

## Smart Schools Investment Plan - TCSD SB 3

## SSIP Overview

Page Last Modified: 08/09/2016

1. Please enter the name of the person to contact regarding this submission.

Allan Gerstenlauer

- 1a. Please enter their phone number for follow up questions.

(631)283-3550 Ext. 303

- 1b. Please enter their e-mail address for follow up contact.

agerstenlauer@tuckahoecommons.com

2. Please indicate below whether this is the first submission, a new or supplemental submission or an amended submission of a Smart Schools Investment Plan.

First submission

3. 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.

By checking this box, you certify that the school district has an approved District Instructional Technology Plan survey on file with the New York State Education Department.

 District Educational Technology Plan Submitted to SED and Approved

4. Pursuant to the requirements of the Smart Schools Bond Act, the planning process must include consultation with parents, teachers, students, community members, other stakeholders and any nonpublic schools located in the district.

By checking the boxes below, you are certifying that you have engaged with those required stakeholders. Each box must be checked prior to submitting your Smart Schools Investment Plan.

- 
- Parents
- 
- 
- Teachers
- 
- 
- Students
- 
- 
- Community members

- 4a. If your district contains non-public schools, have you provided a timely opportunity for consultation with these stakeholders?

- 
- Yes
- 
- 
- No
- 
- 
- N/A

5. Certify that the following required steps have taken place by checking the boxes below: Each box must be checked prior to submitting your Smart Schools Investment Plan.

- 
- The district developed and the school board approved a preliminary Smart Schools Investment Plan.
- 
- 
- The preliminary plan was posted on the district website for at least 30 days. The district included an address to which any written comments on the plan should be sent.
- 
- 
- The school board conducted a hearing that enabled stakeholders to respond to the preliminary plan. This hearing may have occurred as part of a normal Board meeting, but adequate notice of the event must have been provided through local media and the district website for at least two weeks prior to the meeting.
- 
- 
- The district prepared a final plan for school board approval and such plan has been approved by the school board.
- 
- 
- The final proposed plan that has been submitted has been posted on the district's website.

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- 5a. Please upload the proposed Smart Schools Investment Plan (SSIP) that was posted on the district's website, along with any supporting materials. Note that this should be different than your recently submitted Educational Technology Survey. The Final SSIP, as approved by the School Board, should also be posted on the website and remain there during the course of the projects contained therein.

Website Document.docx

- 6. Please enter an estimate of the total number of students and staff that will benefit from this Smart Schools Investment Plan based on the cumulative projects submitted to date.

400

- 7. An LEA/School District may partner with one or more other LEA/School Districts to form a consortium to pool Smart Schools Bond Act funds for a project that meets all other Smart School Bond Act requirements. Each school district participating in the consortium will need to file an approved Smart Schools Investment Plan for the project and submit a signed Memorandum of Understanding that sets forth the details of the consortium including the roles of each respective district.

The district plans to participate in a consortium to partner with other school district(s) to implement a Smart Schools project.

- 8. Please enter the name and 6-digit SED Code for each LEA/School District participating in the Consortium.

Partner LEA/District	SED BEDS Code
(No Response)	(No Response)

- 9. Please upload a signed Memorandum of Understanding with all of the participating Consortium partners.

(No Response)

- 10. Your district's Smart Schools Bond Act Allocation is:

\$96,818

- 11. Enter the budget sub-allocations by category that you are submitting for approval at this time. If you are not budgeting SSBA funds for a category, please enter 0 (zero.) If the value entered is \$0, you will not be required to complete that survey question.

	Sub-Allocations
School Connectivity	32,026
Connectivity Projects for Communities	0
Classroom Technology	33,327
Pre-Kindergarten Classrooms	0
Replace Transportable Classrooms	0
High-Tech Security Features	18,473
<b>Totals:</b>	<b>83,826</b>

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School Connectivity

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1. In order for students and faculty to receive the maximum benefit from the technology made available under the Smart Schools Bond Act, their school buildings must possess sufficient connectivity infrastructure to ensure that devices can be used during the school day. Smart Schools Investment Plans must demonstrate that:
  - sufficient infrastructure that meets the Federal Communications Commission’s 100 Mbps per 1,000 students standard currently exists in the buildings where new devices will be deployed, or
  - is a planned use of a portion of Smart Schools Bond Act funds, or
  - is under development through another funding source.

Smart Schools Bond Act funds used for technology infrastructure or classroom technology investments must increase the number of school buildings that meet or exceed the minimum speed standard of 100 Mbps per 1,000 students and staff within 12 months. This standard may be met on either a contracted 24/7 firm service or a "burstable" capability. If the standard is met under the burstable criteria, it must be:

1. Specifically codified in a service contract with a provider, and
2. Guaranteed to be available to all students and devices as needed, particularly during periods of high demand, such as computer-based testing (CBT) periods.

Please describe how your district already meets or is planning to meet this standard within 12 months of plan submission.

The implementation of our connectivity portion of the Smart Schools Bond funding will help increase the wireless infrastructure we already have from 100 Mbps to 200 Mbps. This is well above the standard set forth by the state of 100 Mbps per 1,000 students necessary under this law.

- 1a. If a district believes that it will be impossible to meet this standard within 12 months, it may apply for a waiver of this requirement, as described on the Smart Schools website. The waiver must be filed and approved by SED prior to submitting this survey.

By checking this box, you are certifying that the school district has an approved waiver of this requirement on file with the New York State Education Department.

