SSIP1 Executive Summary

District-Wide Technology Infrastructure Upgrades

October 3, 2017

Presented to Frontier Central School District Board of Education

ARCHI-TECHNOLOGY LLC
Technology Consultants

Connecting People, Technology & Buildings

1

SSIP1 Executive Summary Overview

Smart Schools Bond Act (SSBA) Overview

Frontier CSD Goals and Objectives

FCSD Smart Schools Investment Plan (SSIP) 1:
Upgrade District-Wide Technology Infrastructure

Previous and Next Steps
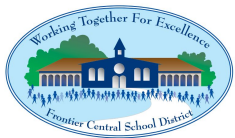
Smart Schools Bond Act (SSBA) Overview

About the Smart Schools Bond Act of 2014

- The **Smart Schools Bond Act (SSBA)** was passed in the 2014 – 15 Enacted Budget and approved by the voters in a statewide referendum on Nov. 4, 2014.

- The SSBA authorized the issuance of **$2 billion** of bonds to finance improved educational technology and infrastructure.

- The intent of the SSBA is to **improve current learning opportunities for NYS K12 students** as well as future employment potential in the 21st Century job market.

—continued—

About the Smart Schools Bond Act of 2014 (cont.)

- The SSBA provides funds for **three specific areas:**
  - Technology infrastructure & connected systems incl. high-tech security features
  - Instructional technology including devices
  - Temporary classroom upgrades to permanent structures

- The SSBA requires that a Review Board review and approve districts' **Smart Schools Investment Plans (SSIPs)** before any funds are made available.

- SSIPs are developed by a **District's SSIP team** based on current conditions and the District's five-year objectives.

- **Frontier Central School District** is eligible for **$3,056,630** that can be used for technology and security upgrades via multiple requests.
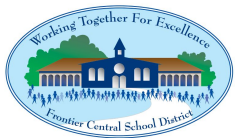
Frontier Central School District
Goals and Objectives

FCSD Mission and Technology Vision

District Mission

The Frontier School Community values and expects a Frontier education to provide life skills and academic skills that allow our students to be successful in any endeavor. A Frontier education will lead to a sense of value of charity, service and community.

Technology Goal

A District Technology Program with all infrastructure needs being met with complete, seamless integration of technology into the curriculum.

Technology/ curriculum integration supported by staff development.
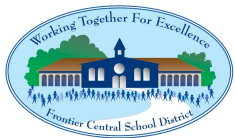
FCSD Technology Goals

1. **Reliable Technology Infrastructure.** Ensure that students and staff have a reliable technology infrastructure for the next 20 years to support educational goals.

2. **Anywhere, Anytime Learning.** All learners will have access to technology in an anytime, anywhere, one-to-one computing environment.

3. **Safe School Environment.** Provide all staff and students with a safe and secure educational environment.

Frontier CSD SSIP1
District-Wide Technology Infrastructure Upgrades

Recommended FCSD SSBA Technology Priorities

Reliable Technology Infrastructure   **Project -** Upgrade District-Wide Technology Infrastructure

Network (Wired & Wireless)   **Project -** Upgrade District-wide Network Infrastructure

Building Communications Systems   **Project -** Security System Enhancement

FCSD Smart Schools Investment Plan

The Smart Schools Investment Plan (SSIP) summarized here is currently estimated to utilize 100% of the District's SSBA allotment - **$3,056,630.**

This SSIP1 Executive Summary describes the plan to **Upgrade District-Wide Technology Infrastructure** by improving the physical network and security system through:

- Improved communications pathways and upgraded cabling (Cat 6/6A)
- New equipment racks, cabinets, and cable management
- New network switches (cost split between SSBA and E-Rate)
- A new fiber optic backbone to support 10 Gbps requirements
- Integrated Security Management System with improved perimeter access control and video surveillance
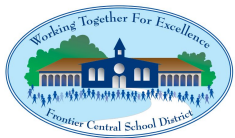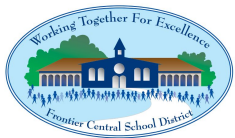
SSIP1: District-Wide Technology Infrastructure Upgrades (cont.)

