technology

Report to the Board of Education

Dr. Andrew Taylor
Director of Technology & Innovation

Technology Department Goals

1. Strengthen infrastructure
2. Harden data privacy and security
3. Ensure business continuity
4. Support instructional initiatives
5. Develop a fiscal plan to support goals

Goal 1: Strengthen the infrastructure

Bond: Infrastructure

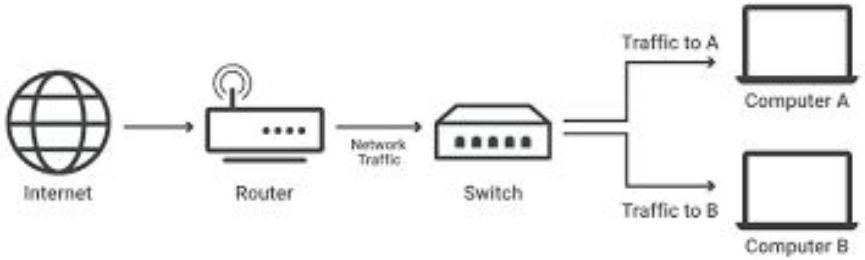
Upgrading and replaced

- Fiber and Copper Wiring
- Switches
- Routers
- Access points
- UPS (Uninterruptible Power Supply)

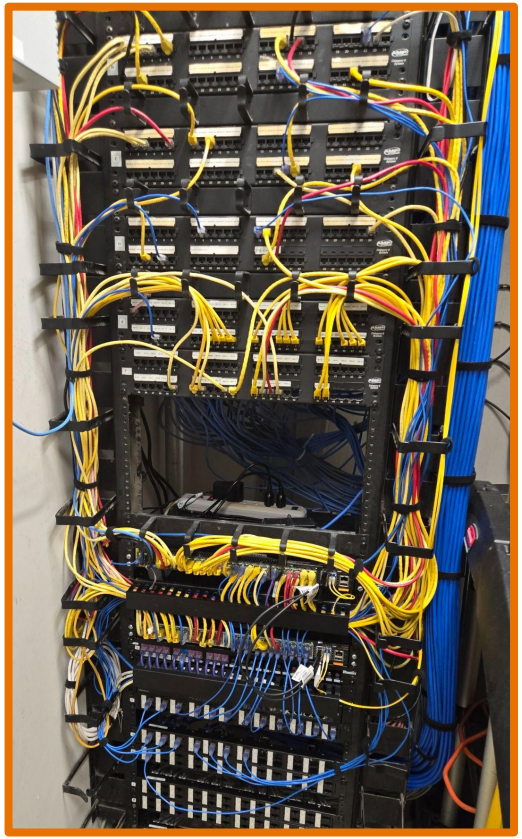
Benefits

- Faster (1G to 10G)
- Reliable (wifi 6)
- Security
- Expandable (Grows with us)
- **Control**
- **Configuration**

} *Ongoing Analysis*



Infrastructure Update

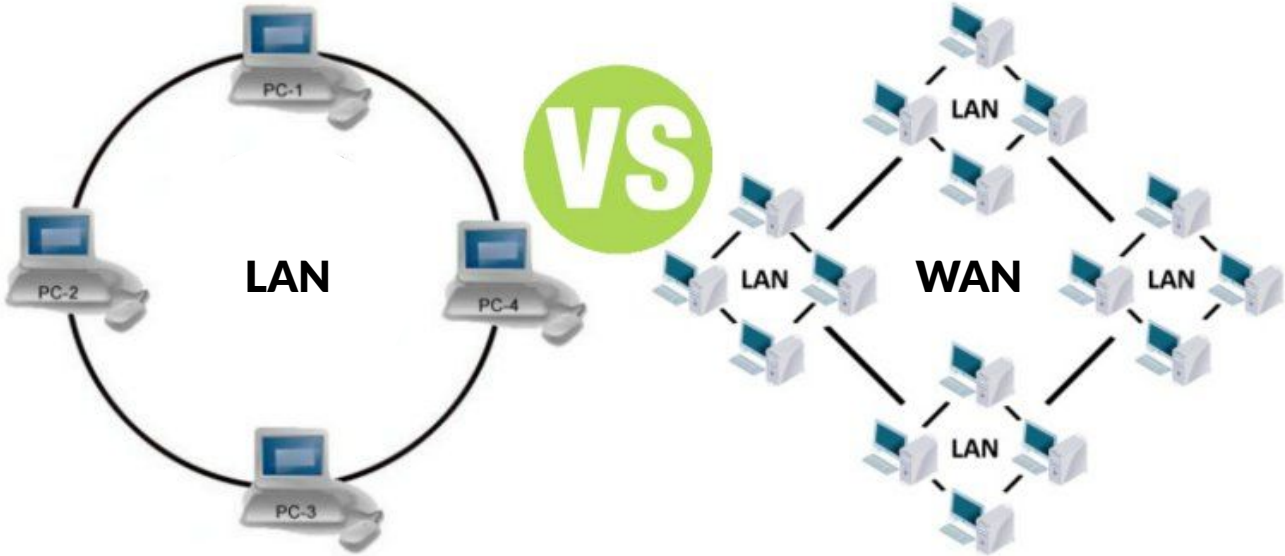


- Wiring/Access Points
  - Estimated completion date 4/15 (4 Schools Completed)
- Closet Wiring, Switches, Routers
  - Estimated completion date 6/28 (2 Schools Completed)
- Network Controls and Configuration
  - Estimated completion date 7/31
- Uninterruptible Power Supplies
  - Estimated completion date 8/21