2. Connectivity Speed Calculator (Required)

	Number of Students	Multiply by 100 Kbps	Divide by 1000 to Convert to Required Speed in Mb	Current Speed in Mb	Expected Speed to be Attained Within 12 Months	Expected Date When Required Speed Will be Met
Calculated Speed	363	36,300	36.3	100	200	currently met

3. Describe how you intend to use Smart Schools Bond Act funds for high-speed broadband and/or wireless connectivity projects in school buildings.

The networking upgrade part of the Smart Schools Bond will consist of a 10 GB Link between our LAN MDF & IDF connections. This will allow the district internally to increase our connection from 1 GB to 10 GB and prepare the district for the eventual upgrade of 10 GB standard speed of network adapters on devices, including Tablets, Desktops, Printers, Access Points, Etc.

We are also upgrading two of our Core Switches, which will include the 10 GB modules for the 10 GB fiber connections between the MDF & IDF as well as options for sharing the 10 GB capability with our older current 1 GB switches. We will also be upgrading our current ASA Security Firewall with a newer one, capable of allowing for multiple WAN connections from our current ISP (Cablevision) and increasing our current WAN bandwidth. This new firewall device will also include the current Web Filtering Components within the Firewall hardware, as opposed to having the software running

via a Virtual VM-Ware Appliance, which we currently use. Allowing for a one vendor solution via McAfee. Currently our Firewall device is Cisco and our Filtering software is via McAfee. The Physical running of the 10 GB Fiber Cable through our Building is also included in the Bond monies and will be connected to the two new Cisco switches.

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School Connectivity

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- 4. Describe the linkage between the district's District Instructional Technology Plan and the proposed projects. (There should be a link between your response to this question and your response to Question 1 in Part E. Curriculum and Instruction "What are the district's plans to use digital connectivity and technology to improve teaching and learning?")

Tuckahoe Common School District developed a technology plan that we began implementing in the 2013-2014 school year. The goal was to break down the walls of a typical school building and allow student learning, creativity, and investigation 24-7/365; to help foster student achievement and break down the achievement gap between our socio-economic groups.

With the approval of the Board of Trustees the technology department began to implement a 1 to 1 tablet initiative in the 2012-2013 school year, which is now entering into the final year of integration into the school. From grades K-4 all students will have access to a computing device during the school day and grades 5-8 will also have the ability to bring that device home. Our Pre-K program will have access to a mobile tablet station of 10 computing devices per classroom. With access to these devices the district has structured a technology program around teaching students the skills they will need in order to be high school, college and career ready. These devices also provide digital testing tools that give instantaneous feedback to teachers, as to the deeper understanding their students have of materials, which helps in guiding their instructional practices as well as state mandated digital testing. It also provides valuable web-based resources that enhance learning or create opportunities for student guided learning throughout the school year.

- 5. If the district wishes to have students and staff access the Internet from wireless devices within the school building, or in close proximity to it, it must first ensure that it has a robust Wi-Fi network in place that has sufficient bandwidth to meet user demand.

Please describe how you have quantified this demand and how you plan to meet this demand.

The current state of our already robust network infrastructure provides a minimum of 100Mbps access with a max of 1 GB. This will be increased to 10GB capacity by the above upgrades to the infrastructure of our Core Switches and Fiber Connections.

- 6. As indicated on Page 5 of the guidance, the Office of Facilities Planning will have to conduct a preliminary review of all capital projects, including connectivity projects. Please indicate on a separate row each project number given to you by the Office of Facilities Planning.

Project Number
58-09-13-08-0-001-016

- 7. Certain high-tech security and connectivity infrastructure projects may be eligible for an expedited review process as determined by the Office of Facilities Planning.

Was your project deemed eligible for streamlined review?

No

- 8. Include the name and license number of the architect or engineer of record.

Name	License Number
(No Response)	(No Response)

- 9. If you are submitting an allocation for School Connectivity complete this table. Note that the calculated Total at the bottom of the table must equal the Total allocation for this category that you entered in the SSIP Overview overall budget.

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School Connectivity

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	Sub- Allocation
Network/Access Costs	32,026
Outside Plant Costs	(No Response)
School Internal Connections and Components	(No Response)
Professional Services	(No Response)
Testing	(No Response)
Other Upfront Costs	(No Response)
Other Costs	(No Response)
<b>Totals:</b>	<b>32,026</b>

10. **Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category. This is especially important for any expenditures listed under the "Other" category. All expenditures must be eligible for tax-exempt financing to be reimbursed through the SSBA. Sufficient detail must be provided so that we can verify this is the case. If you have any questions, please contact us directly through [smartschools@nysed.gov](mailto:smartschools@nysed.gov).  
**NOTE: Wireless Access Points should be included in this category, not under Classroom Educational Technology, except those that will be loaned/purchased for nonpublic schools.**  
**Add rows under each sub-category for additional items, as needed.****

