Katonah-Lewisboro School District (KLSD)

PRELIMINARY SMART SCHOOLS INVESTMENT PLAN

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TABLE OF CONTENTS

I. Introduction

In November 2014, New York State's voters approved the Smart Schools Bond Act (SSBA). The KLSD's allocation is $707,779. The following are allowable uses of the SSBA funds: 1) Educational Technology Equipment 2) High-speed Broadband or Wireless Internet Connectivity, 3) Capital Projects to update facilities to accommodate pre-kindergarten programs, and 4) Capital Projects to install High-Tech Security Systems.

The State requires that districts submit an instructional technology plan for approval. KLSD's plan was submitted and approved in October 2015. As outlined in the plan, KLSD intends to spend the SSBA funds on the following two areas that are in most need of improvement. They are high-speed broadband connectivity of our buildings and high-tech security system. During the October 1, 2015 Board of Education meeting, a presentation was made to apprise the Board and community of the District's general direction for expending the SBBA fund allocation.

II. TECHNOLOGY INFRASTRUCTURE PRECONDITIONS (justification of need)

Currently, our school buildings in the District are interconnected and share a backbone ISP connection to district of a 100 Mbps TLS via the Lower Hudson Regional Information Center and Verizon. Upgrading our internal connections (building to building) to a managed fiber topology will increase the efficiency of our data communications. We will be able to consolidate and exceed the minimum connectivity requirement of 100 Mbps per 1,000 students as established by the Smart Schools Bond Act. The funds allocated to our schools will be prioritized to School Connectivity in order to implement managed fiber and increase our building to building connections from 100 Mbps to 10 Gbps.

In addition to upgrading to managed fiber, we also plan to upgrade our wireless infrastructure to be able to accommodate the new laptops and other wireless devices in the District. On a given day, there are 1,200 wireless devices connected at our high school alone. Therefore, we need to upgrade to AC wireless access points and for access point density to cover all areas where District and students' BYOD devices are in use.

Over the past few years, the District has invested in increasing students' and teachers' access to desktop and laptop computers, iPads, and other devices. In all schools there are stationary and mobile computer labs, iPad carts, windows-based tablets, interactive whiteboards and other display technologies. Based on these investments and a continuing refresh cycle of computers that are five years old, the most effective way to expend the SSBA fund is in building a broadband infrastructure through managed fiber, for efficient data transmission between buildings, and upgrading our wireless infrastructure to handle increasing number of wireless laptops and electronic devices.

Lastly, the District also values student and staff safety and will invest the remainder of the funds on upgrading our aging IP security system. We started the first phase of upgrading our security system by installing a new security server. The next phase will include replacing old cameras with new high-resolution cameras, and adding additional security servers. The higher resolution video feeds from the new cameras will also require a fiber-based broadband WAN connection. The following section outlines the preliminary investment plan.

III. SMART SCHOOLS INVESTMENT PLAN GOALS (ALIGNMENT WITH TECH PLAN SURVEY)

Our district has set as a priority the development of a strong and robust network infrastructure in order to support the use of technology in the classroom. This initial investment in infrastructure of IT will provide increased access for teachers and students to rich content and therefore a greater opportunity of engagement in the learning process, enhancing their ability to use appropriate technologies to support learning, critically analyze and apply information, integrate content material, master fundamental skills and core curricula, and solve real-life problems.

This will prepare our students to be productive citizens in a global society in the 21st century. Learning is a process that includes the students, the family, the community and the school. With the use of telecommunication and network services, students and their families will gain access to school resources. It is the District's goal to incorporate evolving technology systems and practices to support teaching and learning, as well as communication within the community.

The Goals of the Long Range Plan for Technology

The District's plan for technology's instructional design includes the following goals:

- Provide increased opportunities for student to be active participants in their learning and to accommodate different learning styles.
- Develop students' skills in gathering, analyzing, synthesizing, and using information.
- Develop students' critical thinking and problem-solving skills.
- Enhance communication through a variety of media.
- Support current curricula and be flexible enough to adapt to the changing needs of future curricula.
- Support and enhance the development and refinement of technology-based skills across grade levels.
- Support and enhance an interdisciplinary approach to learning.
- Provide direct access to a variety of data and programs through school-wide networks and virtual/online learning opportunities.
- Support alternative forms of assessing student performance.
- Develop students' skills in using software applications which can transfer to college/career/internship environments.
- Provide for opportunities for collaboration on the local, state and global levels.
- Develop skills for Digital Citizenship.
- Foster leadership and responsibility.
- Create a community of 21st century learners.

