



Brewster Central School District

PRELIMINARY INVESTMENT PLAN 2015-2018

PUBLIC HEARING ON SMART SCHOOLS BOND FUNDING

There will be a Public Hearing on Smart Schools Bond Funding at the March 8, 2016 Board of Education Meeting, at 6:30 p.m. in the District Office Board Room.

News Date: Legal Notice for Brewster Central School District Smart Schools Bond Investment Act published on February 4, 2016

We encourage our Community to submit feedback via email at:
smartschoolsbond@brewsterschools.org

TABLE OF CONTENTS

PLAN OVERVIEW

PRECONDITIONS

PLAN GOALS

PURCHASE PLAN & ALLOCATION OF FUNDS

PROFESSIONAL DEVELOPMENT

SUSTAINABILITY

INVESTMENT PLAN TIMELINE

PLAN OVERVIEW

In January 2014, Governor Andrew M. Cuomo called for New York State to invest \$2 billion in its schools through a Smart Schools Bond Act (SSBA). Voters approved the Smart School Bond Act in November 2014 and as a result the Brewster Central School District (Brewster CSD) will receive **\$1,607,265**. In alignment with our NYSED approved Brewster CSD 2015-2018 Instructional Technology Plan, the Brewster Preliminary Smart Schools Investment Plan will be prioritizing investment in the following:

- Modernize and expand the Brewster CSD network infrastructure
- Upgrade and extend the Brewster CSD wireless network capacity
- Provide various technology devices and equipment to support student centered digital learning. Specific devices include Chromebooks, laptops, desktops, tablets, projectors, interactive screens as well as the necessary equipment to secure them.

Working with the Brewster CSD Districtwide Digital Learning Committee (formerly the Technology Committee), parents, community members and aligned with the District's 2015-2018 Technology Plan, this three year investment plan has been drafted to focus the funding from the Smart Schools Bond Act allowable expenditures that include:

- Network and Internet Connectivity
- Classroom Technology

PRECONDITIONS

As a precondition to utilizing the SSBA funds, the District has ensured that there is adequate Internet bandwidth to further expand wireless connectivity for classrooms and other locations, to allow for additional technology devices. There is adequate Internet bandwidth in excess of 200 Mbps per 1,000 students to sustain the increase of more classroom devices.

Brewster CSD has managed fiber between buildings on a private network which provides up to 10 Gigabit of interconnectivity.

All New York State public school districts are required to complete and submit a District Instructional Technology Plan survey to the New York State Education Department in compliance with Section 753 of the Education Law and per Part 100.12 of the Commissioner's Regulations. Districts that include investments in high-speed broadband or wireless connectivity and/or learning technology equipment or facilities as part of their Smart Schools Investment Plan must have a submitted and approved Instructional Technology Plan survey on file with the New York State Education Department (NYSED). The Brewster CSD submitted its required Instructional Technology Plan survey to NYSED in October 2015 and the plan was approved in October 2015.

SMART SCHOOLS BOND ACT FUNDING GOALS

The Brewster CSD Smart Schools Bond Act funding goals align with the District's 2015-2018 Technology Plan that includes:

- Extending student and teacher access to technology, with an emphasis on "anytime/anywhere/any device."
- Providing equitable access to technology tools to prepare all learners to be college and career ready.
- Continuing to provide technical support, infrastructure upgrades, and network maintenance to support all users of the network.
- Continuing to develop and integrate K-12 student technology competencies and learning strategies, developing strategies to seamlessly integrate ISTE Technology Strategies, National Common Core Standards for K-12 and PARCC College and Career Readiness.
- Maximizing college and career readiness skills through multimedia tools and online learning environments.
- Systemically support on-going technology and assistive technology professional learning opportunities for teachers, staff, and administrators to support teaching and learning.
- Continuing to implement ISTE Administrator and Teacher Technology Standards (NETS) practices to ensure that curriculum, instructional strategies, and the learning environments build capacity to successfully utilize a variety of existing and emerging digital learning tools and technologies.