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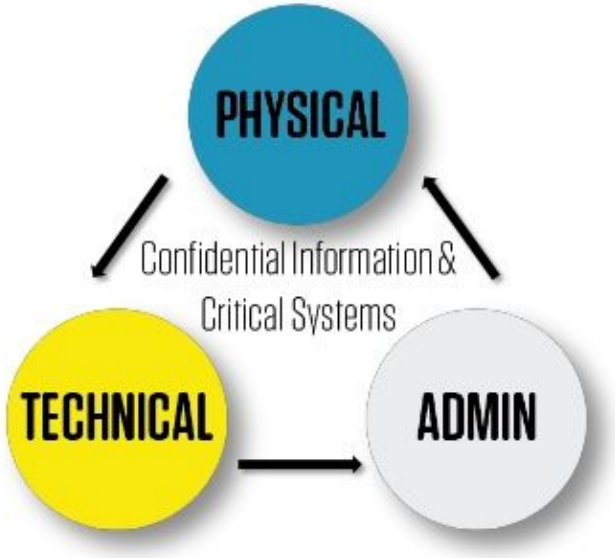
NETWORK INFRASTRUCTURE

Local Area Network



Wide Area Network

Goal 2: Harden data privacy and security



Access Controls

Technical controls include applications or hardware that secure the school's network for potential attacks or threats.

Administrative controls limiting access to specific applications or types of data, provide policies, ensure a well train staff, and monitor use.

Physical controls protects the physical infrastructure from unauthorized access.

Cybersecurity

83%

of breaches involved external actors—with the majority being financially motivated.

74%

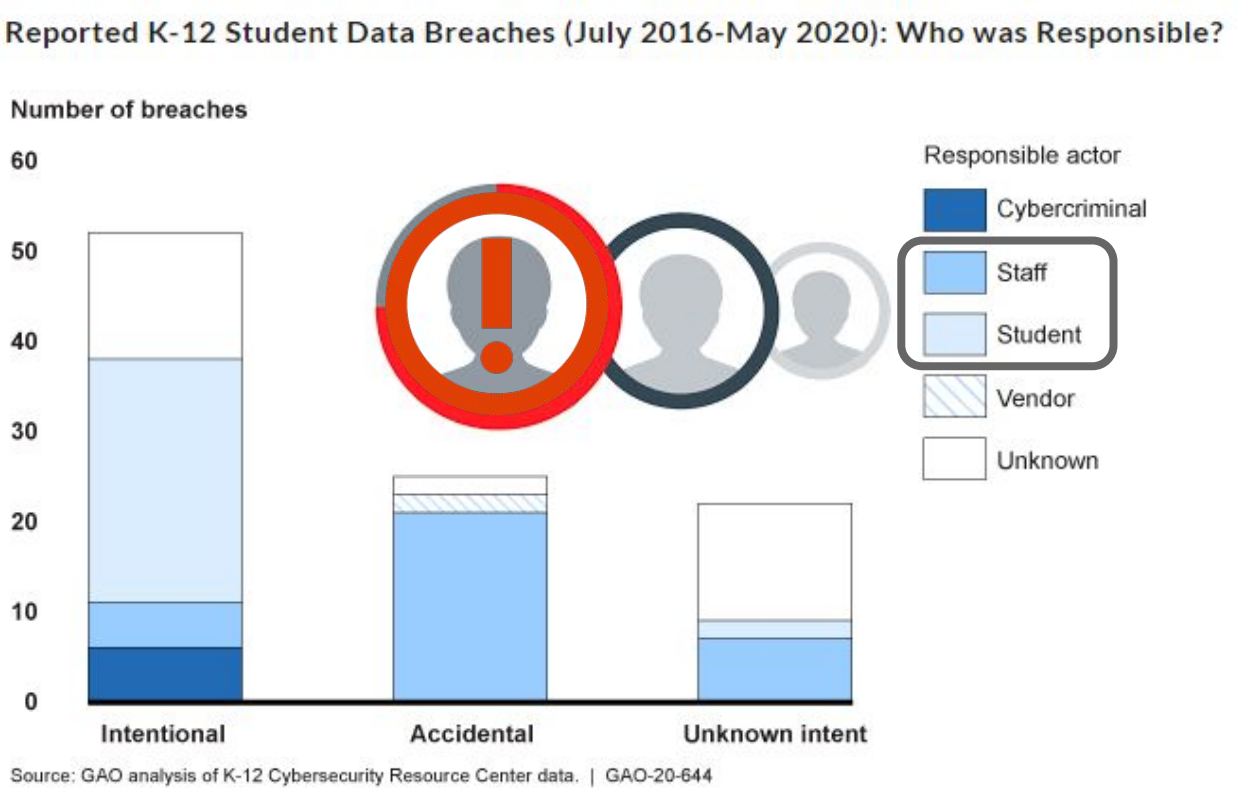
of breaches involved the human element, which includes social engineering attacks, errors or misuse.





