Smart Schools Investment Plan - 2016-17 Version (Original) - Bethpage-SSBA-Wave2

SSIP Overview

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

Andrew Choi

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

516-644-4067

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

achoi@bethpage.ws

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.**

Supplemental 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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SSIP Overview

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.**

Smart Schools Final Investment Plan - Wave 2 (Revised 06.22.17).pdf
Smart Schools Initial Investment Plan - Wave 2.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.bethpagecommunity.com/departments/technology__bethpage

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.**

2,920

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:**

$1,128,764

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	48,960
Connectivity Projects for Communities	0
Classroom Technology	388,303
Pre-Kindergarten Classrooms	0
Replace Transportable Classrooms	0
High-Tech Security Features	0
Totals:	**437,263**

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School Connectivity

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.

   Bethpage Schools is currently a member of the Nassau BOCES Bo-TIE network. Through this network, Bo-TIE provides member school districts with Internet Access through Lightower. As of April 2017, Bethpage Schools subscriber bandwidth is 300 Mbps (WAN) with 1 Gb connection between school buildings (LAN). The Bo-TIE network also has burstability built in, which allows Bethpage Schools to request additional bandwidth, as necessary. Our current bandwidth supports 786 computers and 2,915 mobile devices that depend on our network to access the Internet and other network resources. Our current district enrollment is 2,920 students. We have acknowledged ConnectEd and the FCC's broadband goal of 100 Mbps per 1,000 students enrolled in our district and have taken the necessary measures to meet this speed standard based on our enrollment.

   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	2,920	292,000	292	300	300	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.**

   Bethpage Schools continues to provide our school community with resources that improve teaching, learning, productivity, communication, and collaboration. We continue to take advantage of the opportunities that emerging and evolving technology provides by integrating applicable tools to support teaching and learning while keeping an eye on the future. In order to maximize instructional time and optimal use of technology resources, our wireless network must be reliable and support the technology tools that connect to access curricular content, tools, and resources. We intend to use a portion of our Smart Schools Bond Act allocation to refresh the wireless-N access points with wireless-AC access points at John F. Kennedy Middle School. We will repurpose the wireless-N access points as spares to support the access points of the same frequency at our elementary schools until they are ultimately refreshed. This will continue to support Bethpage UFSD's plan to sustain our 1:1 Google Chromebook initiative in the years ahead by ensuring the prerequisite wireless access will support the mobile devices and other technology tools available for teachers and students are able to successfully connect to the network.

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?)**

In our Instructional Technology Plan Survey, Part E, Question 1; we spotlighted our 1:1 Google Chromebook initiative that provides our students in Grades 3-11 regular access to a cost-effective device to support teaching and learning. Bethpage Schools is planning on expanding our 1:1 Google Chromebook initiative to Grade 12 in the 2017-18 school year. Our proposed projects using a portion of the Smart Schools Bond Act allocated funds will assist with our vision of future success of our instructional technology program by ensuring our wireless network can support the growing number of 1:1 Google Chromebooks and the other emerging technology tools available district-wide for teachers and students that connect to our network.

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.

We currently have a Google Chromebook 1:1 initiative in Grades 3-11, where the Chromebooks in Grades 3-5 are 1:1 in school and the Chromebooks in Grades 6-11 are 1:1 in school and at home. We plan to expand our 1:1 Google Chromebook program to Grade 12 in the 2017-18 school year. Prior to Google Chromebook deployments, each of our school building's wireless networks were upgraded to ensure that our teachers and students can use these devices to support teaching and learning. As of April 2017, our wireless network supports the 2,915 Google Chromebooks and other mobile learning devices across the district.

- In our three elementary schools, wireless-N access points were installed in December 2012 and additional access points were added in March 2014 to facilitate Google Chromebook usage.
- At John F. Kennedy Middle School, wireless capability was established in July 2008. In July 2013, the entire building was upgraded to wireless-N access points. There are now access points in every classroom, gymnasium, cafeteria, auditorium, and faculty work spaces. We plan to refresh these access points to wireless-ac Wave 2 access points using a portion of our Smart Schools Bond Act allocation.
- At Bethpage High School, wireless capability was established in 2007. In 2014, wireless-AC access points were installed prior to the first wave of the 1:1 Google Chromebook usage for Grade 9 students. There are now access points in every classroom, cafeteria, and most office spaces.

