



HEMPSTEAD SCHOOLS TECHNOLOGY UPDATE

TECH TAKE-OFF

Dr. Ahunna M. Akoma
Assistant Superintendent for Technology

This report presents the status of Hempstead Public Schools' technology system and a Preliminary Smart Schools Investment Plan (SSIP) to the Board and School Community, and includes:

- The Current System
- Initial Conditions and Present Position
- Status of Major Infrastructure Improvements – Wi-Fi and Safety
- Other Systems Upgrade – Data
- Goals for Continuous Improvement
- Preliminary Smart Schools Investment Plan

Hempstead's Technology System



The District's Technology System is comprised of a complex system of machines, people, learning tools, and methodologies that help support teaching and learning.

2017-2018 Districtwide Technology Committee

Made up of representatives from schools/departments is charged with strategic and organizational planning, establishing standard practices for technology and bringing issues to the fore to be resolved.

Name	School/Department
Ahunna M. Akoma	Technology
Kelleen Allen	ABGS MS
Maria Cady	ABGS MS
Bill Cherry	Hempstead High School
James Clark	Administration Office
Claudine Clarke	Joseph McNeil School
Chris Claro	Hempstead High School
Rowena Costa	Hempstead High School Annex
Tanika Cullum	100 Main Street
Sharon Daniel	Jackson Annex
Neclisha Davis	ABGS MS
Shawn Devito	Hempstead High School
Tracey Williams	Hempstead High School-

Name	School/Department
Elizabeth Diglio	David Paterson
Lisa Dunn-Lockhart	David Paterson
Deborah Gray	JM – Media
Kristin Harris	Technology
Barbara Intrieri	MS – Phys Ed
Rob Kurtz	Humanities
Betsy Leiby	HHS – Science
Lysa Lopater	HHS – Science
Janet Lovett	Bilingual
Stephen Lux	ABGS MS
Thomas Moran	ABGS MS – Math
Jason Noone	Hempstead High School
Anita Reynolds	Franklin
Joyce Scott	Franklin
Roger Silverblatt	BOE – Media Specialist
Kevin Torres	David Paterson

Who We Are and Whom We Serve

Name and Title	Role
Dr. Ahunna M. Akoma, Assistant Superintendent	Leadership Oversight of all technology systems, strategic and organizational planning
Mrs. Kris Harris, Administrative Support	Supports all the teachers and staff in PowerSchool and helpdesk call dispatching
Ms. Tanika Cullum, Data Analyst	Supports instructional software, PowerSchool, State Data Warehouse, and Website Management
Contractors from BOCES and Vendor Partners Mr. Muhammad Khan, ABGS & Central Admin Mr. Juan Velasco, McNeil & Marshall Mr. Dennis Pagan, Jackson Main and Annex Mr. Kenneth Pettie, High School Mr. Asim Sutton, Prospect, Paterson & Barrack Obama Mr. David Leacraft, Helpdesk & Database Support Mr Matt Iorio, BOCES Engineer for Security Project Vendor Partners from CCSI, EduTek, PCUniversity, Etc.	Six BOCES technical support staff members deliver technical support services to assigned schools and administrative offices, and one project engineer on special assignment assisting with the two large-scale projects—Wi-Fi and Security

Whom We Serve

Technology staff support all the students, teachers and systems in the District, including:

- 7567 Students in k-12
- 1,251 Teachers, Administrators, Support Staff, Security, Food Service and Facilities

Systems We Support

11 Network Servers (Hosts)

71 Network Switches (Upgrading to 10G, 39 Completed)

2,455 Desktops

805 Laptops

114 Macs

1030 iPads

296 Printers

112 Smart or Interactive White Board

Website

PowerSchool Student Information System

Instructional Software (Go-Math, Discovery, and more)