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## School Connectivity

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Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
Network/Access Costs	McAfee Security Management Center	1	2,839	2,839
Network/Access Costs	McAfee Next Generation Firewall 325-C2 Appliance	1	1,434	1,434
Network/Access Costs	Web Filtering Pack	1	223	223
Network/Access Costs	321 & 325 Series 19IN Rack Mounting Kit	1	127	127
Network/Access Costs	Cisco Catalyst 3850 48 Port PoE IP Service	1	12,760	12,760
Network/Access Costs	Cisco Catalyst 3850 4 x 1GE Network Module	1	290	290
Network/Access Costs	1100W AC Configuration 1 Secondary Power Supply	1	870	870
Network/Access Costs	1000Base-T SFP	1	229	229
Network/Access Costs	Catalyst 2960-x 48GugE PoE 740W 2x10G SFP+ LAN Base	1	4,637	4,637
Network/Access Costs	10GBASE-LRM SFP Module	1	577	577
Network/Access Costs	Middle Atlantic 18U 26	1	1,050	1,050
Network/Access Costs	Rack Mount fan kit	1	165	165
Network/Access Costs	2 inch sleeves from ceiling to unit	2	35	70
Network/Access Costs	Category 6 48 port patch panels	3	195	585
Network/Access Costs	Installation of cabinet	1	1,560	1,560
Network/Access Costs	Middle Atlatic 26U 26	1	1,250	1,250
Network/Access Costs	Rack Mount Fan Kit	1	165	165
Network/Access Costs	2 inch sleeves from ceiling to unit	4	35	140
Network/Access Costs	Category 6 48 port patch panels	5	195	975
Network/Access Costs	Labor for Installation	1	2,080	2,080

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Community Connectivity (Broadband and Wireless)

Page Last Modified: 06/14/2016

1. Describe how you intend to use Smart Schools Bond Act funds for high-speed broadband and/or wireless connectivity projects in the community.

(No Response)

2. Please describe how the proposed project(s) will promote student achievement and increase student and/or staff access to the Internet in a manner that enhances student learning and/or instruction outside of the school day and/or school building.

(No Response)

3. Community connectivity projects must comply with all the necessary local building codes and regulations (building and related permits are not required prior to plan submission).

I certify that we will comply with all the necessary local building codes and regulations.

4. Please describe the physical location of the proposed investment.

(No Response)

5. Please provide the initial list of partners participating in the Community Connectivity Broadband Project, along with their Federal Tax Identification (Employer Identification) number.

Project Partners	Federal ID #
(No Response)	(No Response)

6. If you are submitting an allocation for Community Connectivity, complete this table. Note that the calculated Total at the bottom of the table must equal the Total allocation for this category that you entered in the SSIP Overview overall budget.

	Sub-Allocation
Network/Access Costs	(No Response)
Outside Plant Costs	(No Response)
Tower Costs	(No Response)
Customer Premises Equipment	(No Response)
Professional Services	(No Response)
Testing	(No Response)
Other Upfront Costs	(No Response)
Other Costs	(No Response)
<b>Totals:</b>	<b>0</b>

7. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category. This is especially important for any expenditures listed under the "Other" category. All expenditures must be capital-bond eligible to be reimbursed through the SSBA. If you have any questions, please contact us directly through [smartschools@nysed.gov](mailto:smartschools@nysed.gov). Add rows under each sub-category for additional items, as needed.

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Community Connectivity (Broadband and Wireless)

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Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
(No Response)	(No Response)	(No Response)	(No Response)	(No Response)



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Classroom Learning Technology

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1. In order for students and faculty to receive the maximum benefit from the technology made available under the Smart Schools Bond Act, their school buildings must possess sufficient connectivity infrastructure to ensure that devices can be used during the school day. Smart Schools Investment Plans must demonstrate that sufficient infrastructure that meets the Federal Communications Commission’s 100 Mbps per 1,000 students standard currently exists in the buildings where new devices will be deployed, or is a planned use of a portion of Smart Schools Bond Act funds, or is under development through another funding source.

Smart Schools Bond Act funds used for technology infrastructure or classroom technology investments must increase the number of school buildings that meet or exceed the minimum speed standard of 100 Mbps per 1,000 students and staff within 12 months. This standard may be met on either a contracted 24/7 firm service or a "burstable" capability. If the standard is met under the burstable criteria, it must be:

1. Specifically codified in a service contract with a provider, and
2. Guaranteed to be available to all students and devices as needed, particularly during periods of high demand, such as computer-based testing (CBT) periods.

Please describe how your district already meets or is planning to meet this standard within 12 months of plan submission.

The Tuckahoe Common School District is already meeting minimum required speed standards for wireless devices at 100Mbps /1,000 students and with the completion of our network upgrade as state above will increase those speeds to 200Mbps/1,000 students.

- 1a. If a district believes that it will be impossible to meet this standard within 12 months, it may apply for a waiver of this requirement, as described on the Smart Schools website. The waiver must be filed and approved by SED prior to submitting this survey.

By checking this box, you are certifying that the school district has an approved waiver of this requirement on file with the New York State Education Department.

2. Connectivity Speed Calculator (Required)

	Number of Students	Multiply by 100 Kbps	Divide by 1000 to Convert to Required Speed in Mb	Current Speed in Mb	Expected Speed to be Attained Within 12 Months	Expected Date When Required Speed Will be Met
Calculated Speed	363	36,300	36.3	100	200	currently met

3. If the district wishes to have students and staff access the Internet from wireless devices within the school building, or in close proximity to it, it must first ensure that it has a robust Wi-Fi network in place that has sufficient bandwidth to meet user demand.

Please describe how you have quantified this demand and how you plan to meet this demand.

The current state of our already robust network infrastructure provides a minimum of 100Mbps access with a max of 1 GB. This will be increased to 10GB capacity by the above upgrades to the infrastructure of our Core Switches and Fiber Connections.

**Smart Schools Investment Plan - TCSD SB 3**

Classroom Learning Technology

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4. **All New York State public school districts are required to complete and submit an 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 educational technology purchases 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.**

By checking this box, you are certifying that the school district has an approved Instructional Technology Plan survey on file with the New York State Education Department.