In 2013, Bethpage Schools joined the Nassau BOCES Bo-TIE network to obtain Internet Access from Lightower. Bo-TIE has redundancy and burstability built in to allow subscriber school districts to request additional bandwidth from Nassau BOCES, as necessary.

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
28-05-21-03-7-999-BA2

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.

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

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School Connectivity

Name	License Number
John A. Grillo	27360

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	48,960
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)
Totals:	**48,960**

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	Cisco 802.11 Wireless-ac Wave 2 Access Point	60	816	48,960

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Community Connectivity (Broadband and Wireless)

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)
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.

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

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.

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    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	2,920	292,000	292	300	300	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.

We currently have a Google Chromebook 1:1 initiative in Grades 3-11, where the Chromebooks in Grades 3-5 are 1:1 in school and the Chromebooks in Grades 6-11 are 1:1 in school and at home. We plan to expand our 1:1 Google Chromebook program to Grade 12 in the 2017-18 school year. Prior to Google Chromebook deployments, each of our school building's wireless networks were upgraded to ensure that our teachers and students can use these devices to support teaching and learning. As of April 2017, our wireless network adequately supports the 2,915 Google Chromebooks and other mobile learning devices across the district.

- In our three elementary schools, wireless-N access points were installed in December 2012 and additional access points were added in March 2014 to facilitate Google Chromebook usage.
- At John F. Kennedy Middle School, wireless capability was established in July 2008. In July 2013, the entire building was upgraded to wireless-N access points. There are now access points in every classroom, gymnasium, cafeteria, auditorium, and faculty work spaces. We plan to refresh these access points to wireless-ac Wave 2 access points using a portion of our Smart Schools Bond Act allocation.
- At Bethpage High School, wireless capability was established in 2007. In 2014, wireless-AC access points were installed prior to the first wave of the 1:1 Google Chromebook usage for Grade 9 students. There are now access points in every classroom, cafeteria, and most office spaces.

In 2013, Bethpage Schools joined the Nassau BOCES Bo-TIE network to obtain Internet Access from Lightower. Bo-TIE has redundancy and burstability built in to allow subscriber school districts to request additional bandwidth from Nassau BOCES, as necessary.

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.**

Device	Make/Model	Quantity	Compatability with Existing/Planned Platforms Systems
Computer	Dell Optiplex 3040 Small Form Factor Computer	100	The Dell Optiplex 3040 is a computer workstation. We plan to use these workstations to continue with our annual refresh plan to upgrade the oldest computer workstations (Dell Optiplex 380) across the district. Bethpage Schools has existing Dell Optiplex workstations (Models: 755, 760, 380, 390, 990, 9010, 3010, 3020) that have met our instructional and administrative needs. Since these computer workstations are one-for-one upgrades, we will be using the existing outlets to supply power to these workstations. We plan to use existing flat screen monitors with these computer workstations.
Interactive Whiteboard	SMART Board 65" 6265 V2 Series Flat Interactive Panel	6	The SMART Board 65" 6265 V2 Series Flat Interactive Panel is an interactive whiteboard. We plan to furnish these interactive whiteboards in our new STEM Lab classrooms at each of our elementary schools. One will be wall mounted in the front of the classroom while the other will be installed on a portable mount that will lend itself for small group instruction. We have existing SMART Boards (600 series, 800 series, and 6065 Flat Panel) in our classrooms across the district and this model will remain compatible with existing and new Dell computer workstations and Eiki brand projectors.
Tablet	iPad WiFi 32GB (10-pack)	10	The iPad is a tablet that is equipped with 32 GB storage, which will be sufficient to run various applications from Apple's App Store to support STEM instruction. Specifically, these iPads will be used in conjunction with the Lego Education WeDo 2.0 Core Set to

