



Sachem Central School District Smart Schools Investment Plan

Board of Education Presentation
March 8, 2017

Updated October 2018
Updated November 2018



Smart Schools Bond Act

- Passed as part of the New York State 2014-2015 Enacted Budget, the Smart Schools Bond Act was designed to provide \$2 billion in reimbursable funds for technology related purchases
- Of the \$2 billion, Sachem Central School District has been allocated just over \$11 million
- There is no deadline or expiration for these purchases and reimbursements



Purpose

- Advance the use of technology in public and non-public schools and increase internet access and wireless connectivity
- Procure learning technology devices, equipment or facilities
- Build, enhance and modernize Pre-K program educational facilities
- Install high-tech security in schools



Allowable

- Broadband, Wireless Connectivity and Network Infrastructure
- Learning Technologies: Interactive Boards, Servers, Desktops, Laptops and other Mobile Devices
- High-Tech Security Features
- Pre-K Program Facilities

Non-Allowable

- Software or Subscriptions
- Warranty, Support or Services
- Internet Service
- Staff Development
- Staffing
- Operating Expenses
- Equipment Lease



Prerequisites

- District Technology Plan ☒
- Stakeholder Feedback ☒
- Coordinate with Architects ☒
- Sustainability and Long Term Support ☒
- Infrastructure and Internet Bandwidth ☒
- Contact SUNY/CUNY Teacher Prep Program ☒
- Inclusion of Non-Public Schools ☒
- Approval from SED ☐
- Modifications or Amendments must have prior approval from NYSED



Timeline

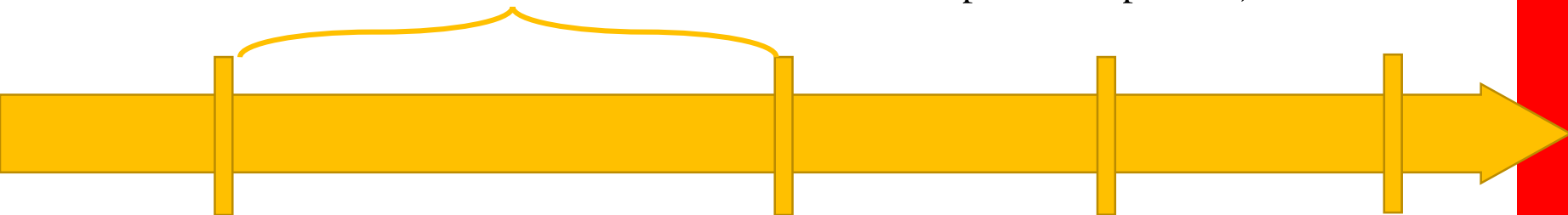
Preliminary plan posted to the district website for 30 days.
ssipfeedback@sachem.edu

Board of Education
Approval of Final Plan and
Submission to SED
Anticipated - April 19, 2017

Presentation of
Preliminary Smart
Schools Investment
Plan-March 2017

Public Hearing
April 19, 2017

Secure funding
and procure
product upon
SED approval





Current Technology

- High Speed Backbone
- All K-5 rooms with IWB
- Many peripheral rooms and secondary rooms with IWB
- Google Apps for Education
- Podcasts/Voki
- Coding
- 3D printing
- Google Voice
- CAD
- Robotics/Ozobots
- Online Curricula
- Discovery Education
- Video Conferencing/Field Trips
- Flipped Classrooms/Screencasting
- Scratch Storytelling
- Public Service Announcements
- iReady, Hearbuilder, WebAssign
- Examgen, Castle Learning, Naviance, Test Out Lab
- Game design
- Bridgebuilder
- Flight Simulator
- Video Editing/Digital Photography
- Digital Graphics/Webdesign/Media Arts
- Raspberry Pi



Technology Challenges

- Infrastructure has not been able to be upgraded since before East was built
- Wireless in only 3-4 isolated locations in each building
- Outdated wiring and building network topology
- Servers, network and backup systems that are nearing end of support and starting to show failure
- Need for increased security measures and replacement or addition of existing video surveillance cameras