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Cybersecurity



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Cybersecurity





MFA: Multi Factor Authentication



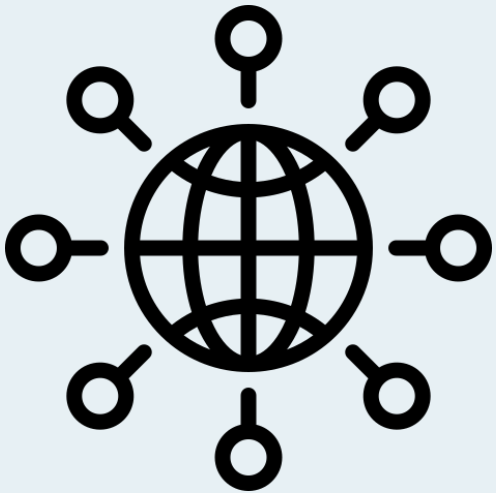


Goal 3: Ensure business continuity



System Redundancy

Phase 1
Internet Access



Phase 2
Servers Management

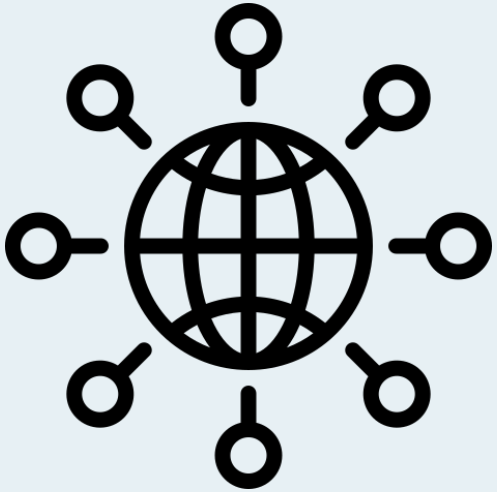


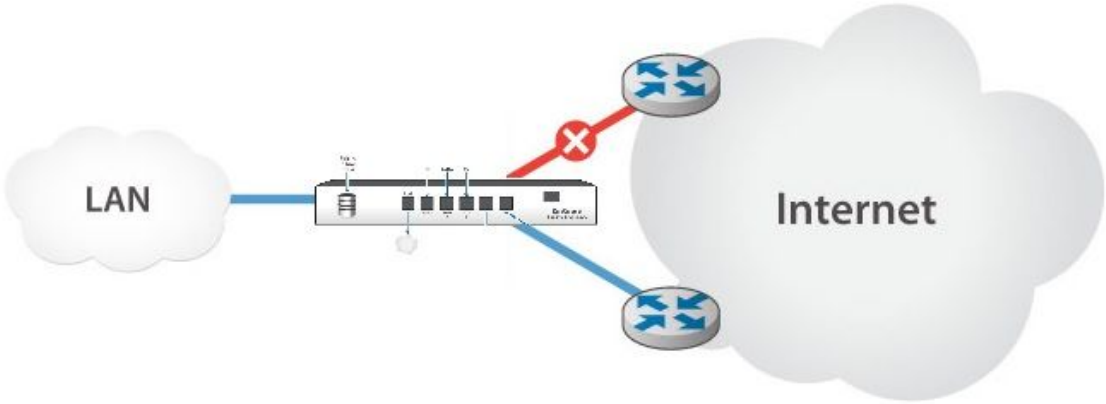
Phase 3
Phone System



Phase 1: Internet Access

Phase 1
Internet Access

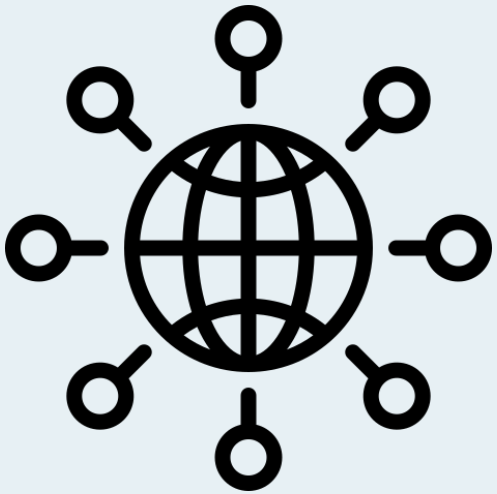




Automated Failover

Phase 1: Internet Access

Phase 1
Internet Access



Benefits of LHRIC WAN Services

- Fully Redundant Internet (5g)
- Dual Firewall- Tier One (Support/Maintenance)
- Intrusion and DDoS Attack Protection
- Dedicated WAN Support Team
- Proactive Traffic Management
- Annual Penetration Test
- Log Server and Audit Compliance