5. **Describe the devices you intend to purchase and their compatibility with existing or planned platforms or systems. Specifically address the adequacy of each facility's electrical, HVAC and other infrastructure necessary to install and support the operation of the planned technology.**

Everything purchased here will function with our current system and we have the adequate electrical supplies for all purchases.

1 - Luxar 30 Tablet Computer Charging Cart / 30 - Surface Pro 3 Power Supplies

2 - 16 Slot Tablet Carts

2 - Adjustable YES Tablet Carts

1 - National DC6-163 ASC Digital Microscope

2 - Samsung DM40D 40" Flat Panel Displays

1 - HP Designjet Z2100 Large Format Graphics Printer

1 - Mac Pro 3.5Ghz 6 Core, 64GB RAM, 512GB SSD / 1 - Apple Thunderbird Display 27" / 1 - Studio Equipment for Film/Television Production

1 - Full Spectrum Laser & Accessories

5 - HP Stream x360 Laptops (For Nonpublic School)

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## Classroom Learning Technology

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6. Describe how the proposed technology purchases will:
- > enhance differentiated instruction;
  - > expand student learning inside and outside the classroom;
  - > benefit students with disabilities and English language learners; and
  - > contribute to the reduction of other learning gaps that have been identified within the district.

The expectation is that districts will place a priority on addressing the needs of students who struggle to succeed in a rigorous curriculum. Responses in this section should specifically address this concern and align with the district's Instructional Technology Plan (in particular Question 2 of E. Curriculum and Instruction: "Does the district's instructional technology plan address the needs of students with disabilities to ensure equitable access to instruction, materials and assessments?" and Question 3 of the same section: "Does the district's instructional technology plan address the provision of assistive technology specifically for students with disabilities to ensure access to and participation in the general curriculum?")

**Luxar 30 Tablet Charging Cart / Surface Pro 3 Power Supplies / 16-Slot Tablet Carts / Adjustable YES Carts:**

The Tuckahoe Common School District's 1 to 1 tablet initiative has been implemented within the classroom environment for two full school years. Within this timeframe we were able to evaluate areas in which we needed to make changes in order to alleviate some of the issues that were presenting themselves in the classrooms. The first of which is the lack of fully charged devices throughout the school day, especially from those individual students from lower socio-economic groups. With the purchase of the Luxar charging cart and additional power adaptors we will make a space available within the Middle School wing of our building. Now during down time or lunch, students can have the opportunity to quickly charge their devices to have them ready to engage in the learning process and alleviate some of the issues that were presenting themselves. The 16-Slot Tablet Carts and Adjustable YES Tablet Carts will accommodate the needs of our two pre-K classrooms and two Kindergarten classrooms.

**National DC6-163 ASC Digital Microscope:**

The Science Department has been utilizing a digital microscope within the science classrooms throughout the curriculum in grades 6, 7 and 8. The device however is limited by the upgrade of the districts operating system to Windows 8.1 in 2014 and Windows 10 in 2015, as the software is no longer compatible. With this upgrade, students will have the ability to connect the microscope to their individual tablets or the instructor will have the opportunity to project it onto the Smartboard for the entire class.

With the 1 to 1 tablet initiative this type of device will allow the instructor to take snapshots of slides within the classroom environment, insert them into the Classroom OneNote Notebook and students will instantaneously have the information at their fingertips in school and at home. This will increase the opportunity for those students who don't have access to digital resources at home, still engage in the learning activities at the same level as those students who do. It also provides the opportunity with English Language Learners and students with disabilities to engage their support teachers in the core curriculum during small group settings by having all of the required slides always available.

**HP Designjet Z2100 Large Format Graphics Printer:**

The Arts program at Tuckahoe Common School District in collaboration with the Technology program has developed numerous graphic design units in which students are utilizing industry standards (Adobe Photoshop, Adobe Dreamweaver, Autodesk 123 Design) in order to design, develop and engineer projects. These units help students develop the skills they need to become college and career ready and introduce students to fields of study they can move towards as they enter high school and beyond.

Unfortunately at the completion of these projects our students have created graphics that are too complex for our current color printing devices. This is a distinct disadvantage for our lower socioeconomic groups in that they may not have the resources to go to a local store and have the prints made at a professional level. This printer will allow the teachers to let students be as creative as they want, with the finest of details and still be able to print the project out for their portfolios at the end of the unit. It also will engage students in the learning process as they will see there is a tangible element that can be taken home at the completion of their work.

**(2) Samsung DM40D 40" Flat Panel Displays:**

During the community forum, parents within the community raised the question of whether we could develop an in-school communication system so that students, as well as parents, can stay up to date with critical information regarding upcoming school and community events. Their recommendation was to implement a digital display system in "high-traffic" areas (the main lobby for parents and the cafeteria for students) within the building. These displays would provide the school principal the opportunity to create a slideshow of important information and upcoming events that will always be available for viewing.

These displays will also serve as a starting point for the digital production program in which students will learn how to write, direct, produce and edit short news stories to broadcast throughout the school; leading towards a news show to help prepare students for high school, college and career readiness.

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### Classroom Learning Technology

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#### **Mac Pro 3.5Ghz 6 Core, 64GB RAM, 512GB SSD/Apple Thunderbird Display 27"/ Studio Equipment for Film/Television Production:**

Digital media is becoming a more prevalent part of how our society disseminates information to the masses. A vital component of that are the individual careers behind the scenes that develop the digital content. The Tuckahoe Common School District's goal of providing all students across all socio-economic groups the opportunity to learn vital skills to become college and career ready as well as help develop a focus for high school will be implementing a digital production program.

To achieve this goal the district will purchase through the Smart Schools Bond the beginning components of a basic video production studio.

