

## SMART SCHOOL INVESTMENT PLAN

PHASE 1 – INFRASTRUCTURE / CORE NETWORK

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# SMART SCHOOL INVESTMENT PLAN

PHASE 1 – INFRASTRUCTURE AND CORE NETWORK

#### OVERVIEW

The SMART SCHOOLS BOND ACT OF 2014 was passed in the 2014-15 New York State enacted budget and approved by the voters in a statewide referendum held during the 2014 General Election on Tuesday, November 4. This bond act authorized the issuance of \$2 billion of general obligation bonds to finance improved educational technology and infrastructure to improve learning and opportunity for students throughout the State.

William Floyd's portion of this funding is \$10,398,033. The Smart School Bond has designated four areas of allowable focus for these funds:

- 1. Install high-speed broadband or wireless internet connectivity for schools and communities
- 2. Acquire learning technology equipment or facilities
- 3. Pre-kindergarten programs and/or replace classroom trailers
- 4. Install high-tech security features in school buildings and on school campuses

In collaboration with teachers, administrators, parents, and community members; our district has chosen to concentrate on 1, 2, and 4; increasing our Internet connectivity, acquiring additional learning technology equipment and installing high tech security features. This document provides the district's phase one recommendation for use of these funds for our infrastructure and core network. As required, all district Smart School Investment Plans (SSIP) will be posted for a 30 Day public review and comment period. A public hearing will follow then formal approval by the Board of Education. Once Board approved, we will submit to the New York State Education Department for

final acceptance. Smart School Investment Plans must meet the requirements of demonstrating a rationale for students' need, preparing for minimal speed requirements for connectivity, providing professional development and appropriate technical support, and long term sustainability.

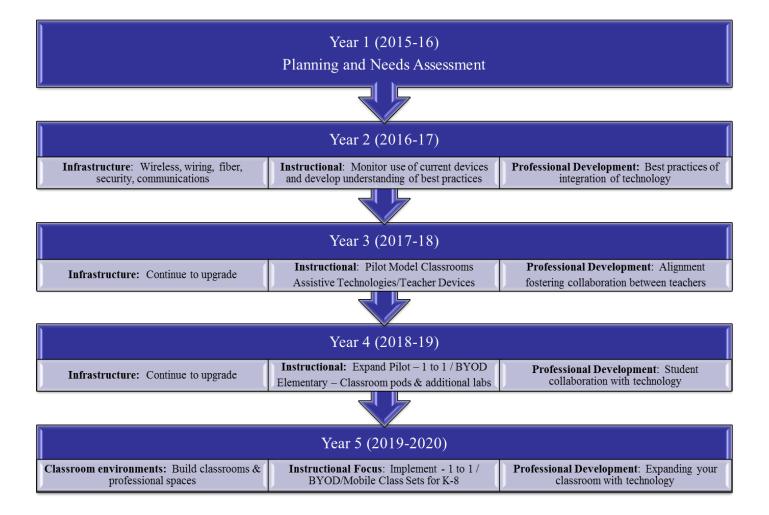
#### RATIONALE

The William Floyd School District is committed to providing all of our students with high quality education. It is our mission to achieve a learner-centered, nurturing, safe environment that empowers students and teachers with the ability and desire to thrive as life-long learners. To achieve this requires a commitment to and investment in the technologies essential to create safer and more productive schools. We intend to take full advantage of this incredible opportunity of Smart Schools to reinvest in long term infrastructure improvements and reinvent our approach to instruction.

Our long term strategy to this goal is multifaceted:

- Rebuild our technology infrastructure to future proof our network capacity.
- Improve and integrate our security and communication systems to ensure the safety of our students and staff.
- Increase our teachers' aptitude for the integration of technology to improve student engagement and achievement.
- Improve our students' access to technology to provide them with expansive opportunities and prepare them for their future.
- Develop classroom spaces that foster collaboration and critical thinking to build life-long learners passionate about the quest for knowledge.