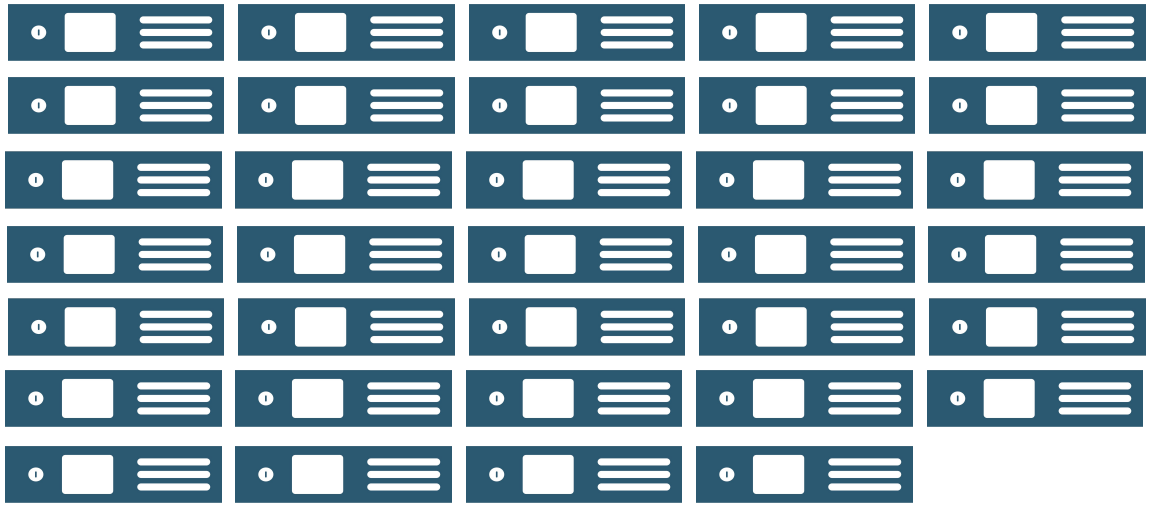
CROWN CASTLE

Included 2024-2025

Phase 2: Servers Management

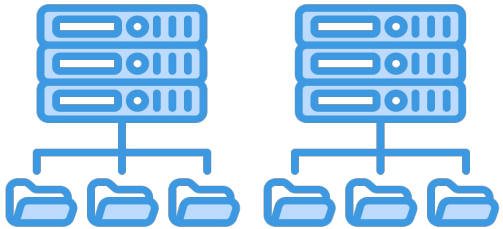
Phase 2
Servers Management





34 Servers

2 File Servers



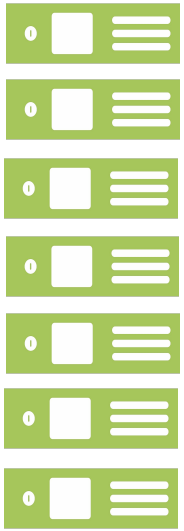
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Phase 2: Servers Management

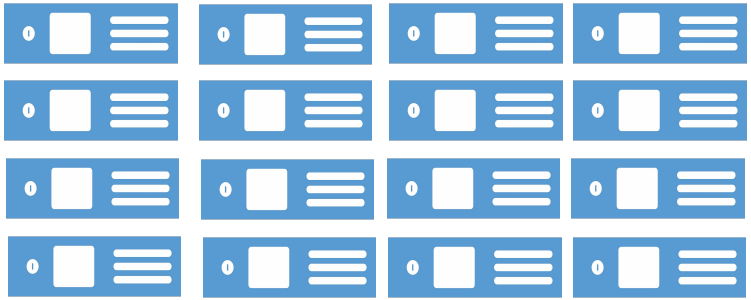
Decommission

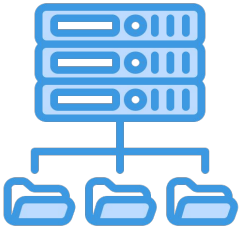


Industry Hosted

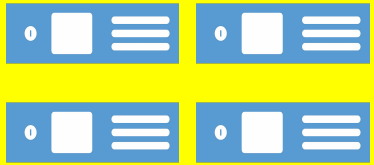


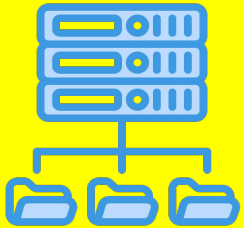
Cloud Hosted





Local/Cloud Hybrid





Phase 2: Servers Management

Phase 2
Servers Management



Benefits of LHRIC Hosting

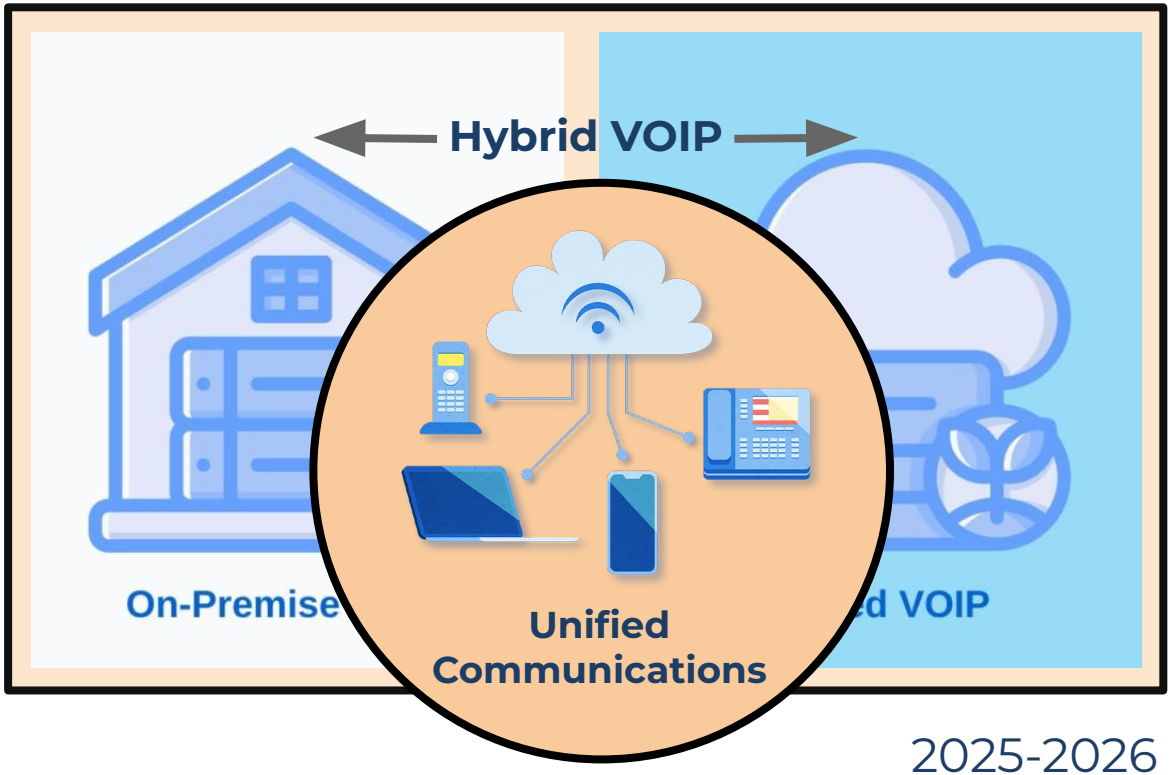
- Backups of all Data over private WAN
- Replicated in 2 NYS Data Centers and Cloud
- Enterprise-level uninterruptible power supplies
- Enterprise generators
- Physical access controls
- Disaster recovery support (24x7x365)
- Industry-Standard backup protocols