IV. PURCHASE PLAN & ALLOCATION OF FUNDS

TABLE: SMART SCHOOL ALOWABLE EXPENDITURE-BUDGET CATEGORY

Budget Category	Sub Allocation
School Connectivity	$463,324.57
Classroom Technology	
Kindergarten Classrooms	
Replacement of Classroom Trailers	
High-Tech Security Features	$244,474.43
Unallocated Funds	
Total	$707,779.00

School Connectivity

The funds allocated in the School Connectivity budget category will be used to implement managed fiber technology for up to 10 gigabit connection between buildings. Currently, the schools in the District are far apart and connected through a 100 megabit TLS, which hinders efficient data communications between buildings and causes notable delays in data transmission. Building a fiber-based broadband infrastructure will enable the District to consolidate the wide area network for more efficient operation and will support our needs now and into the future.

SSBA Funds Sub-Allocation Category: School Connectivity

SSBA Connectivity Projects for Schools	Sub-Allocation
Network/Access Costs	$463,324.57
Outside Plant Costs	$ 0
School Internal Connections and Components	$ 0
Professional Services	$ 0
Testing	$ 0
Other Upfront Costs	$ 0
Other Costs	$ 0
TOTALS	$463,324.57

<u>High-Tech Security Features</u>

The District has security cameras that are over eight years old, already obsolete and at end of life. Our intent is to upgrade and extend the coverage of the High Definition Cameras in our buildings to ensure a safe environment for students and the school community.

<u>SSBA Funds Sub-Allocation Category: High-Tech Security Features</u>

SSBA High-Tech Security Features	Sub - Allocation
Capital-Intensive Project (Standard Review)	$0
Main Entrance Electronics Security System (Streamlined Review)	$244,474.43
Main Entrance Entry Control System (Streamlined Review)	$0
Approved Door Hardening Project (Streamline Review)	$0
Other Costs	$0
TOTALS	$244,474.43

V.   PROFESSIONAL DEVELOPMENT

Katonah Lewisboro School District views ongoing professional development as a necessary part of every initiative both instructional and administrative. Even though the SSBA funding does not support Professional Development, our district will engage in productive and effective professional development for our teachers to support the technology in the classroom.

Through professional development activities, teachers and staff have the opportunity to learn of new and emerging technologies that support teaching and learning, and increase efficiency of administrative functions. A continuous training cycle is necessary to reach organizational goals and to that end, the District employs various professional development models such as:

- Participation in the Lower Hudson Regional Information Center's (LHRIC) Model Schools Program which offers a myriad of instructional technology workshops.
- Participation in the LHRIC's Models Schools Core Plus program which includes training and coaching of a cohort of eight teachers (per semester) who after training become turnkey trainers.
- Tech staff provides one to one or small group training on District systems and infrastructure.
- Use of Superintendent's Conference Days, held three times a year, to provide technology training to teachers on resources and curriculum-specific technologies. Session facilitators include vendors, consultants, the LHRIC's instructional technology trainers and District staff.
- Provision of trainings specific to grade-level or subject-area curriculum needs

VI.   SUSTAINABILITY

The Smart Schools Investment will be sustained with additional investment that our districts will support via our district budget and our standard equipment replacement program every 4 years. We are constantly evaluating our infrastructure and inventory control to clearly identify equipment that is reaching end of life, end of support and or obsolete status. We also provide technology support for all our equipment via contracted services with SW BOCES- Lower Hudson Regional Information Center.

In addition, we work closely with our Business Official and use funding opportunities such as IPA and leases with approvals from NYSED to ensure we attend appropriately to our replacement of equipment needs.

VII.   INVESTMENT PLAN TIMELINE

After the Smart Schools Review Board and New York Education Department approve our Smart Schools Bond Act Investment Plan, equipment will be purchased in accord with the District's purchasing policies and budget. Our technology staff will inventory the new equipment and prioritize installation configuration according to the implementation plan.