			program and control the various builds capable from this set. They will be charged and stored using the Spectrum InTouch32 Secure Tablet Locker.
Storage/Charging Cabinet	Spectrum InTouch32 Secure Tablet Locker	3	The Spectrum InTouch32 Secure Tablet Locker reflects a charging cabinet that we plan to use in our elementary STEM Lab Classrooms to secure and charge our iPad tablets. We are currently using this same make/model cabinets in our Grades 3-5 classrooms to safely secure and charge our 1:1 Google Chromebooks.
Robotics Kit	Lego Education WeDo 2.0 Core Set Robotics	100	The Lego Education WeDo 2.0 Core Set Robotics is a robotics kit. Each kit includes various guided projects and open projects, designed to allow students to explore, create, and share their findings. The activities and builds from this kit are brick-based with motorized components. They are controlled via built-in Bluetooth to wireless connect to the application downloaded on the iPad. We currently have 24 of these kits in the district that are being used to support STEM instruction in our elementary schools.
Other	Digital STARLAB Portable Planetarium	3	The Digital STARLAB is a portable planetarium that will allow our students to expand their study of astronomy or dig deeper into our Earth's center to study its layers. The kit is comprised of a 1200 pixel projector, custom fish-eye lens, laptop, projector case, HDMI connection cables and accessories, speakers, and software for the Starry Night and the Layered Earth. This will be a central piece of technology used in our elementary STEM Lab classrooms.
Computer & Monitor	iMac 21.5" Intel Core i5 8GB LPDDR3 SDRAM 1 TB	7	The iMac 21.5" Intel Core i5 8 GB LPDDR3 SDRAM 1 TB is a computer workstation. We plan to use these workstations to continue with our annual refresh plan to upgrade the oldest iMacs in our Bethpage High School MacLab,

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Classroom Learning Technology

			which have storage and operating system limitations (1 GB and OSx 10.6 Snow Leopard) that prevent us from addressing current software needs. Bethpage Schools has existing iMacs that have met our instructional needs. Since these computer workstations are one-for-one upgrades, we will be using the existing outlets to supply power to these workstations.
Laptop	ACER Chromebook C740-C4PE 11.6" 4GB/16GB SSD	300	The ACER Chromebook is a cost effective laptop that de-emphasizes hardware and rather leverages cloud-based storage and web-based tools to support student learning. The devices are equipped with 4 GB RAM and 16 GB storage, sufficient to run Google Chrome applications and extensions. Since most files are saved to Google Drive, there is no need for the ACER Chromebooks to have large storage capacities. They are "instant-on" and helps to maximize limited instructional time. The ACER Chromebooks also have built-in wireless 802.11 a/b/g/n in order to connect to our wireless network. We plan to use these ACER Chromebooks to refresh any Chromebook devices that are obsolete, broken, or too costly to repair. Bethpage Schools has existing 2,765 Google Chromebooks (Models: Samsung 550, 303, 503, 500; ACER C740) that are issued to students as 1:1 devices in Grades 3-11. Since these Chromebooks are 1:1 devices, the students will be charging the devices at home each night.

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?"

    In our Instructional Technology Plan, Part E, Questions 2 & 3; we spotlighted how our plan provides all students and staff with access to instructional technology tools to improve student learning, including access to assistive technology for students identified by their individualized education plans (IEP). Technology plans are developed for each student that requires assistive technology tools via the Committee on Special Education (CSE) process that takes place throughout the school year.

    Our proposed technology acquisitions will enhance differentiated instruction by allowing our students to utilize a variety of third-party instructional programs that include adaptive technologies to allow students to work at their individual and personalized instructional level. One such application is Achieve 3000, which utilizes an individual student's baseline Lexile score to deliver non-fiction articles at the specific Lexile level of each student without changing the content.

    The ACER Chromebooks are a cost-effective device that allows student learning to be expanded inside and outside of the classroom. The devices are instant-on and requires little maintenance, lending itself to allow teachers with maximizing instructional time. The ACER Chromebooks provide our students and teachers access to files and applications in school and at home and increased opportunities for collaboration using G-Suite's (Google Apps for Education) tools. Our current Chromebook 1:1 initiative provides each student in Grades 3-11 a device to use to support teaching and learning (Grades 3-5 students have Chromebooks to use in-school and Grades 6-11 students have Chromebooks to use in-school and out-of-school). We plan to expand this program to include Grade 12 in the 2017-18 school year. Staff and students are also provided the ability to connect via remote access to their Bethpage Windows desktop, which allows our users to access additional computing resources offered by Bethpage Schools, leveraging these non-Windows devices with low cost of ownership to access Windows applications and home drives and other shared drives.