Included 2024-2025

Phase 3: Communications System

Phase 3
Phone System





2025-2026

Phase 3: Phone System

Phase 3
Phone System



Benefits of LHRIC VOIP Services

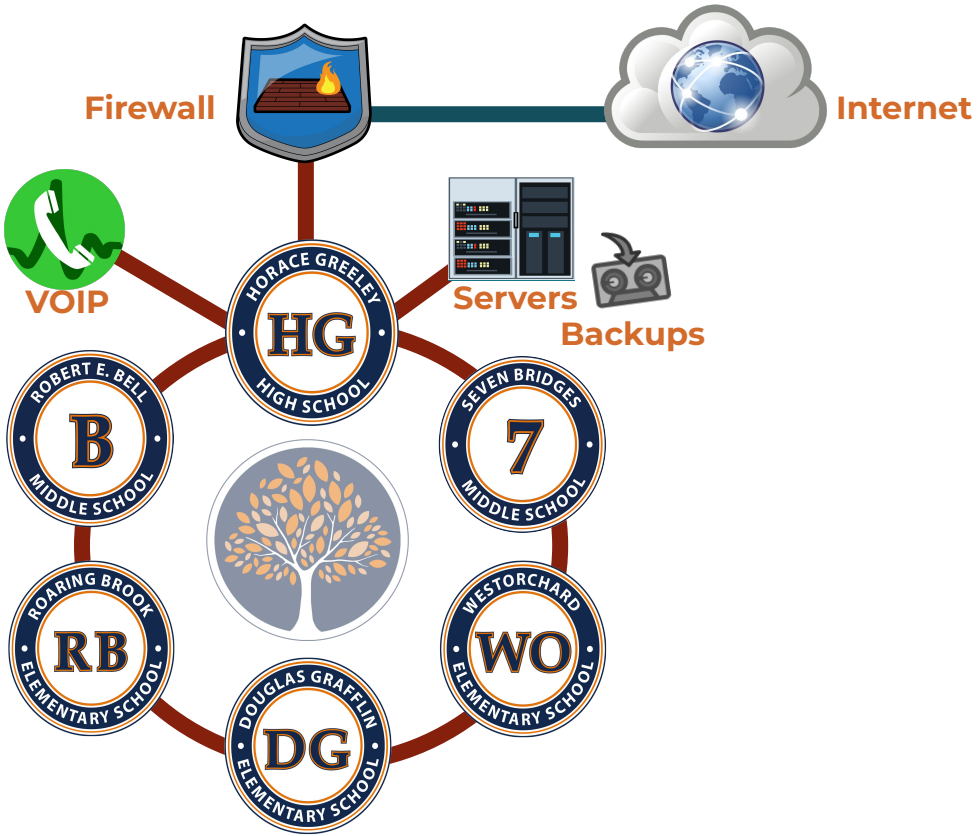
- Cisco VOIP Services (Industry Standard)
- Hybrid (On-Site and Cloud)
- Unified Communication
- Support, Maintenance, and Repair
- Call Manager Support

