Shenendehowa CSD Smart Schools Bond Act Initiative

- March 2018 -

Smart Bond Initiative

- Passed by New York Voters in November of 2014
- Awarded $2 Billion to Schools based on enrollment and state aid formula.
- Shenendehowa's Award is $3,926,194

Rules for the use of SSBA funds

6 Categories:

- **Classroom Connectivity - Infrastructure, Wired/Wireless**
- Classroom Technology - Mobile Devices, PC's, IWB's. etc.
- Community Connection - Internet
- Pre-K Classroom Improvements
- Elimination of Temporary/Trailer Classrooms
- **School Security and Safety**

Shenendehowa Central Schools — COMMITMENT TO EXCELLENCE

SSBA funds may NOT be used to:

- Pay salaries
- Pay for software
- Pay for professional development

Schools are expected to provide these, but may not be paid for with SSBA funds.

Tech Plan Requirement

- SED Tech Plan (Survey) - Annual approval
- Shenendehowa CSD Tech Plan - Aligned with and guided by SED Tech Plan

Submission Types

- Community Connectivity / Classroom Technology / Devices - Streamlined process
- Capital Projects (Streamlined) - Submit Letter of Intent (LOI)
  - Some projects may be streamlined - No permit required.
  - Non-wiring project
- **SED Approved Capital Projects**

Potential Security Enhancements:

Expand safety and security services including

- Video surveillance (in progress)

- **Integrated notification & communications systems**
  - ○ **Public Address**
  - ○ **Phone**

- Securing building access - RFID/Keypad (in progress)

Capital Project Process

- Administration works with the district's architects to establish priorities in the approved categories.
- Consideration of
    - Shenendehowa's Strategic Plan
    - Shenendehowa's Technology Plan
    - Building Condition Survey

SSBA Planning Committee must review and approve proposals.

Membership must include:	
Students	Staff
Administrators	BOE Member
Parents	Community Members

All expenditures for SSBA must be recommended by SSBA Committee.

Next Steps:

1. With the SSBA committee's consent (3/26/2018), the administration presents the proposed SSIP to the Board of Education (3/27/2018).

2. Board of Education may accept the proposals as the preliminary plan (3/27/2018).

3. Smart Schools Investment Plan (SSIP) is then published on the school district website with an [email address](#) for public comments for a minimum of 30 days.

Next Steps - Continued

4. At a public hearing (5/8/2018 BOE Meeting) comments on the Smart Schools Investment Plan are reviewed and then the plan may be approved by the Board of Education.

5. Approved SSIP submitted to NYSED.

6. The Plan then churns through NYSED approval process.

Leveraging SSBA with E-Rate Fund$

Network connectivity qualifies for E-Rate funding extending the reach of SSBA funds.
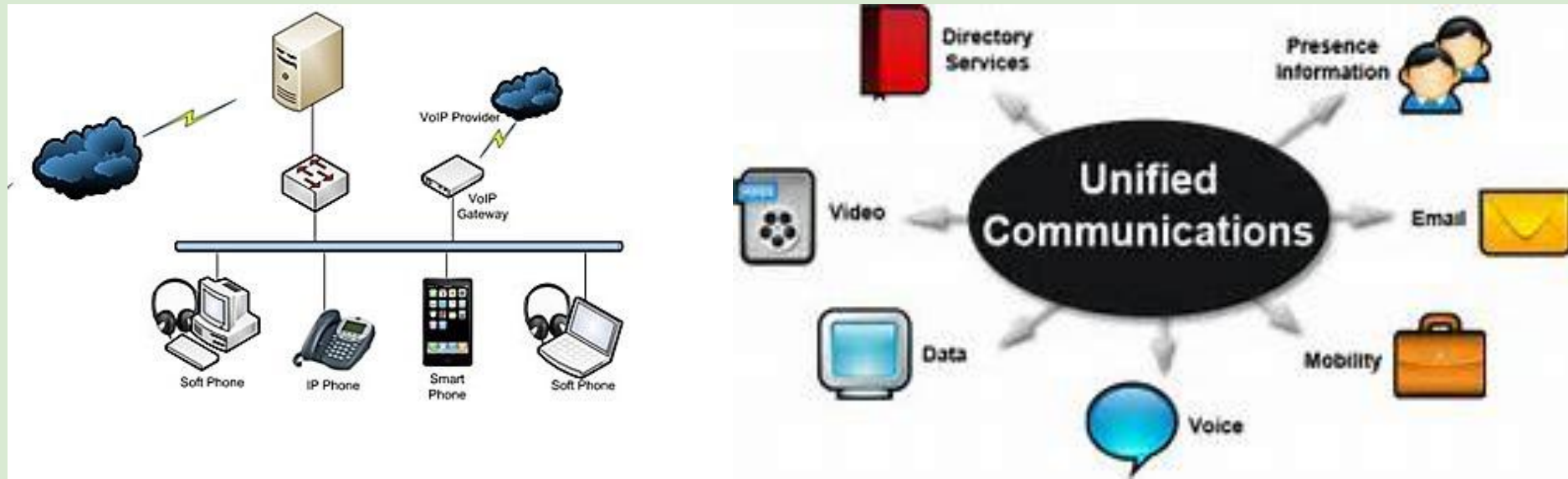- Fiber optic cabling
- Network switches

Proposed Smart School Project:

Replace existing Telephone System which is:
- 17 years old
- challenging to support
- challenging to source replacement parts/components for.