Specifically, the District's Smart Schools Bond Act funding allocations will focus on:

- Expanding Brewster CSD network infrastructure to improve Internet access and increase bandwidth to support student learning
- Expand Wi-Fi infrastructure to provide ubiquitous wireless access districtwide
- Expand access to technology devices for use in all Brewster CSD classrooms.
- Expand technology devices in support of the vision of anytime/anywhere/any device learning opportunities.

PURCHASE PLAN & ALLOCATION OF FUNDS

The Brewster CSD supports a technology network of over 3,500 users. In alignment with the approved Brewster CSD 2015-2018 District Technology Plan, we plan to utilize SSBA funds as described below:

TABLE 1: SSBA Expenditure Summary of \$1,607,265 by Budget Category

SSBA Budget Category	Allocations
School Connectivity	\$250,000
Classroom Learning Technology	\$1,357,265
TOTAL	\$1,607,265

The investment in School Connectivity will be concentrated on the following Sub-Allocations:

SCHOOL CONNECTIVITY	SUB-ALLOCATIONS
School Internal Connections and Components	\$175,000
Professional Services - Configuration and engineering	\$30,000
Other Upfront Costs - Firewall/filter	\$45,000
Totals (School Connectivity)	\$250,000

- **Modernize and Expand the Brewster CSD Network Infrastructure/Access Points**
Expand network Infrastructure in all Brewster CSD school buildings, and upgrade the wireless capacity to handle a 1:1 technology implementation. Our wired network switching and connectivity between schools will be 10gbps. Our Aruba wireless network will be evaluated so we can implement necessary changes to support the intended number of concurrent

connections in each classroom and common area. This high speed connectivity will be complemented by high speed, redundant internet connections, currently at 200mbps each but scalable to 1gbps throughput.

- **Expand Brewster CSD School Internal Connections and Components**

Currently Brewster CSD has a Wireless Aruba Network at all schools and Wireless Aruba Access Points in all school libraries, middle and high school cafeterias, general meeting areas, classrooms in Brewster High School, H.H. Wells Middle School, and C.V. Starr Elementary School, and temporary access (not mounted) in all classrooms at the John F. Kennedy Elementary School. Our current Category 2 FCC E-Rate reimburses 60% of funds expended on access points, and we will maximize aid by using SSBA funds to cover the remaining forty percent.

- **Provide Various Technology Devices and Equipment to Support Student Centered Digital Learning**

The investment in Classroom Learning Technology will be concentrated on the following Sub-Allocations:

CLASSROOM LEARNING TECHNOLOGY	SUB-ALLOCATIONS
Interactive Screens/Projectors	\$360,000
Desktop Computers	\$50,000
Laptop Computers	\$910,000
Tablet Computers	\$37,265
Totals (Classroom Learning Technology)	\$1,357,265

The District plans to purchase a Dell Chromebook for each teacher and student in grades 2-12. The current model being considered has an (11) inch screen, Intel Processor, 4GB of memory, Intel Dual-Band wireless 802.11a/c capabilities and features a nine (9) hour battery. These devices will be purchased with the Chrome OS Management license and added to the District’s existing Brewster CSD Google for Education (GAFE) Management Console. These units are allocated in groups of 30 and will be charged and secured in Dell Mobile Computer carts in classrooms or taken home by students as part of our vision of an anytime/anywhere digital learning experience..

Non Public Schools Participation

According to Smart Schools Bond Act Guidelines located at:

http://www.p12.nysed.gov/mgtserv/smart_schools/docs/Smart_Schools_Bond_Act_Guidance_04.27.15_Final.pdf

Brewster CSD must provide proportional funding allocation for Classroom Learning Technology for the Non Public School students in the form of a loaning technology program. The allocation is calculated proportionally after taking the total funding allocation for SSBA Category: Classroom Learning Technology divided between the BEDS student enrollment count for the Non Public Schools plus Brewster CSD the result is the per pupil SSBA Allocation and then it is multiplied by the enrollment in the Non Public Schools (k-12 Only) to provide with the maximum allocation in technology that can be shared with the Non-Public schools located in Brewster. Green Chimneys is the Non Public School that will benefit with this loaning program.