Included 2025-2026

Network Configuration

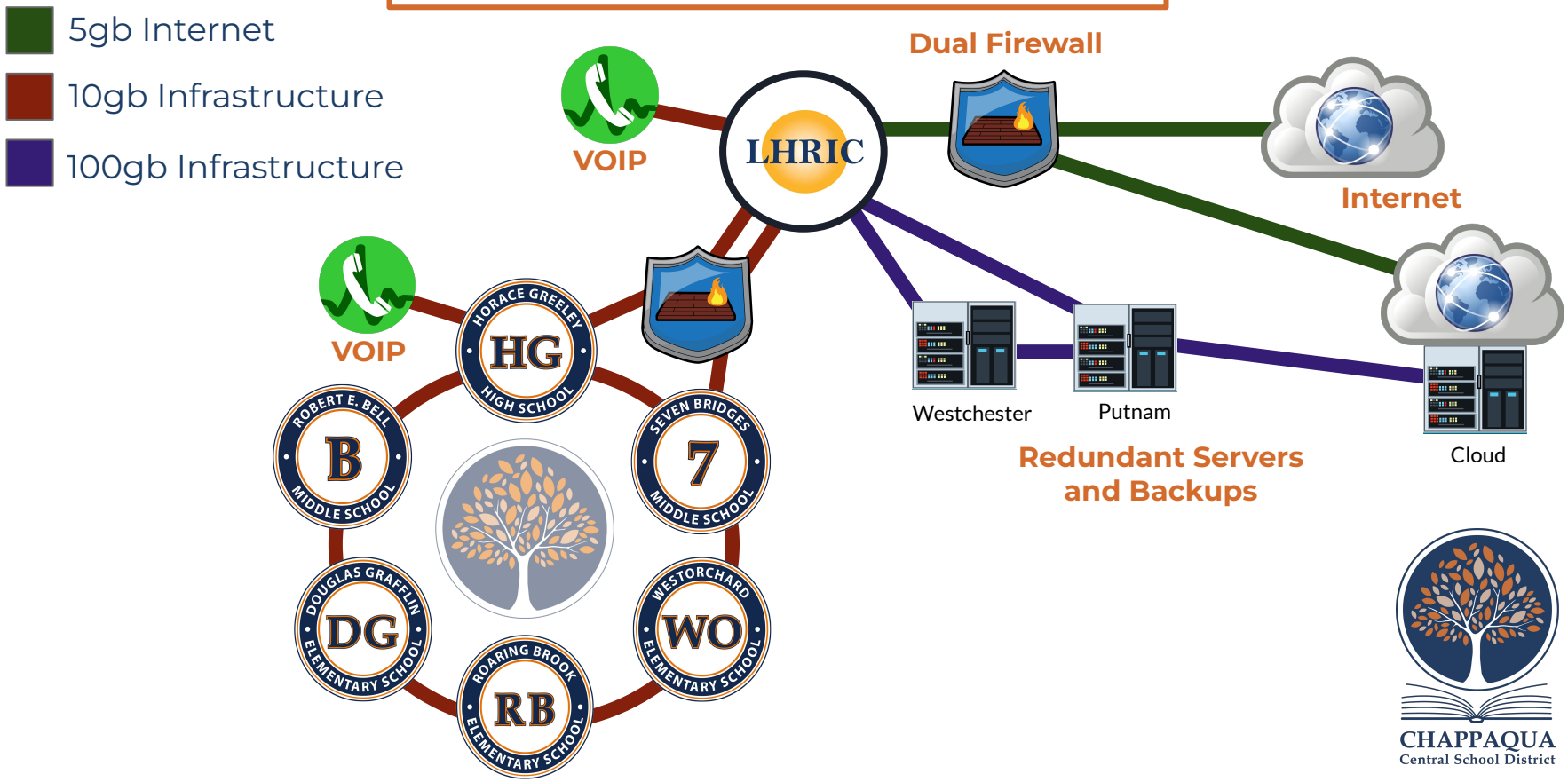
4gb Internet

10gb Infrastructure



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Network Configuration



Goal 4: Support Instructional Initiatives

- 3-8 Computer-Based Testing
- iPad rollout 5-6
- ~60 ViewSonic Interactive Display transition
- Apple TV & Wireless Casting upgrades
- Inservice Course: Technology for Integration & Innovation
- Apple Professional Learning
- 3D Printing expansion in MS
- Virtual Reality inclusion at MS
- Coding & Robotics programming at ES, MS & HS
- MultiMedia Production using Stop Motion, GreenScreen
- Amplification of Assistive tools for SWD & MLL

Device Refresh





Student Device Planning

Grade	22-23	23-24	24-25	Anticipated 25-26
K & 1	Planning	Refresh (1) →	Refresh (K)	Implementation
2	Implementation	Implementation	Implementation	Refresh
3 & 4	Refresh	Implementation	Implementation	Implementation
5 & 6	Refresh (5)	Refresh	Implementation	Implementation
7 & 8	Evaluation	Planning	Refresh (7 & 8)	Implementation
9-12	Implementation	Implementation	Implementation	Implementation

Middle School Technology

5th & 6th Grade (’23-’24)



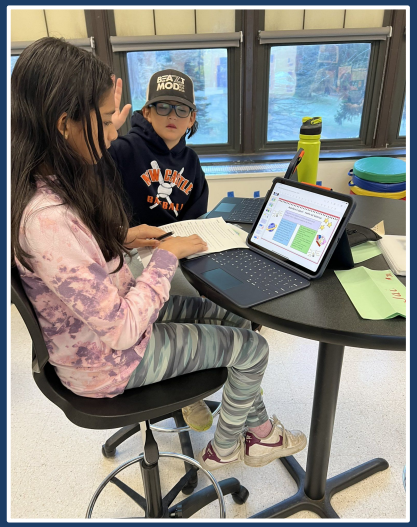
7th & 8th Grade (’24-’25)

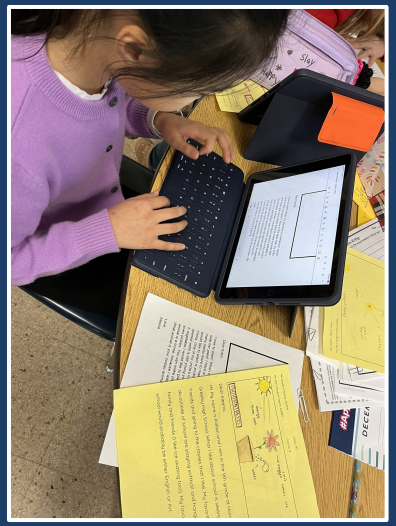


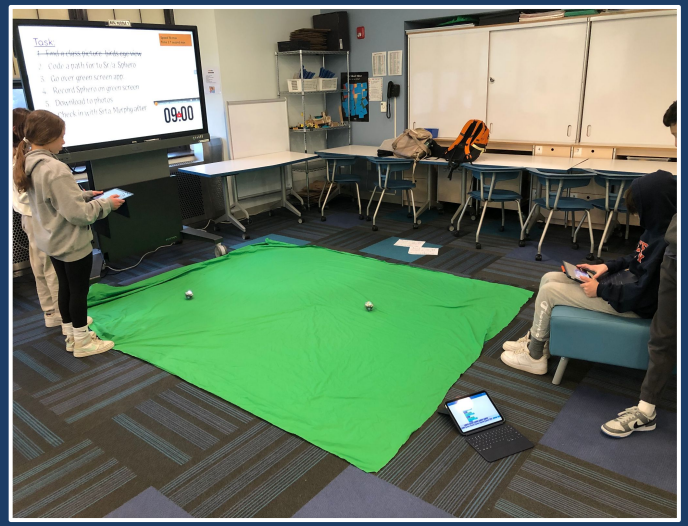
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Teaching and Learning