- 1 – Impact Chroma Sheet Background 10x24' Green Screen
- 1 – Oben AC-1261 3-Section Aluminum Tripod with BA-117 Ball Head
- 1 – Telmax Galaxy Series Pro iP Ex iPad Teleprompter
- 1 – Canon XA10 HD Professional Camcorder
- 1 – Impact Tungsten Two-Floodlight Kit with 6' Stands & Umbrella Kit
- 1 – Mac Pro with a 3.5Ghz 6 Core Processor, 64GB RAM, 512GB SSD
- 1 – 27" Apple Thunderbird Display

These tools and skills can be utilized throughout all curriculum areas in order to engage students in thought provoking projects that are products of a 21st century classroom. An example of this is a news report produced by students in an 8th grade Social Studies course that describes events that happened during the Civil War or the Civil Rights Movement or a Foreign Language classroom in which students report the news in the language they are studying.

#### **Full Spectrum Laser & Accessories:**

The Tuckahoe Common School District has developed a high-performing engineering and design program through its Industrial Arts classes. These courses allow students to investigate career paths that they may not be exposed to outside of school and begin to build the skills they need in order to compete in a global economy.

To further achieve this goal the district will purchase through the Smart Schools Bond a Full Spectrum Laser Cutter and accessories.

- 1 - 24x18 Professional Series CO2 Laser Base with Retinaengrave 3D Software
- 1 - Focus Lens 1.5
- 1 - Focus Lens 2.0
- 1 – Focus Lens 5.0
- 1 - Water Chiller
- 1 - Friction Rotary Attachment
- 1 - Chuck Rotary Attachment

This tool will be integrated into the Industrial Arts program which already features two 3D printers where students utilize Autodesk 123 Design software to engineer printed models. The program also utilizes a VCarve CNC CAM Router and Vectric VCarve Pro in order to manufacture items within the woodshop. With the introduction of the laser cutter the program will be able to integrate all three components into higher level projects that cross the entire engineering process from design, to modeling, to manufacturing for sale.

These tools will also serve the new STEAM Honor Society that is in the beginning stages of its inaugural school year (15-16).

#### **HP Stream x360 Laptops (For Nonpublic School):**

During the community meeting Tuckahoe Common School District engaged in a conversation with the Montessori School of Southampton and their technology needs and goals. With this information the Technology Department will be purchasing five (5) HP Stream x360 touchscreen laptops, installing Windows 10, Office 2013 and the districts McAfee Proxy Server for Content Filtering.

These devices will be for the sole discretion of the Montessori School for implementation within their curriculum and learning environment. The Tuckahoe Common School District will maintain the equipment if necessary upgrades are made available by Microsoft for the OS and Office Suite on a yearly basis as long as the Montessori School provides the equipment to the technology department at the end of each school year in June.

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## Classroom Learning Technology

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7. **Where appropriate, describe how the proposed technology purchases will enhance ongoing communication with parents and other stakeholders and help the district facilitate technology-based regional partnerships, including distance learning and other efforts.**

During the community forum, parents within the community raised the question of whether we could develop an in-school communication system so that students, as well as parents, can stay up to date with critical information regarding upcoming school and community events. Their recommendation was to implement a digital display system in "high-traffic" areas (the main lobby for parents and the cafeteria for students) within the building. These displays would provide the school principal the opportunity to create a slideshow of important information and upcoming events that will always be available for viewing.

The district technology that has been implemented over the course of the last three years along with the infrastructure upgrades associated with the Smart Bonds Act will allow the district to utilize distance learning opportunities where they are available and appropriate for instruction practices.

8. **Describe the district's plan to provide professional development to ensure that administrators, teachers and staff can employ the technology purchased to enhance instruction successfully.**

**Note: This response should be aligned and expanded upon in accordance with your district's response to Question 1 of F. Professional Development of your Instructional Technology Plan: "Please provide a summary of professional development offered to teachers and staff, for the time period covered by this plan, to support technology to enhance teaching and learning. Please include topics, audience and method of delivery within your summary."**

The professional development program is created each year with the input of the school and district administration, teachers, and staff, as well as the Professional Development Committee. At its core, the program reflects the belief that teachers continuously improve their professional practice, model lifetime learning, and exhibit leadership in their school and professional community by promoting and demonstrating the effective use of digital tools and resources. Professional development is generally structured around technology changes within the district, such as the upgrade from Windows 8.1 to Windows 10. All professional development efforts are aimed at enhancing the classroom environment to support instruction and student engagement in the learning process. If teachers are comfortable utilizing the technology tools, they will apply them in the most effective manner in the classroom to support student achievement. Formal and informal classroom observations reflect evidence of the high incidence of the utilization of instructional technology - teachers and students are well equipped to manage a digital environment.

Teachers:

- Participate in local and global learning communities to explore creative applications of technology to improve student learning.
- Exhibit leadership by demonstrating a vision of technology infusion, participating in shared decision making and community.
- Evaluate and reflect on current research and professional practice on a regular basis to make effective use of existing and emerging digital tools and resources in support of student learning.
- Contribute to the effectiveness, vitality, and self-renewal of the teaching profession and of their school and community.

For the 2016-17 school year, professional development efforts will focus on enabling teachers to utilize Microsoft OneNote Creation App and Sharepoint to create a virtual learning environment that students can access whether they are in school or at home. Additionally, professional development will be devoted to the above-mentioned upgrade to Windows 10, as well as the upgrade from Office 2013 to Office 2016 and other web-based resources such as e-school, IXL, and/or STAR testing to ensure a smooth transition in functionality.