We will be developing these plans simultaneously over the next 5 years.



To accomplish these long term goals we are beginning our project with an upgrade of our core network. Our existing wired network is due for replacement and refresh, as the majority of these devices were installed as early as 2007. The network equipment is nearing obsoletion and will no longer be supported by warranty and service. Our current capacity for throughput on our network causes bottlenecks, our aging UPS back power units are no longer back-ups in case of power failure, and our racks do not correctly accommodate the size of the current or future network equipment. In addition, our technology infrastructure is becoming costlier to manage and maintain and it does not

adequately support our long term strategy of increasing student access to cutting edge technologies and devices. Our current infrastructure has slower application response times and the bandwidth constraints are not able to accommodate the newest innovation in technology for our teachers and students.

This upgrade to our network will provide the backbone to facilitate more access to higher download speeds as well as increase the number of simultaneous users working at the same speed. It is our goal to build a secure, robust infrastructure that supports new initiatives and provides us with room to expand our digital and blended learning opportunities for our students.

#### PROJECT OUTLINE

We will begin with the procurement, configuration, and installation of network infrastructure equipment, battery backups, and network racks. We will be including the 229 network switches; modules, and stacking cables needed; 197 UPS systems, 48 Racks, all new patch cords as well as configuration and installation services.

Upon approval from the state the required equipment will be purchased in accordance with district purchasing policies. The work will be scheduled at a time mindful to not disrupt the educational process. The goal will be to have all purchases and installations of our network upgrades to take place over the next 2 years.

#### PROFESSIONAL DEVELOPMENT

The William Floyd School district is committed to ongoing professional development for teachers, administrators, and staff in the use and integration of technology. This first phase of our Smart School Bond is refreshing and updating of our core network. This work is critical to support our current and future instructional technology initiatives, as well as support necessary improvements in our administration and staff productivity. While no direct teacher professional development will be required for this portion of our Smart School Investment Plan, we will fully support our technical staff with the required training and preparation to ensure they are fully equipped to support all district technology initiatives. This improvement in our core network supports the ongoing expansion of our current and future instructional technologies initiatives. All district innovations will be fully outlined in our district's professional development plan and supported in our district's general budget.

#### TECHNICAL SUPPORT

The William Floyd technology department is made up of a Coordinator of Technology, Web Master, Network Administrator/Programmer, Professional Developer and 4 contracted technical support personnel. They are a high functioning team that is well equipped to support this first phase of our network refresh and upgrade. However, as part of our long term planning they will be surveying staff and students this year to understand areas of strength and challenges as a department. From this baseline we will address needs and look for efficiencies to ensure our technical support is of the highest quality. As we expand our student and teacher access to digital technologies and incorporate more devices, we will be very mindful of technical support needed and will

address the needs with creative cost effective solutions. Our board of education has provided ongoing support of technology innovations in our schools. Their support has always come with the understanding of the importance of quality technical expertise to ensure the successful deployment of any innovation.

#### BUDGET

The district's plan to fund these projects is to use multiple funding sources, eRate /Universal Service Schools and Library Aid funds, general budget funds and Smart Schools Bond funding will all be used to accomplish our goals.

	Smart School Bond	
Total WFSD Allocation	\$	10,398,033
Phase 1 - Infrastructure & Core Network	\$	2,000,000
	\$	8,398,033

#### SUSTAINABILITY

The Board of Education of the William Floyd School District has demonstrated consistent financial support for the use of technology throughout our schools. In preparation for our Smart School Investment Plan, our district consulted with teachers, administrators, students, and parents to determine needs and long term plans for technology. This first phase of updating our core network will provide a robust network and future proof infrastructure that can adapt to future evolving demands. As a district we believe the use of the Smart School Bond funds for this purpose will lay a foundation for technology that we can sustain through our general fund going forward. The

hardware proposed in this plan integrates into our existing systems and the refresh should decrease our maintenance cost in the short term and the ongoing cost will fall within our current budgetary allotment for network support.