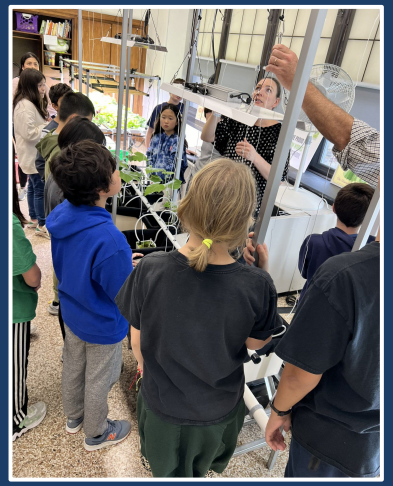


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STEAM Spaces













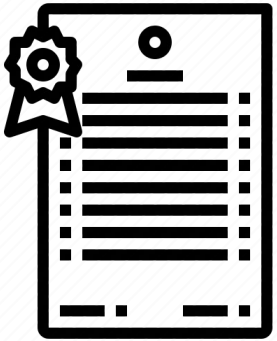
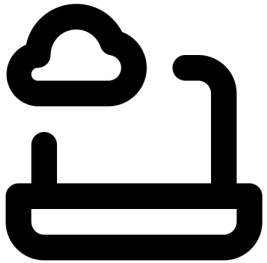
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Lease Agreement



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Goal 5: Develop a fiscal plan to support goals

Cybersecurity	Education Law 2-D	Device Refresh	Infrastructure Upgrades
			

Proposed Budget

	2022-23	2023-24	2024-25	Approved 23-24 vs. Proposed 24-25	
Computer Assisted Instruction	**Approved**	**Approved**	**Proposed**	**Variance $**	**Variance %**
Equipment	382,000	382,000	347000	-35,000	-9.16%
Contract Services	1,942,425.00	1,894,438.00	1,829,438.00	-65,000.00	-3.43%
Travel/Conferences	2,500	2,500	2,500	0	0.00%
Technology Training	50,000	5,000	5,000	0	0.00%
Supplies	125,000.00	125,000	109,000	-16,000	-12.80%
State Aided Computer Software	290,000	290,000	235,000	-55,000	-18.97%
BUDGET TOTAL	$2,791,925	$2,698,938	**$2,527,938**	**-$171,000**	**-6.34%**

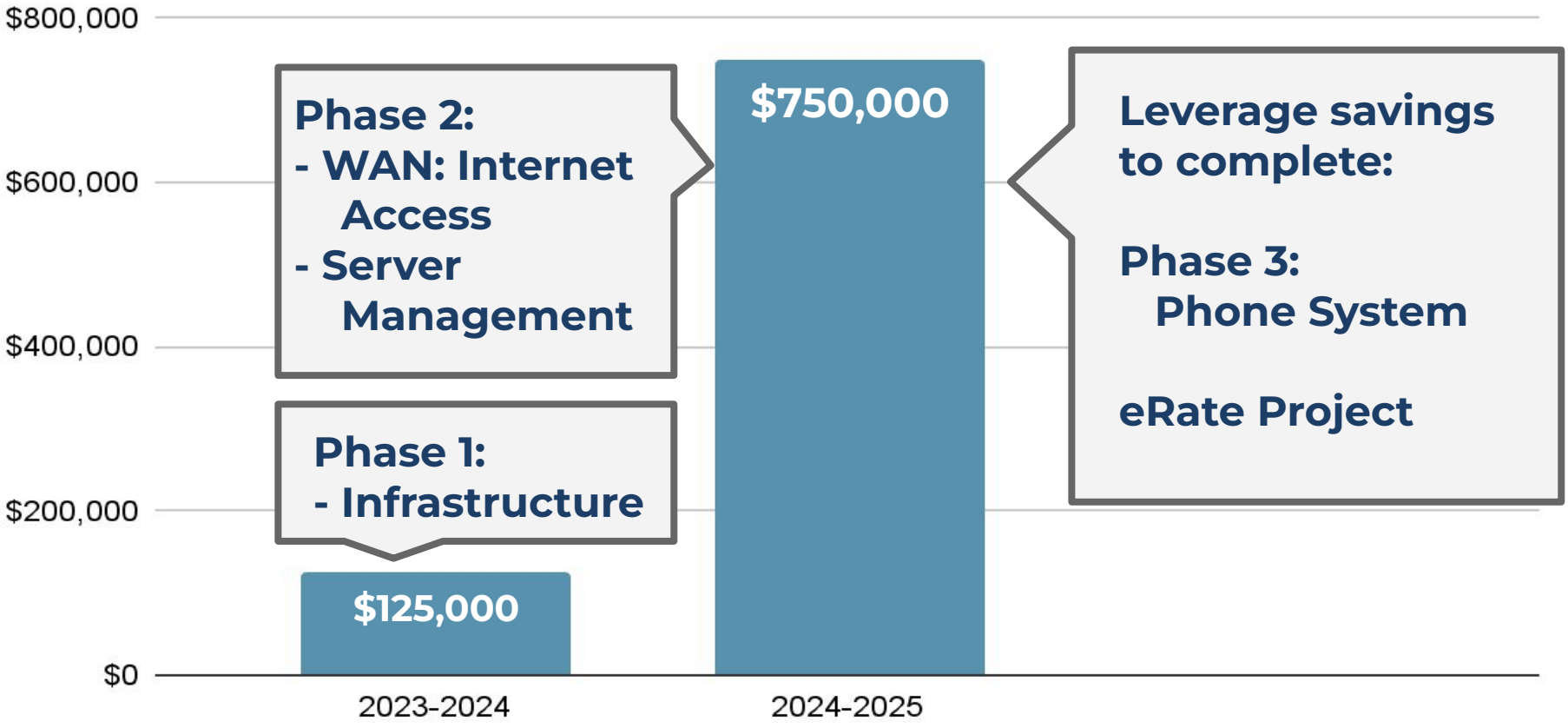
Proposed Budget

Computer Assisted Instruction	2022-23 Approved	2023-24 Approved	2024-25 Proposed	Approved 22-23 vs. Proposed 23-24 Variance $	Variance %
CCSD BUDGET TOTAL	$2,791,925	$2,698,938.00	$2,527,938	***-$171,000***	***-6.34%***
BOCES TOTAL	$31,612	$257,611.00	$470,611	**$213,000**	**82.68%**
LEASE TOTAL	$890,000	$890,000	$890,000	***$0***	***0.00%***
TOTAL	$3,713,537	$3,846,549	$3,888,549	**$42,000**	**1.09%**