From an instructional perspective, the focus will be on utilizing technology to enhance instruction in social studies and science, as well as meeting the needs of the school's ENL population.

The only devices being purchased are: (1) for the nonpublic school (laptops), who will provide their own professional development; and (2) our video editing system, which will be instructed by our art teacher who, as a videographer, has the knowledge to instruct the course and use the equipment to further provide instructional opportunities for our students.

9. **Districts must contact the SUNY/CUNY teacher preparation program that supplies the largest number of the district's new teachers to request advice on innovative uses and best practices at the intersection of pedagogy and educational technology.**

By checking this box, you certify that you have contacted the SUNY/CUNY teacher preparation program that supplies the largest number of your new teachers to request advice on these issues.

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9a. Please enter the name of the SUNY or CUNY Institution that you contacted.

Stony Brook University

9b. Enter the primary Institution phone number.

631-631-6000

9c. Enter the name of the contact person with whom you consulted and/or will be collaborating with on innovative uses of technology and best practices.

Dr. Robert Scheidet, Director of Educational Leadership, Department of Technology & Society

10. A district whose Smart Schools Investment Plan proposes the purchase of technology devices and other hardware must account for nonpublic schools in the district.

Are there nonpublic schools within your school district?

- Yes
- No

10a. Describe your plan to loan purchased hardware to nonpublic schools within your district. The plan should use your district's nonpublic per-student loan amount calculated below, within the framework of the guidance. Please enter the date by which nonpublic schools must request classroom technology items. Also, specify in your response the devices that the nonpublic schools have requested, as well as in the in the Budget and the Expenditure Table at the end of the page.

Any private school requesting to borrow equipment for the school year from the Tuckahoe Common School District, who are located within the borders of the school district, must provide in writing to the Superintendent of Schools a letter by June 30 of the preceding year in order to be eligible. The district hardware purchase of five (5) laptop computing devices will be solely utilized by nonpublic schools within the districts borders; currently there is only on such school.

10b. A final Smart Schools Investment Plan cannot be approved until school authorities have adopted regulations specifying the date by which requests from nonpublic schools for the purchase and loan of Smart Schools Bond Act classroom technology must be received by the district.

By checking this box, you certify that you have such a plan and associated regulations in place that have been made public.

11. Nonpublic Classroom Technology Loan Calculator

The Smart Schools Bond Act provides that any Classroom Learning Technology purchases made using Smart Schools funds shall be lent, upon request, to nonpublic schools in the district. However, no school district shall be required to loan technology in amounts greater than the total obtained and spent on technology pursuant to the Smart Schools Bond Act and the value of such loan may not exceed the total of \$250 multiplied by the nonpublic school enrollment in the base year at the time of enactment.

See:

[http://www.p12.nysed.gov/mgtserv/smart\\_schools/docs/Smart\\_Schools\\_Bond\\_Act\\_Guidance\\_04.27.15\\_Final.pdf](http://www.p12.nysed.gov/mgtserv/smart_schools/docs/Smart_Schools_Bond_Act_Guidance_04.27.15_Final.pdf).

	1. Classroom Technology Sub-allocation	2. Public Enrollment (2014-15)	3. Nonpublic Enrollment (2014-15)	4. Sum of Public and Nonpublic Enrollment	5. Total Per Pupil Sub-allocation	6. Total Nonpublic Loan Amount
Calculated Nonpublic Loan Amount	33,327	348	10	358	93	930

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Classroom Learning Technology

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12. To ensure the sustainability of technology purchases made with Smart Schools funds, districts must demonstrate a long-term plan to maintain and replace technology purchases supported by Smart Schools Bond Act funds. This sustainability plan shall demonstrate a district's capacity to support recurring costs of use that are ineligible for Smart Schools Bond Act funding such as device maintenance, technical support, Internet and wireless fees, maintenance of hotspots, staff professional development, building maintenance and the replacement of incidental items. Further, such a sustainability plan shall include a long-term plan for the replacement of purchased devices and equipment at the end of their useful life with other funding sources.

By checking this box, you certify that the district has a sustainability plan as described above.

13. Districts must ensure that devices purchased with Smart Schools Bond funds will be distributed, prepared for use, maintained and supported appropriately. Districts must maintain detailed device inventories in accordance with generally accepted accounting principles.

By checking this box, you certify that the district has a distribution and inventory management plan and system in place.

14. If you are submitting an allocation for Classroom Learning Technology complete this table. Note that the calculated Total at the bottom of the table must equal the Total allocation for this category that you entered in the SSIP Overview overall budget.

	Sub-Allocation
Interactive Whiteboards	0
Computer Servers	0
Desktop Computers	6,675
Laptop Computers	930
Tablet Computers	0
Other Costs	25,722
<b>Totals:</b>	<b>33,327</b>

15. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category. This is especially important for any expenditures listed under the "Other" category. All expenditures must be capital-bond eligible to be reimbursed through the SSBA. If you have any questions, please contact us directly through [smartschools@nysed.gov](mailto:smartschools@nysed.gov). Please specify in the "Item to be Purchased" field which specific expenditures and items are planned to meet the district's nonpublic loan requirement, if applicable. NOTE: Wireless Access Points that will be loaned/purchased for nonpublic schools should ONLY be included in this category, not under School Connectivity, where public school districts would list them. Add rows under each sub-category for additional items, as needed.