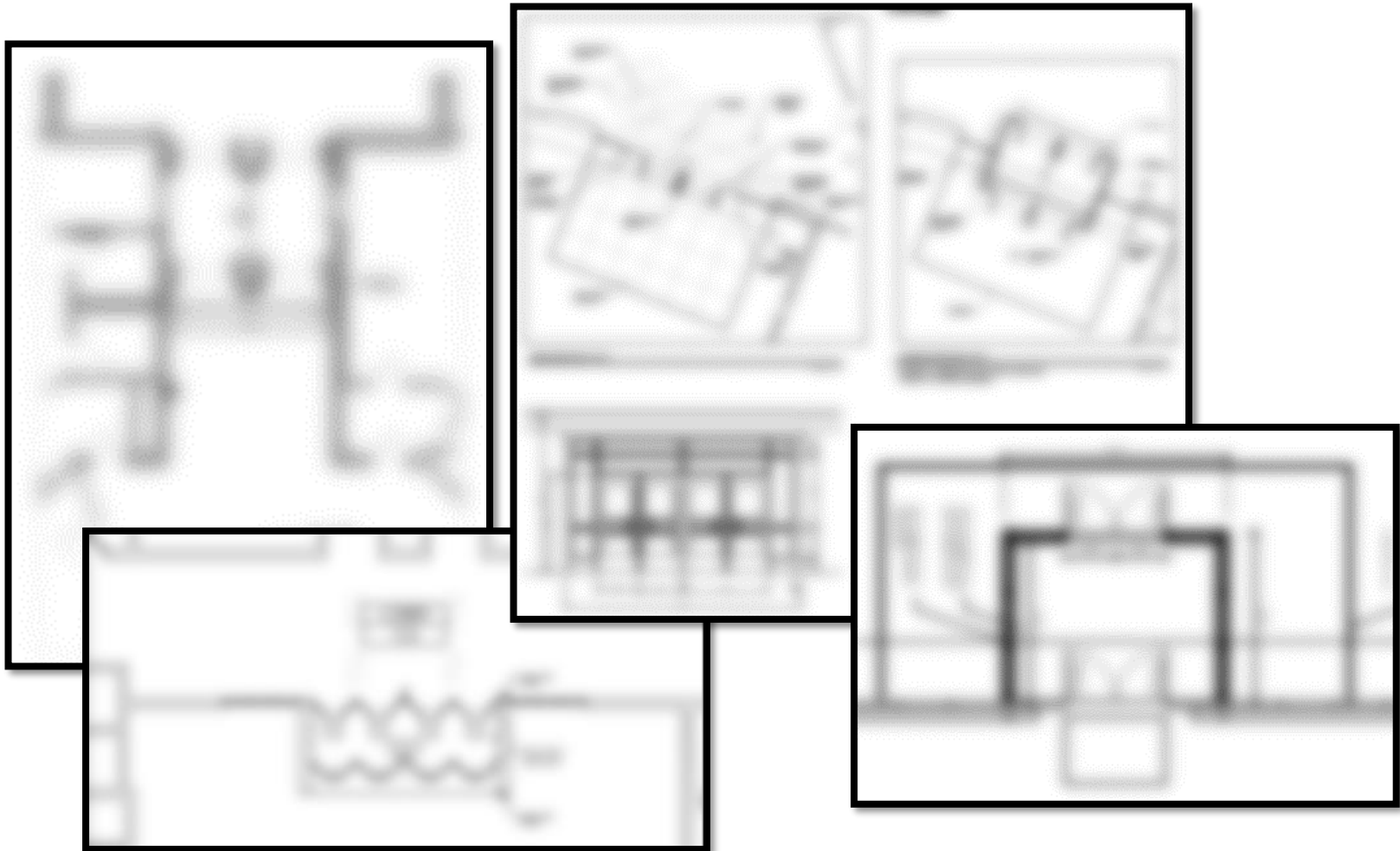


Technology Challenges

- District Vision and Goals
- Community Feedback
- Tech Literacy/Problem Solving
- A Digital World: STEM/STEAM, Coding, Programming
- Cyber-citizenship, Online Media, Digital Content
- Broader opportunities for Students and Teachers
- College and University Teacher Preparation Programs
- Safety and Security