SSIP1 Total Funding

Categories	Sub-Allocation $ Amount
School Connectivity (details on next pages)	**$2,184,758**
High-Tech Security (details on next pages)	**$871,872**
Total Estimated Cost	**$3,056,630**

SSIP1 Technology Infrastructure

Items	Total Cost
New Technology Rooms - 9 Rooms District Wide (AMEP, Grounding/Bonding & Fittings)	**$225,000**
Communication Equipment Room Fittings - District Wide (Racks, Cable Runways, Wire Management)	**$352,000**
Primary Communications Pathways - District Wide (Conduit, Sleeves, Cable Tray, Firestop)	**$65,500**
Secondary Communications Pathways - District Wide (Surface mount raceway, radius fittings and devices boxes)	**$103,200**
Redundant Service Provider Conduit - District Wide	**$112,000**
Fiber Optic Backbone Cabling Upgrades - District Wide	**$93,300**

13

SSIP1: District-Wide Technology Infrastructure Upgrades (cont.)

SSIP1 Technology Infrastructure (cont.)

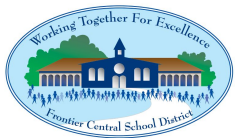| Items	Total Cost
Horizontal Cabling - District Wide (Category 6 For Wired Network, Category 6A for Wireless Network)	**$304,690**
Horizontal Cabling - High School (50% of cost - shared with E-Rate)	**$114,125**
Press Box Backbone Conduit - High School	**$23,000**
Relocate Intrabuilding and Service Provider Fiber - Middle School	**$20,000**
Main Telecommunication Room Recabling - Middle School	**$22,750**
Upgrade Network switches (50% of total cost - shared with E-Rate)	**$253,000**
Total Technology Infrastructure Costs (Does not include Professional Services)	**$1,688,565**
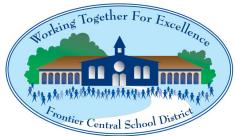
SSIP1: District-Wide Technology Infrastructure Upgrades (cont.)

SSIP1 High-Tech Security

| Items	Total Cost
Integrated Security Management System, Upgraded Video Surveillance, and Perimeter Door Monitoring	**$670,671**
Total High-Tech Security Costs (Does not include Professional Services)	**$670,671**

SSIP1: District-Wide Technology Infrastructure Upgrades (cont.)

SSIP1 Professional Services

Items	Total Cost
Wireless Network Survey	**$99,760**
Professional Services (30% - Design Contingency, Construction Contingency, Incidentals)	**$597,634**
Total Other Costs	**$697,394**
Total Project Costs	**$3,056,630**
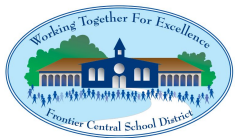
Next Steps

SSIP1 Next Steps

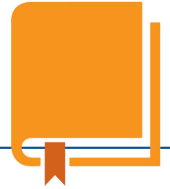| Date	Milestone
Oct. 3	SSIP1 Executive Summary - **Preliminary** Approval By Board
Oct. 4	SSIP1 Executive Summary posted to district website for 30-day review
Oct. 17	SSIP1 Public Forum, time/location TBD
Nov. 7	SSIP1 Executive Summary - **Final** Approval By Board
Nov. 10	SSIP1 Submission to SSBA website
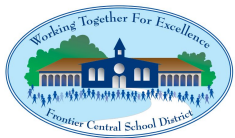
Available Resources
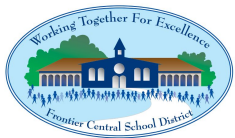
Available Resources

FCSD Resources

- District Strategic Plan
- District Technology Plan
- District Comprehensive Technology Plan

NYS Resources

- Smart Schools Bond Act of 2014 Statute
- Smart Schools Bond Act FAQs
- Smart Schools Bond Act (SSBA) Guidance
- NYS State Education Dept. (SED) SSBA website

Questions and Discussion