Smart Schools Investment Plan - 2016-17 Version (Original) - First Submission

SSIP Overview

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

Christopher Borsari

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

914-631-9404

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

cborsari@tufsd.org

2. Please indicate below whether this is the first submission, a new or supplemental submission or an amended submission of an approved 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 occured 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.

ThePublicSchoolsoftheTarrytownsUFSDFinalSmartSchoolsInvestmentPlan.pdf

5b. Enter the webpage address where the final Smart Schools Investment Plan is posted. The Plan should remain posted for the life of the included projects.

http://www.tufsd.org/dynimg/_WEAAA_/docid/0x0ADB07B53F954174/2/TUFSD%2BSmart%2BSchools%2BInvestment%2BPlan%2B%2528SSIP%2529.pdf

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.

4,375

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:

$853,540

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	472,418
Connectivity Projects for Communities	0
Classroom Technology	380,796
Pre-Kindergarten Classrooms	0
Replace Transportable Classrooms	0
High-Tech Security Features	0
Totals:	**853,214**

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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.

As a precondition to utilizing the Smart Schools Bond Act funding, there is a requirement for the District to meet the minimum FCC speed standard of at least 100 Mbps per 1,000 students. The Union Free School District of the Tarrytowns meets and/or exceeds this requirement based on current patterns of student and staff usage. With the use of Smart Schools Bond Act funding we plan to update our infrastructure and increase our bandwidth to meet the growing and future operational needs of our school district. With a population of approximately 2,800 students, our infrastructure and school connectivity project will allow us to establish a minimum speed of 300 Mbps. This project will be completed by the Summer of 2018. The increase in speed and access points will ensure that our infrastructure is robust and our bandwidth is more than adequate to support high usage times such as periods of Computer-based Testing (CBT).

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	2,763	276,300	276.3	100	300	July 30, 2018

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 funds allocated in the School Connectivity category would cover the cost of installing switch replacements as well as high speed cabling and additional wireless access points at all buildings to improve connectivity within buildings and across the district.

Specifically the District's Smart Schools Bond Act allocation will focus on:

- Expanding the network infrastructure to upgrade connectivity and speeds (bandwidth) between TUFSD schools out to the Internet. This would include routers, core switches, the batteries that power the core switches, data switches, and cabling where needed
- Expand current WiFi infrastructure for WiFi access points in all classrooms, grades K-12, including John Paulding, which isn't supported in our current configuration.

The recommendations were based on an extensive review of our existing network, research into the future needs of the district, and meetings with technology and administrative personnel as well as technology consultants.

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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?)

Our teachers, with the support of the Technology Integration Specialist and Department Chair of Technology, are key to transforming computers and peripherals into useful teaching tools. Teachers must be comfortable with technology in order to utilize it to its maximum capacity in the classroom. The training that is provided to teachers helps them to develop a vision that is grounded in the understanding that technology is a tool that can offer creative solutions to longstanding teaching and learning problems. They are encouraged to use technology to be creative and innovative in planning and implementing their lessons. These proposed recommendations will propel the Public Schools of the Tarrytowns well into the 21st Century with websites, blogs, video channels, simulations, and computer assisted design courses along with meeting the requirements of computer-based testing. The UFSD of the Tarrytowns maintains a strong commitment to the use of instructional technology in the classroom as a tool to improve student engagement and preparation for 21st century skills. Technology is utilized to support each student's ability to successfully meet rigorous standards and develop problem solving, creative thinking, and communication skills. We seek to empower our students to find information, to build information, and to better understand the world. This is evidenced through professional development, instructional practice, and student learning.
On a monthly basis, a committee of district and building level administrators, teachers, and technology specialists, representing all schools and grade levels, meets to discuss the current status as well as the future of our technology needs. Its collective goal is to guide the district in making future purchases and integrating existing technologies to further advance student learning and success. An important component of our Technology Plan is to evaluate the current status of technology through the District. We have used formal surveys, informal and formal observation data, professional development feedback, and equipment inventories to guide our decision making.

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.