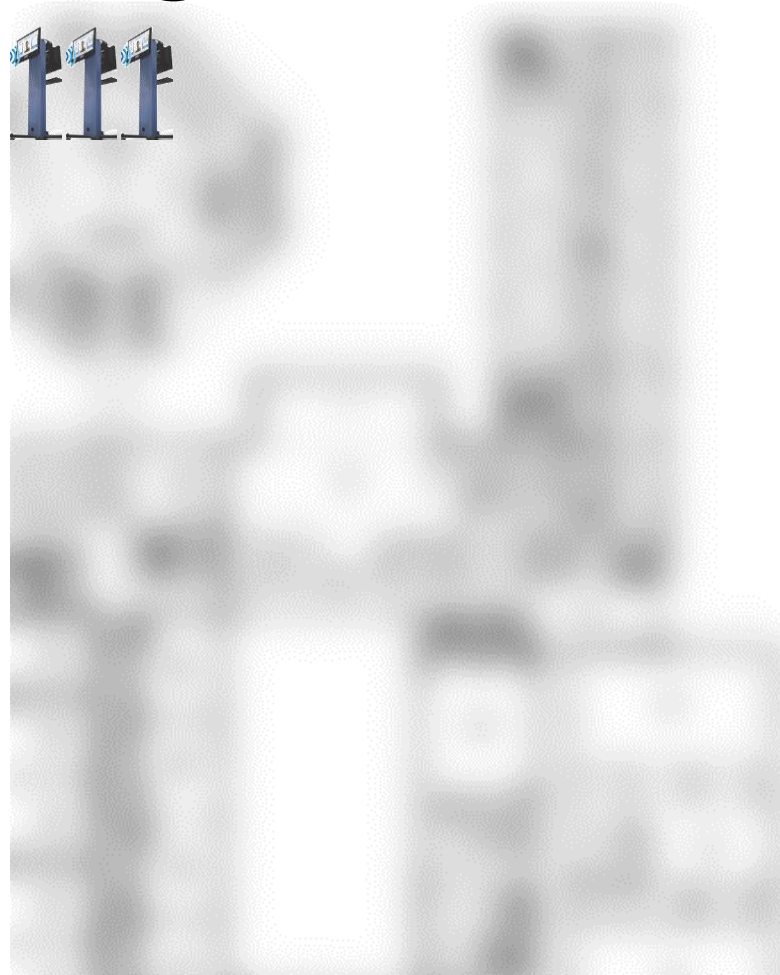
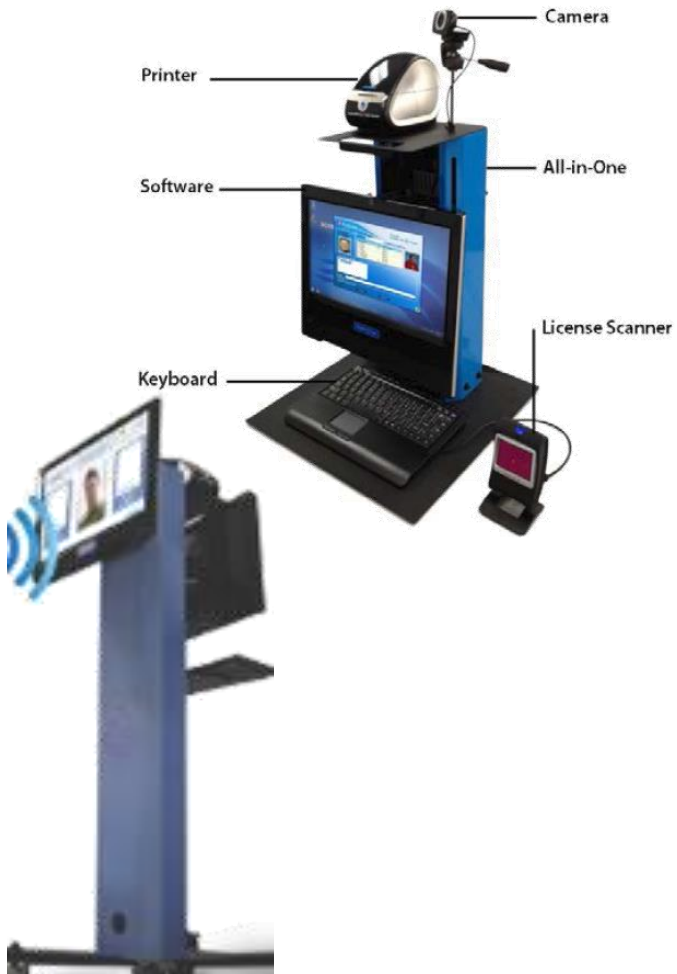