Proposal includes a network based Voice over IP (**VoIP**) **phone** solution with **Unified Communications.**

Advantages of VoIP Technology

- Most educational and business phone systems are VoIP
- Unified Communications
  - Social Media Integration
  - Email / Voicemail Integration
  - Video conferencing
- Phone number travels with teachers/administrators.
- Interfaces with WiFi Network and mobile telephone systems
- Software/Server based platform makes it easier to upgrade and enhance
- Instant District Wide Notification
- Easier Integration with other security solutions deployed in the district (i.e. lockdown, mass notification, etc.)
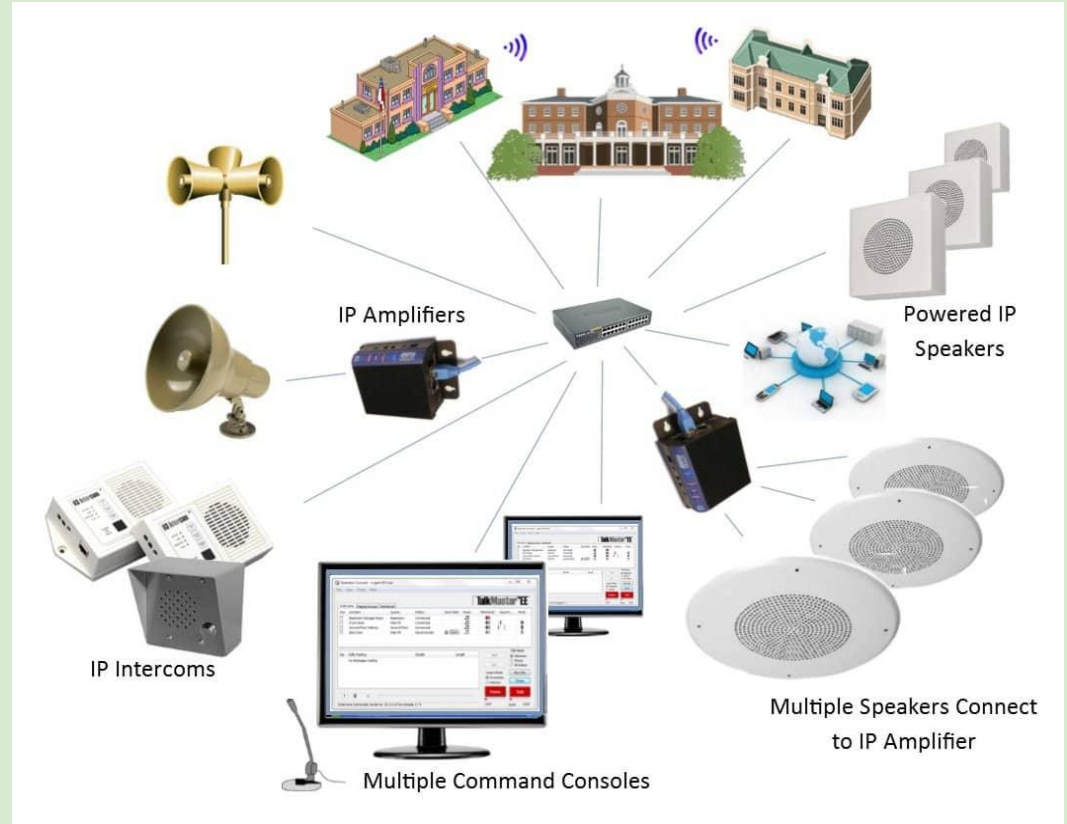
Proposal includes replacing the Existing Public Address System with an IP Based System

Existing System is:

- 17 years,
- costly to maintain
- Not capable of unified district wide unified communications

**IP** based **P**ublic **A**ddress System built on SHENET data network

Advantages of IP Based Public Address Technology

- Provides District Wide paging from authorized phones and stations

- Utilizes existing Analog Speakers in Classrooms and Hallways

- Provides IP based speakers in assembly spaces volume control based on ambient noise level.

- Provides district or building wide pre-recorded announcements in emergencies.

- Easier Integration with other district security solutions (i.e. lockdown, mass notification, etc.)

- Software/Server based platform makes it easier to upgrade and enhance over time.

Re-Terminate/Test Campus Fiber Backbone and Provide Redundant Fiber to Disaster Recovery Center.

- There have been some problems with campus fiber connections that were installed in 2000

- New terminations will be easier interface, provide more reliable connections and better bandwidth to new equipment

- Redundant path to disaster recovery center in High School East will further enhance overall network reliability
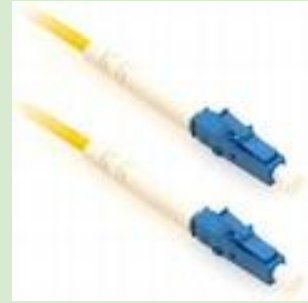
Upgrade Emergency Power District Wide

- Provide generator power in all buildings currently without it.
  - Orenda-Karigon
  - Tsago-Skano
  - Okte
  - Chango
  - Arongen-Shatekon

- Provide emergency generator to all network closets

Why Generators ?

- Networks will support VoIP Phone system as well as critical security systems and should be backed up during extended power outages.

- Using UPS with batteries for multiple hours of backup requires more space than is available in some closets and is costly to maintain over time. Generator minimizes UPS requirement.

- Generators also support other crucial building systems such as the heating plant, fire alarm and egress lighting.

Technology Wing

- Network cabling

- Interactive Panels

- Instructional Technology

Approximate District Wide Costs

VoIP Telephone System	$1,900,000
Public Address System	$ 750,000
Fiber Modifications	$ 100,000
Emergency Generator Power	$ 950,000
HSE Tech Wing - Instructional Tech	$ 200,000
Total Estimated Cost	**$3,900,000**

Public Comments may be addressed to: shenssbacomments@shenschools.org