In February 2016, the District updated the DHCP WiFi server. We purchased and installed a W-7220 Wireless Controller. This controller supports up to 1,024 access points and 24,500 mobile devices. The controller was purchased for $37,990.00 and includes interminable support for three years. Our internal network bandwidth between school buildings falls within a range of 100 Mb to 1Gb and our bandwidth connections to the internet have been contracted at a maximum speed of 100 Mbps. As noted this will need to increase to 300 Mbps in the future to meet FCC requirements.

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
66-04-01-03-7-999-BA1
66-04-01-03-7-999-001

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?

Yes

7a. Districts that choose the Streamlined Review Process will be required to 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.

☑ I certify that I have reviewed all installations with a licensed architect or engineer of record.

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

Name	License Number
Saverio J. Belfiore	33060

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.

	Sub-Allocation
Network/Access Costs	226,011
Outside Plant Costs	0
School Internal Connections and Components	246,407
Professional Services	(No Response)
Testing	0
Other Upfront Costs	0
Other Costs	0
Totals:	**472,418**

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.
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.

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	VSP 8400 Chassis with 4 IO Module Slots	2	12,055	24,110
Connections/Components	Universal Slide Rack Mount Kit for Use with VSP 8400	2	341	682
Connections/Components	VSP 8000 Spare 100-240V 800W AC Power Supply	2	548	1,096
Connections/Components	842XS Ethernet Switch Module - 24 Port 1/10G SFP+	2	10,332	20,664
Connections/Components	8424XT Ethernet Switch Module - 24 Port 100M/1G/10G Base-T	2	11,365	22,730
Connections/Components	1-port 10GBASE-SR Small Form Factor Pluggable Plus (SFP+) 10 Gigabit Ethernet Transceiver,	4	647	2,588

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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
	connector type: LC			
Connections/Components	SFP+ Direct Attach Cable	4	234	936
Network/Access Costs	ERS 4850GTS-PWR+ with 48 10/100/1000 802.3at PoE+ and 2 SFP ports plus 2 SFP+ ports and HiStack ports	33	4,547	150,051
Connections/Components	4000-SSC HiStack Stacking Cable 1.5m for Ethernet Routing Switch 4500 or 4800 series	3	192	576
Connections/Components	1-port 10GBBASE-LR Small Form Factor Pluggable Plus (SFP+) 10 Gigabit Ethernet Transceiver, connector type: LC	60	1,621	97,260
Network/Access Costs	WLAN 9133 Indoor access point 802.11n/ac, Dual Radio 3x3 MIMO, OMNI-Directional Antenna, Integrated Wireless Controller	50	1,037	51,850
Connections/Components	Single mode fiber runs in each building (closet to closet)	1	31,000	31,000
Connections/Components	Cat 5e certifies plenum wire drops includes cable, jack plus termination at jack ends and into patch panels	15	425	6,375
Connections/Components	Installation, configuring and programming of dual core switches, PWR switches and uplinks	2	10,500	21,000
Connections/Components	Programming of access points controller to integrate to wireless AP	1	2,000	2,000
Connections/Components	Integration and programming for CS 1000 telecom system into core switches	1	3,500	3,500
Connections/Components	Wireless closets: removal of legacy equipment, reorganization of all wireless closets and installation of new wire management	18	2,000	36,000

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

N/A

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.

N/A

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.

N/A

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)
Totals:	**0**

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.
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
(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

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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.

As a precondition to utilizing the Smart Schools Bond Act funding, there is a requirement for the District to meet the minimum FCC speed standard of at least 100 Mbps per 1,000 students. The Union Free School District of the Tarrytowns meets and/or exceeds this requirement based on current patterns of student and staff usage. With the use of Smart Schools Bond Act funding we plan to update our infrastructure and increase our bandwidth to meet the growing and future operational needs of our school district. With a population of approximately 2,800 students, our infrastructure and school connectivity project will allow us to establish a minimum speed of 300 Mbps. This project will be completed by the Summer of 2018. The increase in speed and access points will ensure that our infrastructure is robust and our bandwidth is more than adequate to support high usage times such as periods of Computer-based Testing (CBT). The District will purchase 300 Mbps broadband through a commercial provider once our infrastructure is updated and configured to support that speed.

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	2,763	276,300	276.3	100	300	July 30, 2018

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.