Brewster CSD (k-12 enrollment)	3,187
Green Chimney (k-12 enrollment)	206
Total k-12 student population	3,187
Total Classroom Learning Technology Allocation	\$1,357,265
Per Pupil SSBA Allocation (CAP at \$250)	\$ 250
Times Non Public (k-12) enrollment	206
Non Public Tech Loaning Program Allocation=	\$51,500

Source:

http://www.p12.nysed.gov/mgtserv/documents/SSBAQuestionsASBO102615_updated_1_21_16.pdf

(page 7)

PROFESSIONAL DEVELOPMENT

Designing professional development and addressing diverse learning needs - The district's professional development plan is aligned to its needs, as determined by various data points collected through surveys and observational data. The district provides in-person training before, during, and after school hours; during faculty meetings; through external Teacher Center offerings; at building level Technology Committee meetings; during faculty meetings; when school is not in session or holiday breaks; via online resources developed specifically for the district population and via targeted resources disseminated through email or on training websites. Professional development opportunities follow established best practices and respect the various needs and learning styles of our adult learners.

Content knowledge and quality teaching; Technology - Our professional development is designed to take existing content knowledge and scaffold those skills to new experiences and learning opportunities for teachers and students. This process includes sharing strategies for moving along the SAMR continuum with purposeful implementation of to maximize the impact on student learning.

Research-based professional learning and collaboration - The district utilizes internal resources as well as subscribing to services offered by the Lower Hudson Regional Information Center and Putnam Northern Westchester BOCES. These have been selected with a focus on research based models and teachers are encouraged to participate in professional learning communities, both on-site and online, and the district promotes this with credit or reimbursement.

Student learning environments; Parent, family and community engagement - Our professional development plan places a strong emphasis on digital literacy. This follows the NETS standards for teachers and students, and includes many points of information for parents. The learning environments both in school and suggested for home are developmentally and age appropriate, and parents and community members are included in learning opportunities through online communications as well as presentations and workshops.

Professional learning opportunities in the Brewster Central School District focus on several specific areas:

SUSTAINABILITY

The District is committed to working upgraded and new devices purchased through the Smart Schools Bond Act into the equipment replacement cycle already in place. Each year, over the next 4 years, an allotment of funds will be budgeted for the normal repair costs of a percentage of the total devices. After (4) years the devices will be replaced and/or reallocated in order to ensure the equipment stays current and new technology is supported. The school district will also use when needed other financial instruments such as IPA and leases to ensure our technology adequately supports instruction in Brewster Schools.

PROVISIONS AND DISTRIBUTION TIMELINE

Once the Brewster CSD Smart Schools Bond Act Investment Plan is approved by Smart Schools Review Board the equipment will be purchased in accordance with the District's purchasing policies and budget cycles. Once equipment arrives the Technology Department Staff will prioritize inventory and provision of the equipment in accordance with our multi-year plan. Based on proposed quantities, equipment should be in place and operational within 30-60 days after it arrives. Projects are prioritized in the below order:

1. Modernize and expand the Brewster CSD network infrastructure
2. Upgrade and extend the Brewster CSD wireless network capacity

3. Provide various technology devices and equipment to support student centered digital learning. Specific devices include Chromebooks, laptops, desktops, tablets, projectors, interactive screens as well as the necessary equipment to secure them.

The district will include this new equipment in its existing inventory database and monitor it to ensure equipment is securely maintained in its designated locations. The District's asset insurance database will be updated to reflect the additional equipment as well.

REFERENCES

To learn more about the Smart Bond Act Guidelines go to:

http://www.p12.nysed.gov/mgtserv/smart_schools/docs/Smart_Schools_Bond_Act_Guidance_04.27.15_Final.pdf

<http://www.p12.nysed.gov/facplan/SmartSchoolsBondAct.html>