Users Accounts for All Systems

Initial Conditions and Current Status

Initial Conditions/Issues	Current Status
<i>Aging Network Infrastructure*</i>	New Servers and Switches Being Installed
<i>Security over 10 years old and disparate*</i>	New Security Infrastructure Upgrade
Inadequate Wi-Fi for Wireless Devices	New Wi-Fi Infrastructure Upgrade (HS, ABGS, McNeil, Barack Obama & Jackson Main are Done). David Paterson starts on Tuesday, May 22 nd
End-of-Life of Wyse Terminals' Server	Replaced with New Dell AIO, started a Hardware Replacement Cycle of 5 Years
Inadequate Network Security and Random Technical Support	Established new security protocols, changed passwords, assigned techs to schools, improved the helpdesk system, hired a vendor from BOCES RFP for security risk assessment
<i>Lack of Student Network Accounts and access to resources*</i>	Student accounts are created and being piloted in one high school teacher's class. Responsible Use Policy
Lack of a Central Inventory System	Established a new inventory system for all District hardware, grant and otherwise
<i>Internet Bandwidth Below State Standard of 100 Mb/s per 100 Students*</i>	Upgrading to 800 Mb/s for our student population
Finance Manager Under-Utilized	Finance Manager Requisition Manager is working again. Training provided.
<i>Lack of Standardization and multiple interactive technology systems</i>	Included in the Smart Schools Preliminary Plan to standardize classrooms
Food Service System End-of-Life	Obtained scope of work for BOCES to replace
<i>Lack of a Tested 911 Call System *</i>	Corrected after a 911 Call Test failed to show proper number and locations

Major Projects and Initiatives

- Replacement of Terminals with Dell All-in-One
- Network Infrastructure Upgrade
 - Wi-Fi Access Points in Every Classroom, and Switches
 - Additional Network Drops in the Classrooms
- Phase I Security Infrastructure Upgrade
 - New Servers for video recording and system monitoring
 - New camera additions and integration of old cameras to new system
 - Door Access Controls and Card Printer
 - Video intercom at all primary locations
 - Notification via existing PA system
- Phase II Security Infrastructure (SSBA)
- Training for teachers, staff, Security System
- Student Accounts
- Responsible Use Policies



OTHER IMPROVEMENTS

- Website
- Inventory Database and Procedures
- Email Archiver
- PowerSchool Upgrade and Registration Module-In progress
- New iPad Management System and Deployment of iPads that had been in boxes
- Ongoing Technology Needs Assessment and
- Technology Committee Engagement

FUTURE GOALS

- Continue with current improvement strategies and maintain a technology infrastructure that will support a student-centered learning environment
- Provide professional development opportunities for teachers to use technology tools to engage students in meaningful learning
- Explore opportunities to support students' needs to access online learning materials from home
- Continue to conduct annual needs assessments to include stakeholders' voice in the planning process and update the Multi-Year Technology Plan annually



Technology in Action – Library Media Specialist
at McNeil School Pilots LittleBits Coding Toolkit

SMART SCHOOLS BOND ACT

Smart Schools Bond Act

What is the Smart Schools Bond Act?

- In 2014, Governor Cuomo proposed a \$2 Billion Dollar Bond to the voters of NYS to fund educational technology and expand Pre-K throughout the state
- In November 2014, NYS Voters passed the bond
- Hempstead School District's allocation is **\$9,726,134***

**All we have to do is apply for it, following the process prescribed by NYS*

Four Areas that Schools Can Invest

- 1) Educational Technology Equipment

Interactive Whiteboards, Projection Systems, Computers and Other Devices

- 2) High-speed Broadband or Wireless Internet Connectivity

Infrastructure Upgrades of switches, cabling, servers to accomplish speed

- 3) Capital Projects to update facilities to accommodate pre-kindergarten programs, and