In February 2016, the District updated the DHCP WiFi server. We purchased and installed a W-7220 Wireless Controller. This controller supports up to 1,024 access points and 24,500 mobile devices. The controller was purchased for $37,990.00 and includes interminable support for three years. Our internal network bandwidth between school buildings falls within a range of 100 Mb to 1Gb and our bandwidth connections to the internet have been contracted at a maximum speed of 100 Mbps. As noted this will need to increase to 300 Mbps in the future to meet FCC requirements.

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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.

The focus of the Classroom Technology category is to advance the acquisition and upgrade of learning technology equipment, including the purchase of interactive whiteboards, desktops, and ChromeBooks. Currently, the District elementary schools as well as the middle school and high school utilize interactive whiteboards, desktops, and ChromeBooks so there are no compatibility issues that will need to be addressed in order install and support the operation of the planned technology. In our yearly evaluation of technology needs, these devices were noted as priority needs for teaching in learning in the 21st Century classroom. The infrastructure work included in the School Connectivity category of the Smart Schools Bond Act application and Investment Plan will provide all classrooms with wireless access while increasing speed in and across all locations. Our electrical and HVAC systems will support the much needed interactive whiteboard upgrades as well as the additional mobile devices.

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?"

The District is a strong advocate for the needs to students with disabilities and aims to make equitable access to instruction available to all students. We provide the same resources to all students in the district, regardless of disability. When necessary, special devices are provided to students or modifications are made to ensure equity of instruction, materials, and assessments. Our goal is for every student to have an appropriate access point to the general education curriculum. We believe this goal to be attainable with the strategic, purposeful, and innovative use of technology.
Our Technology Plan includes the use of assistive technology in alignment with IEP requirements. Our students have access to ChromeBooks, notebooks, spelling devices, iPads, speech-to-text software, headsets, microphones, FM units, and augmentative communication devices. IEPs address the personalized needs of each student's disability.
Our Technology Pan includes the use of technology to support the language acquisition needs of our English Language Learners. Finding ways to integrate technology into instruction not only helps English Language Learners acquire a new language, it also enhances motivation and confidence. Utilizing and combining graphics, video, and audio can address varied styles of learning in more effective ways and can be tremendous learning supports for English as a New Language students. Interactive whiteboards are excellent tools for presenting multi-media lessons and encouraging student participation. Notes and visuals can be saved for students to review later and connections can be made to previous learning. Video is used to build background and develop academic vocabulary and recording devices can encourage oral language development. Targeted, cloud-based software (such as Imagine Learning and Read 180) is used to build and advance literacy skills.
Our immediate goal is to establish a 2:1 mobile device policy for all students, with the hope for the future to improve the ratio to 1:1. We will initiate a lending program for our students who don't have access to a computer or the Internet at home so that ChromeBooks and hotspots can be borrowed from the school library. This will help to "level the playing field" for research as well as the completion of daily assignments through the use of Internet access and mobile technology in school and at home.

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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.

The District is committed to expanding learning opportunities outside of the classroom using "Anywhere, Anytime Access" strategies, advancing the use of engaging and interactive instructional delivery techniques, increasing access and ease of use to student performance data to address learning gaps, and strengthening communication within the District for students, teachers and families. In an effort to improve "Anywhere, Anytime Access", the District is expanding wireless capability in all instructional settings and expanding the use of Google Applications for Education. With Google Docs and Google Drive, our administrators and teachers have access to communicate and collaborate in real time. Teachers have access to documents at home, at work and on their mobile devices. Teachers are beginning to participate in the development of curriculum and lesson planning electronically and remotely. In addition, they are developing Google classroom spaces to support increased parent and student communication. These developments allow for more individualized communication and targeted instruction. Our students are able to share documents with their teachers and peers in order to receive meaningful (and at times immediate) feedback on their work. The interactive whiteboards allow our teachers to create engaging lessons that emphasize creativity, communication, and collaboration over traditional teacher facilitated delivery formats, including lecture. The purposeful use and implementation of technology opens our classrooms up to distance learning and for developing educationally focused partnerships with universities (within and outside of our region). As we prepare our students to be global citizens, we must prepare them to use technology as a tool for learning, creating, and communicating across boundaries of time and location.

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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."