Security Vestibules





Visitor Management





Video Surveillance

Replacement of the 525 remaining analog cameras with digital in our High Schools. Addition of 388 cameras district-wide.

Additional cameras per school

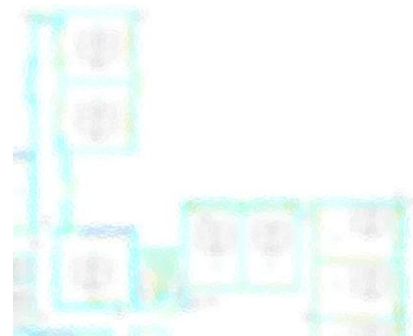
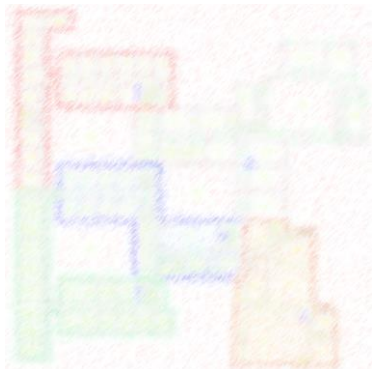
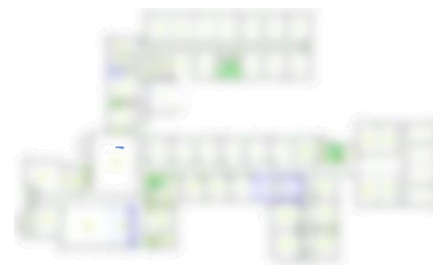
School Type	Indoor Camera	Outdoor Camera	Pan/Tilt/Zoom Camera
Elementary School	12 each (120 total)	6 each (60 total)	1 each (10 total)
Middle School	24 each (72 total)	10 each (30 total)	2 each (6 total)
High School	24 (48 total)	12 each Transptn - 6 (30 total)	East 6, North 5, Transptn 1 (12 total)
Total Cameras – in addition to existing camera counts	240	120	28





Cabling/Wiring

- Closet Locations - Fiber
- Data Drops for Classrooms
- Video Surveillance Cameras
- Access Points