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Select the allowable expenditure type. Repeat to add another item under each type.	Item to be Purchased	Quantity	Cost per Item	Total Cost
Other Costs	Luxar Black 30 Tablet Computer Charging Cart	1	609	609
Other Costs	16 Slot Tablet Cart	2	346	693
Other Costs	The Adjustable YES Cart for Tablets	2	1,529	3,058
Other Costs	30 Tablet Power Adaptors	30	70	2,100
Other Costs	DesignJet z2100 24	1	2,802	2,802
Other Costs	Impact Chroma Sheet Background 10x24	1	114	114
Other Costs	Oben AC-1361 Section Aluminum Tripod BA-117 Ball Head	1	169	169
Other Costs	Telmax Galaxy Series Pro iP ExiPad Teleprompter	1	425	425
Other Costs	Canon XA10 HD Professional Camcorder	1	1,499	1,499
Other Costs	Impact Tungsten Two-Floordlight Kit with 6' Stand & Umbrella Kit	1	109	109
Other Costs	National DC6-163 ASC Digital Microscope	1	1,759	1,759
Desktop Computers	Mac Pro	1	6,675	6,675
Other Costs	Mac Thunderbolt Display	1	1,000	1,000
Other Costs	Full Spectrum Laser & Accessories	1	9,595	9,595
Laptop Computers	HP Stream 11-r091nr Signature Edition Laptop (Blue): non-public item	5	186	930
Other Costs	Samsung DM40D 40	2	895	1,790



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Pre-Kindergarten Classrooms

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1. Provide information regarding how and where the district is currently serving pre-kindergarten students and justify the need for additional space with enrollment projections over 3 years.

(No Response)

2. Describe the district’s plan to construct, enhance or modernize education facilities to accommodate pre-kindergarten programs. Such plans must include:

- Specific descriptions of what the district intends to do to each space;
- An affirmation that pre-kindergarten classrooms will contain a minimum of 900 square feet per classroom;
- The number of classrooms involved;
- The approximate construction costs per classroom; and
- Confirmation that the space is district-owned or has a long-term lease that exceeds the probable useful life of the improvements.

(No Response)

3. Smart Schools Bond Act funds may only be used for capital construction costs. Describe the type and amount of additional funds that will be required to support ineligible ongoing costs (e.g. instruction, supplies) associated with any additional pre-kindergarten classrooms that the district plans to add.

(No Response)

4. All plans and specifications for the erection, repair, enlargement or remodeling of school buildings in any public school district in the State must be reviewed and approved by the Commissioner. Districts that plan capital projects using their Smart Schools Bond Act funds will undergo a Preliminary Review Process by the Office of Facilities Planning.

Please indicate on a separate row each project number given to you by the Office of Facilities Planning.

Project Number
(No Response)

5. If you have made an allocation for Pre-Kindergarten Classrooms, complete this table. Note that the calculated Total at the bottom of the table must equal the Total allocation for this category that you entered in the SSIP Overview overall budget.

	Sub-Allocation
Construct Pre-K Classrooms	(No Response)
Enhance/Modernize Educational Facilities	(No Response)
Other Costs	(No Response)
<b>Totals:</b>	<b>0</b>

6. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category. This is especially important for any expenditures listed under the "Other" category. All expenditures must be capital-bond eligible to be reimbursed through the SSBA. If you have any questions, please contact us directly through [smartschools@nysed.gov](mailto:smartschools@nysed.gov). Add rows under each sub-category for additional items, as needed.

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Pre-Kindergarten Classrooms

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Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

**Smart Schools Investment Plan - TCSD SB 3**

Replace Transportable Classrooms

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1. Describe the district’s plan to construct, enhance or modernize education facilities to provide high-quality instructional space by replacing transportable classrooms.

(No Response)

2. All plans and specifications for the erection, repair, enlargement or remodeling of school buildings in any public school district in the State must be reviewed and approved by the Commissioner. Districts that plan capital projects using their Smart Schools Bond Act funds will undergo a Preliminary Review Process by the Office of Facilities Planning.

Please indicate on a separate row each project number given to you by the Office of Facilities Planning.

Project Number
(No Response)

3. For large projects that seek to blend Smart Schools Bond Act dollars with other funds, please note that Smart Schools Bond Act funds can be allocated on a pro rata basis depending on the number of new classrooms built that directly replace transportable classroom units.

If a district seeks to blend Smart Schools Bond Act dollars with other funds describe below what other funds are being used and what portion of the money will be Smart Schools Bond Act funds.

(No Response)

4. If you have made an allocation for Replace Transportable Classrooms, complete this table. Note that the calculated Total at the bottom of the table must equal the Total allocation for this category that you entered in the SSIP Overview overall budget.

	Sub-Allocation
Construct New Instructional Space	(No Response)
Enhance/Modernize Existing Instructional Space	(No Response)
Other Costs	(No Response)
<b>Totals:</b>	<b>0</b>

5. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category. This is especially important for any expenditures listed under the "Other" category. All expenditures must be capital-bond eligible to be reimbursed through the SSBA. If you have any questions, please contact us directly through [smartschools@nysed.gov](mailto:smartschools@nysed.gov). Add rows under each sub-category for additional items, as needed.

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

Smart Schools Investment Plan - TCSD SB 3

High-Tech Security Features

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**1. Describe how you intend to use Smart Schools Bond Act funds to install high-tech security features in school buildings and on school campuses.**

The Tuckahoe Common School District is committed to the safety and security of all students, staff and community members while on school grounds. The district's current security system will be upgraded to allow for a more detailed security assessment within three areas: (1) an upgrade to existing digital video recording components; (2) improving video surveillance in the middle school wing of the school building; and, (3) improving video surveillance in the elementary wing. The projects are outlined below.