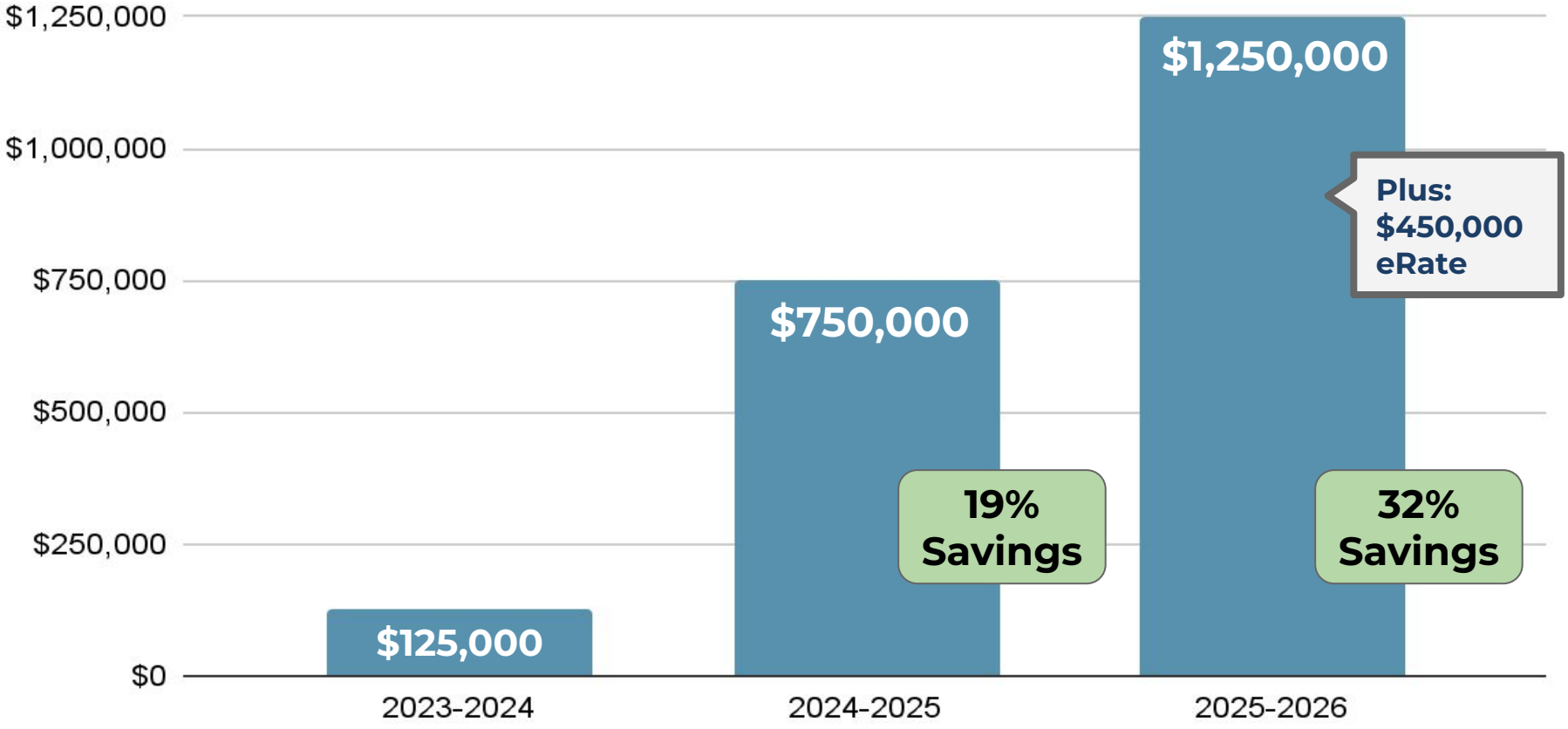
Budget Highlights

Equipment	• Device / Display Replacement • STEAM/Innovative Learning Equipment
Contractual Servi[illegible]	• Cybersecurity & Data Privacy • ~~Acture Contract~~ • Display / Signage
State Aided	• Data Privacy & Protection, Ed Law 2-D • **Communications, WAN, Server Hosting/Backup, and VOIP** • Acture Contract
Supplies	• Instructional Space Technology Supplies • STEAM Technology Supplies
Lease	• 7th & 8th Apple Devices • Viewsonic Display
Technology Learning	• Apple Professional Learning / Apple Learning Academy

Estimates AID 2023-2026



Estimates AID 2023-2026



Estimated Budget Offsets

Detail	2023-24	2024-25	2025-26	2026-27
Device Buy-back	-$100,000	-$200,000	-$100,000	-$100,000
Recycling	-$25,000	-$25,000	-$25,000	-$25,000
BOCES AID	-$125,000	-$125,000	-$750,000	-$1,200,000
Total:	-$250,000	-$350,000	-$875,000	-$1,325,000