- 4) Capital Projects to install High-Tech Security Systems

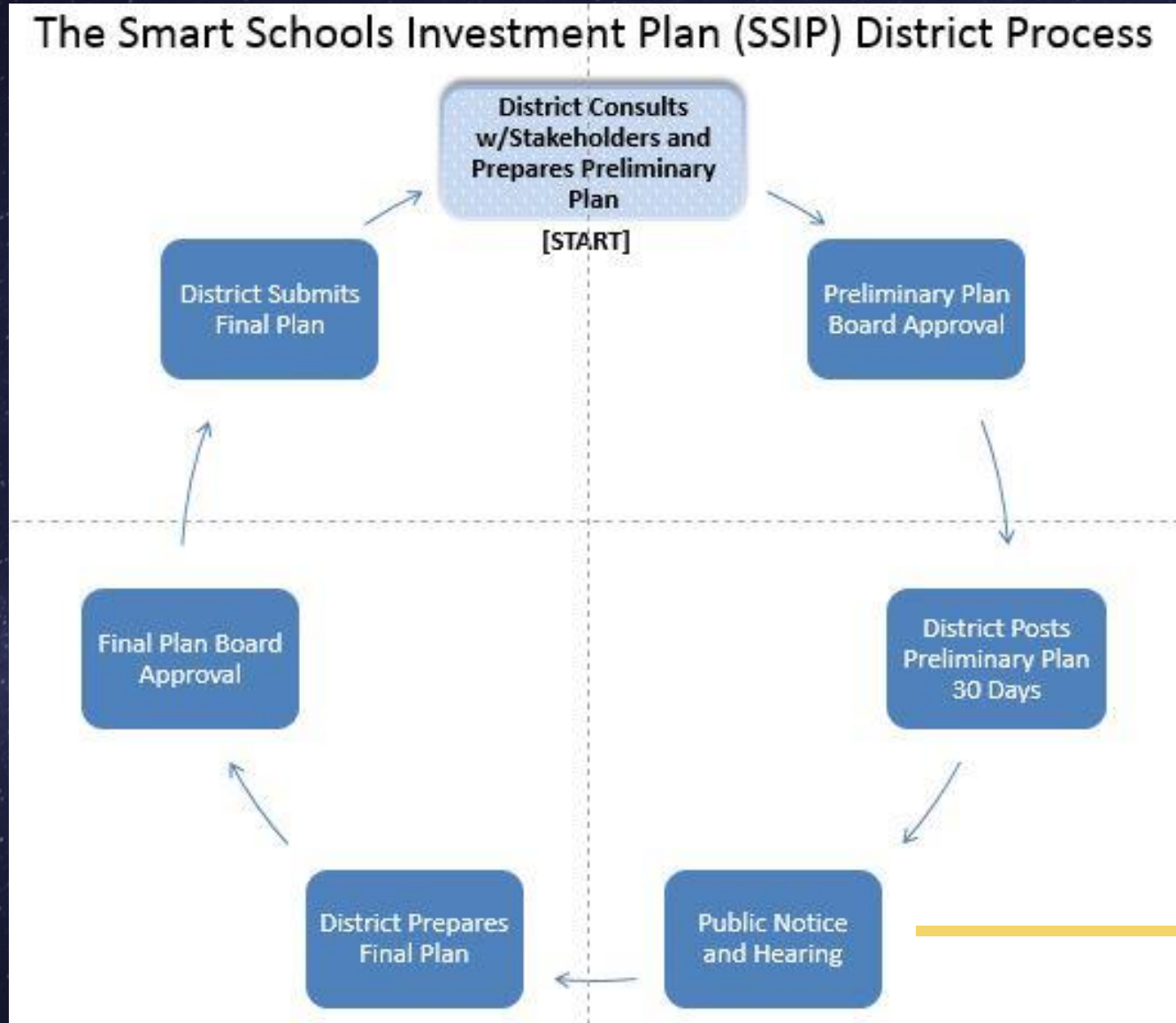
Install high-tech security features in school buildings such as video surveillance, door access controls, phone upgrades with added security features, etc.

REQUIREMENTS

- Districts are required to submit a Three-Year Technology Plan to the State
 - *District's current plan is being revised by Tech Committee*
- Engage Stakeholders in the process of developing a Preliminary Smart Schools Investment Plan (SSIP)
- Engage Non-Public Schools
- Present the Preliminary SSIP to the School Board and Community
- Obtain BOE Approval and post Preliminary SSIP for 30 days on the District's website
- Make adjustments if necessary (after further engagements and examination)
- Submit the Final SSIP to NYSED for approval*

**A district will only be reimbursed for expenditures if the resources are acquired after NYSED's approval of the final SSIP.*

NYS SSIP PROCESS



Mon, May 21th, 11 am-12:30 pm
Fri, May 25th, 1:00 – 2:30 pm

Focus of Hempstead's Preliminary SSIP

Because of the end-of-life of our network and security infrastructures, the initiated major projects to build a new Wi-Fi upgrade, network closets/switches, servers and security system's Phase I and replacement of 360 end-of-life computers, SSBA Funds will be used as follows:

- School Connectivity - \$99,100
- Classroom Technology - \$1,770,812
- High-Tech Security - \$2,970,040

Total: \$4,839,952

Unallocated: \$4,886,182

Smart Schools Bond Act

School Connectivity

- Fiber Cables and Transceivers

Classroom Technology

- 30 Laptops for each elem. school grade
- Interactive White boards in 260 classrooms
- Non-Public Schools

High-Tech Security

- Replace all cameras
- Door Access
- X-Ray Machines
- Phone Upgrade to include emergency features and 911

HEMPSTEAD SCHOOLS' SSIP

- Helps us ensure the safety of all students, teachers and staff
- Provides technology resources that our students need to enhance learning by developing critical thinking and problem-solving skills



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Questions and Discussion