Infrastructure

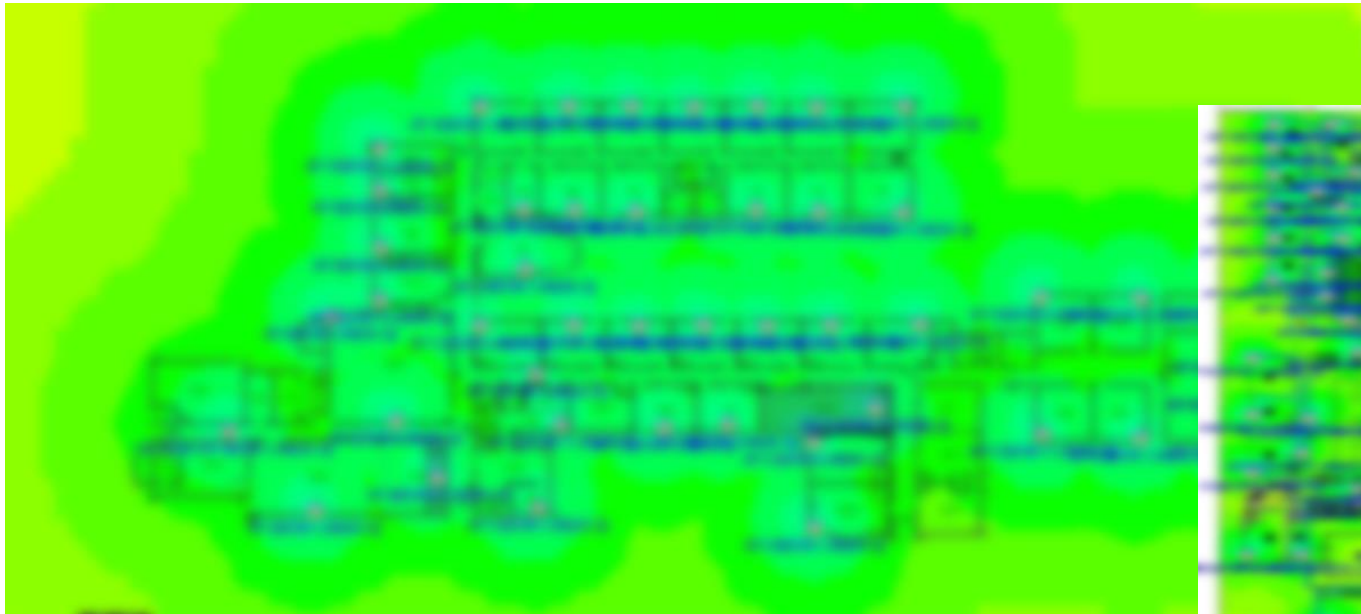
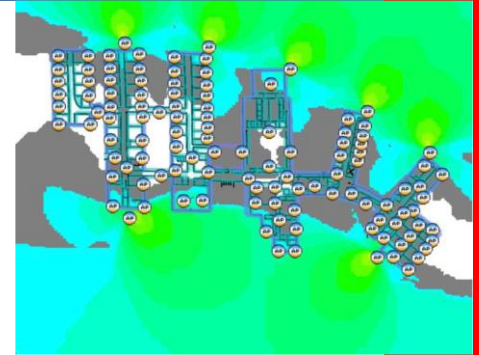
- Consolidate Switches
- Upgraded Code
- Redundancies
- Power for Phones and Access Points





Wireless Access

- Full building coverage
- Modified outdoor coverage
- Logon policies and content management





Wireless

- Ubiquitous Access and Content to Varied Devices
- Chromebook Carts
- Laptop Carts
- Bring Your Own Device
- Video Content
- Technology Literacy
- Transportation camera access

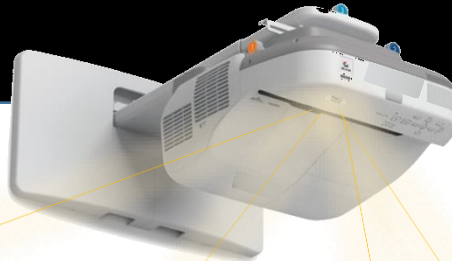




Server/Core SANs/Power

- Server for Logon Security and Management for wired and wireless connectivity
- Network storage for user, building, district, security data





Devices

- Document Cameras
- Interactive Whiteboards/
Interactive Projectors
- Laptop Carts – 30 count carts
 - 30 Carts Districtwide
 - Connectivity
 - Management
 - Productivity





Non-Public Schools

- St. Joseph School - \$40,000
- Miamonides - \$2000
- Long Island Baptist Academy - \$4250















Budget

Category	Project Cost
Connectivity	\$ 6,729,502.00
Learning Technology	\$ 144,700.00
High-Tech Security	\$ 4,139,652.00
Nonpublic Loan	\$ 46,250.00
Total	\$ 11,060,104.00



Implementation Timeline

SED Approval & Funding	
Vestibules	
Video Surveillance	
Fiber	
Cabling	
Infrastructure	
Wireless	
Servers	
Document Cameras	
Interactive Whiteboards	
Laptop Carts	



Questions

**Smart Schools Investment
Plan Feedback:**
ssipfeedback@sachem.edu