**(1) Upgrade existing digital video recording components.** The district currently has a DVR server that does not allow for retention of potentially critical information for more than a few days. The upgraded DVR system will extend the length of recording for district administration to review in case any incidents happen within the building.

The DVR Components include:

- 1 DVD Server
- 1 Rackmount Case
- 2 - Digital Interface 16 Port Board
- 2 - Digital Interface Real Time Upgrade
- 1 - DVR 32 Channel Support Upgrade
- 1 - Pan Tilt Zoom Camera Controller Card
- 16 - 1TB Hard Drives
- 1 - Remote Access Configuration
- 1 - DVR Server Configuration
- 1 - EMAP Setup & Configuration
- 1 - Network Connection & Configuration

**(2) Improve video surveillance in the middle school wing.** In the middle school wing of the building we will increase the number of camera angles available by eight; Main entrance interior, first floor hallway 1 & 2, second floor hallway 1, 2 & 3, as well as two in the cafeteria.

The Middle School Components will include:

- 7 - Hi-Res Interior Day/Night Dome Camera
- 1 - Hi-Res Interior Day/Night Dome Camera Wide Dynamic Range
- Wiring (low voltage), Mounting, Configuration, Setup and Programming

**(3) Improve video surveillance in the elementary wing.** In the elementary school wing of the building we will increase the number of camera angles available by eight; Replace main entrance interior, first floor front, room 100 exit door, upgrade exterior, north 59 hallway, teachers entrance, back hallway 1 & 2.

The Elementary School Components will include:

- 4 - Hi-Res Interior Day/Night Dome Camera
- 1 - Hi-Res Interior Day/Night Dome Camera Wide Dynamic Range
- 3 - 1.3MP Interior Day/Night Dome Camera
- Wiring (low voltage), Mounting, Configuration, Setup and Programming

**2. All plans and specifications for the erection, repair, enlargement or remodeling of school buildings in any public school district in the State must be reviewed and approved by the Commissioner. Districts that plan capital projects using their Smart Schools Bond Act funds will undergo a Preliminary Review Process by the Office of Facilities Planning.**

**Please indicate on a separate row each project number given to you by the Office of Facilities Planning.**

Project Number
58-09-13-08-0-001-BA1

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High-Tech Security Features

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3. Was your project deemed eligible for streamlined Review?

- Yes
- No

3a. Districts with streamlined projects must certify that they have reviewed all installations with their licensed architect or engineer of record, and provide that person’s name and license number. The licensed professional must review the products and proposed method of installation prior to implementation and review the work during and after completion in order to affirm that the work was code-compliant, if requested.

By checking this box, you certify that the district has reviewed all installations with a licensed architect or engineer of record.

4. Include the name and license number of the architect or engineer of record.

Name	License Number
Paul Rogers (Chaleff & Rogers Architects, P.C.)	160281

5. If you have made an allocation for High-Tech Security Features, complete this table.

Note that the calculated Total at the bottom of the table must equal the Total allocation for this category that you entered in the SSIP Overview overall budget.

	Sub-Allocation
Capital-Intensive Security Project (Standard Review)	0
Electronic Security System	18,473
Entry Control System	0
Approved Door Hardening Project	0
Other Costs	0
<b>Totals:</b>	<b>18,473</b>

6. Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category. This is especially important for any expenditures listed under the "Other" category. All expenditures must be capital-bond eligible to be reimbursed through the SSBA. If you have any questions, please contact us directly through [smartschools@nysed.gov](mailto:smartschools@nysed.gov).

Add rows under each sub-category for additional items, as needed.

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High-Tech Security Features

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Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
Electronic Security System	Hi-Res Interior Day/Night Camera	7	299	2,093
Electronic Security System	Hi-Res Interior Day/Night Dome Camera with Dynamic Range	1	399	399
Electronic Security System	Indoor Camera Wiring	8	139	1,112
Electronic Security System	Indoor camera mounting/focusing	8	75	600
Electronic Security System	Camera setup configuration	8	49	392
Electronic Security System	Extended camera wiring	3	150	450
Electronic Security System	Security System Installation	2	155	310
Electronic Security System	Hi-Res Interior Day/Night Dome Camera	4	299	1,196
Electronic Security System	1 Hi-Res Interior Day/Night Dome Camera	1	399	399
Electronic Security System	1.3 Megapixel Interior Day/Night camera Dome	3	399	1,197
Electronic Security System	Indoor Camera Wiring	7	75	525
Electronic Security System	Indoor Camera Mounting/Focusing	8	75	600
Electronic Security System	Camera Configuration	8	49	392
Electronic Security System	Extended Wiring	3	150	450
Electronic Security System	Security Installation	3	155	465
Electronic Security System	DVR Server	1	999	999
Electronic Security System	Rackmount Case	1	170	170
Electronic Security System	Digital Interface 16 Port Board	2	999	1,998
Electronic Security System	Digital Interface Real Time Upgrade	2	449	898
Electronic Security System	DVR 32 Channel Support Upgrade	1	499	499
Electronic Security System	Pan/Tilt Camera Control Board	1	299	299
Electronic Security System	1TB Hard Drive	16	144	2,304
Electronic Security System	Remote Access Configuration	1	99	99
Electronic Security System	DVR SErver Configuration	1	129	129
Electronic Security System	EMAP Setup & Configuration	1	249	249
Electronic Security System	Network Connection & Configuration	1	249	249

**Smart Schools Investment Plan - TCSD SB 3**

Report

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