Our professional development is committed to nurturing a culture of continuous improvement with a goal of improving professional practice and increasing the learning outcomes for all students, including those with special needs. With guidance from the Director of Curriculum and Instruction and through the efforts of the Technology Department Chair, the Technology Integration Specialist, Technology Teaching Assistants, staff developers, and many teachers who have gained various levels of expertise in using technology to enhance the learning environment, staff development is offered on Superintendent Conference Days and on extended days when teachers are required to attend additional hours for professional learning and collaboration. Teachers receive regular opportunities for individualized training, staff development workshops, teacher-to-teacher consultation, and collegial coaching. Our focus has included topics and initiatives such as: Google Apps for Education, SMARTnotebook, Infinite Campus, and Website design as well as the effective implementation of iPads and Chromebooks. Very often, the participants for these professional development sessions are a diverse group of teachers encompassing many different grade levels and disciplines. In addition to the in-district professional development, we also partner with the Edith Winthrop Teacher Center, SWBOCES, PNWBOCES, and various universities. Many offerings are provided online and through blended learning initiatives. Our professional development plan is in alignment with the New York State Professional Development Standards and based upon research and experience. Professional development is driven by clear, coherent individual and organizational goals. It is designed and often facilitated by teachers and administrative colleagues. It addresses current issues in curriculum, instruction, and assessment with the goal of improving the effectiveness of teaching that will lead to improved student learning outcomes.
These programs will be offered throughout the 2016-2017 and 2017-18 school year for faculty, staff, and parents (as appropriate). Course offerings/topics of focus will be reviewed annually by the Technology Committee.

PD Activity	Topics	Audience	Method of Delivery
Google Bootcamp Level 1	The basics of: • Google Classroom • Google Sites • Google Drive • Google Calendar • Google Apps • Google Forms	K-12 Teachers and all new hires	Peer expert facilitated sessions Technology Integration Specialist
Google Bootcamp Level 2	Expanding knowledge of: • Google Classroom • Google Sites • Google Drive • Google Calendar • Google Apps • Google Forms	K-12 Teachers	Peer expert facilitated sessions Technology Integration Specialist
SMART Notebook 15 Level 1	The basics of: • SMART features • SMART Exchange • Creating lessons	K-12 Teachers and all new hires	Peer expert facilitated sessions Technology Integration Specialist
SMART Notebook 15 Level 2	Expanding knowledge of: • SMART features • SMART Exchange • Creating lessons	K-12 Teachers	Peer expert facilitated sessions Technology Integration Specialist
Using Technology to Enhance RTI Strategies/ Assistive Technology	• Talk to Text • Read Write	K-12 Special Education Teachers, ENL Teachers, K-12 Teachers,	Peer expert facilitated sessions Technology Integration Specialist

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	• Proloquo • Google Apps	Teaching Assistants, parents	
Using Chromebooks in the Classroom	• Logging on • Designing lessons using chromebooks • How to integrate into the classroom	K-12 Teachers	Peer expert facilitated sessions Technology Integration Specialist
Creating a Classroom Website	• Edline • Weebly • Youtube	K-12 Teachers	Peer expert facilitated sessions Technology Integration Specialist
Mac	• iMovie • Transitioning from PC to MAC	K-12 Teachers	Peer expert facilitated sessions Technology Integration Specialist
IEP Direct	• Writing IEPs • Setting goals • Monitoring progress	Administrators, Special Education Teachers	Peer expert facilitated sessions Technology Integration Specialist
RTI-M Direct	• Inputting goals • Inputting notes from meeting	Administrators, Special Education Teachers	Peer expert facilitated sessions Technology Integration Specialist
TUFSD Technology Bootcamp	• Aesop • My Learning Plan • Infinite Campus • First Class	K-12 Teachers	Peer expert facilitated sessions Technology Integration Specialist
Wincap Training	• Creating purchase orders	Clerical Staff	Peer expert facilitated sessions Technology Integration Specialist
Technology Best Practices	• Nearpod • Kahoot! • Flip Your Classroom		Peer expert facilitated sessions Technology Integration Specialist
3D Printing	• Creating 3D models to print	Art Teachers	Peer expert facilitated sessions Technology Integration Specialist
Troubleshooting	• Dealing with the mishaps in the classroom	All faculty	Peer expert facilitated sessions Technology Integration Specialist
Library Media Center Technology	• Checking out books • OPAC • E-Books • Databases	Library Media Specialists, Teaching Assistants	Peer expert facilitated sessions Technology Integration Specialist
Tech Mondays	• Topics based on teacher need	K-12 Teachers	Peer expert facilitated sessions Technology Integration Specialist
Technology to Support ENLs	• Rosetta Stone • Google Translate • Read 180 • System 44 • Read Write • Talk to Text	ENL teachers	Peer expert facilitated sessions Technology Integration Specialist

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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.

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

SUNY New Paltz

9b. Enter the primary Institution phone number.

(845) 257-2800

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. Michael Rosenberg

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

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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.

As per guidance from New York State, we have updated the District "Relationship with Non-Public Schools" Board Policy 1740 as well as the Regulations 1740-R to include our Smart Schools Bond Act Loan Program. The policy states: "The Board recognizes its responsibility to fully comply with the requirements of the Smart Schools Bond Act with respect to loaning classroom technology obtained as part pf the Smart Schools Bond Act to nonpublic schools. The District will set allocations and make loans to nonpublic schools in accordance with guidance set forth by the State Department of Education". Using the Technology Loan Calculator, we have allocated $ 380,796 of our Smart Schools Bond Act funding to Classroom Instructional Technology. Based on this total, the non-public school loan allocation calculates to $ 104,287 at a rate of $ 101.55 per pupil. Our non public school expenditures in this plan are slightly above that, at $ 104,381.

In the 1740 Regulations, it states, "Upon request, the District will loan, at no charge, classroom instructional technology obtained as part of the Smart Schools Bond Act, including interactive whiteboards, desktop, laptop, and tablet computers to children attending nonpublic schools located within the District boundaries. The District will loan classroom instructional technology at an equitable rate in accordance with the Education Law, Commissioner's Regulations, and the Smart School Bond Act. Requests for classroom instructional technology loan, in compliance with the Smart Schools Bond Act, must be received by the Schools Business Administrator no later than June 30 of the school year prior to that for which the technology is being requested. Notification of the deadline will be sent by March 1 of each year to all nonpublic schools. All other requests made after the June 30 deadline will not be denied where a reasonable explanation is given for the delay in making the request and such requests meet the criteria outlined in this regaulation."

Policy 1740: Relationship with Nonpublic Schools was adopted on December 11, 2008 and revised on September 29, 2016 by the Union Free School District of the Tarrytowns, Board of Education.

1740-R: Relationship with Nonpublic Schools Regulations was adopted on December 11, 2008 and revised on September 29, 2016 by the Union Free School District of the Tarrytowns, Board of Education.

In conversation with our nonpublic schools, we are aware that they are interested in using the Smart Schools Bond Act Loan program to access desktop computers and Chromebooks (dependent upon need). This is reflected in our Investment Plan.

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.

	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	380,796	2,723	1,027	3,750	102	104,287

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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	143,400
Computer Servers	0
Desktop Computers	53,910
Laptop Computers	183,486
Tablet Computers	0
Other Costs	0
Totals:	**380,796**

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.
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.

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be Purchased	Quantity	Cost per Item	Total Cost
Interactive Whiteboards	SMARTBoard 6000 Series	30	4,780	143,400
Laptop Computers	Dell Chromebook 11	353	275	97,075
Desktop Computers	Dell Optiplex 5040 all in one	30	1,198	35,940
Laptop Computers	Dell Chromebook 3189 (non public school requests for loan))	289	299	86,411

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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
Desktop Computers	Dell Optiplex 540 all in one (non public school requests for loan)	15	1,198	17,970

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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.

NA

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.

NA

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.

NA

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)
Totals:	**0**

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

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)

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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.

NA

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.

NA

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)
Totals:	**0**

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.
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)

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.

NA

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. Was your project deemed eligible for streamlined Review?

- ☐ Yes
- ☐ No

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

Name	License Number
(No Response)	(No Response)

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)	(No Response)
Electronic Security System	(No Response)
Entry Control System	(No Response)
Approved Door Hardening Project	(No Response)
Other Costs	(No Response)
Totals:	**0**

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.
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)