    The technology acquisitions will benefit students with disabilities and English language learners (ELL's) as this type of technology is extremely helpful in the learning process for these students and other groups of at-risk students to reduce any of the learning gaps as identified by our district. Our proposed technology acquisitions will also contribute to our efforts to reduce other learning gaps that are identified by our district with the increased capacity to provide individualized and personalized instruction through our third-party software vendors and our ability to provide improved and real world applications and materials, and increased access to information.

    During our school's budget vote in 2016, our community approved the use of capital funds to construct STEM lab classrooms at Central Boulevard Elementary School, Charles Campagne Elementary School, and Kramer Lane Elementary School. These will be state-of-the-art classrooms with high-ceilings, running water, ample storage space, and access to instructional technology tools to conduct STEM instruction with each classroom getting access to the space for a full week at least three times a year. All students, including those with disabilities and English Language Learners will participate in STEM instruction. With this new space, we hope to instill an interest in STEM and STEM-related fields to our students from an early age.

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 ACER Chromebooks will allow us to expand our 1:1 program to include our Grade 12 students (as of April 2017, Grades 3-11 have 1:1 Chromebook devices) . These devices allow students and teachers to collaborate and communicate using G-Suite's (Google Apps for Education) tools and provide a vehicle for learning continuum outside of the classroom and increase home access to technology in an effort to attack the "digital divide". Students are creating more digital content and publishing to a greater audience. Staff and students are also provided the ability to connect via remote access to their Bethpage Windows desktop. This allows us to further expand the computing resources of Bethpage Schools, leveraging these non-Windows devices with low total cost of ownership to access Windows applications and access to home drives and other shared drives. Bethpage Schools is fortunate to be located in close proximity to many corporate partners and community leaders. Some of these partners include Altice (formerly, Cablevision), Composite Prototype Center, and Hofstra University, who have mentored our students, visited and spoken to classes about colleges/careers, delivered cutting-edge technologies, and assisted us with planning for the future. We plan to maintain these important community-based partnerships moving forward.

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."

   In our Instructional Technology Plan Survey, Part F, Question 1; we spotlighted our Professional Development Academy and partnerships with the InterCounty Teacher Center and the Nassau BOCES Model Schools Program to emphasize and support the ways in which instructional technology can be used to enhance a standards-based curriculum. We will utilize our Director of Technology, who will conduct ongoing workshops.We plan to continue to our partnerships with the aforementioned and continue to develop our own in-service course offerings and make training available to all staff members on a push-in basis.

   Bethpage Schools will make use of Teacher Conference Days, develop in-service courses, and a summer training academy to ensure that staff members can successfully integrate instructional technology tools and discuss best practices and integration techniques to support 21st Century teaching and learning. We are also piloting with blended professional development courses, that will require participants to attend a portion of the professional development in-person and the other portion virtually via Google Hangout. We hope that this will allow us to further expand our course catalog and provide staff members additional flexibility in order to participate in professional development outside of their standard work day and outside of the school building. The courses and workshops will be for topics such as:
   - Elementary STEM & Robotics
   - Flipping the Classroom
   - Google Applications & Extensions
   - Google Classroom
   - Google Docs
   - Google Drive
   - Google Level 1 Fundamentals Training & Certification
   - Google Level 2 Advanced Training & Certification
   - Google Slides
   - SMART Board
   - SMART Table
   - Using Achieve 3000 (Online Literacy Program) to Support Reading Instruction
   - Using Engrade (Learning Management System) to Deliver Instruction
   - Using Movenote to Create Presentations
   - Using Screencastify to Create Screencasts
   - Using Technology for Formative Assessments
   - Using Think Central (Online Math Support Program) to Support Math Instruction

   We utilize My Learning Plan to track teacher professional development hours and provide our teachers with a catalog of professional development offerings, whether they are developed and delivered by our staff, Nassau BOCES, or one of our other approved providers.

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 Stonybrook

   9b. **Enter the primary Institution phone number.**

   631-632-7050

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. Ken Lindblom

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

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

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	28,851
Computer Servers	0
Desktop Computers	69,843
Laptop Computers	79,200
Tablet Computers	29,400

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Classroom Learning Technology

	Sub-Allocation
Other Costs	181,009
Totals:	**388,303**

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
Other Costs	Spectrum InTouch32 Secure Tablet Locker	3	1,017	3,051
Tablet Computers	iPad WiFi 32GB (10-Pack)	10	2,940	29,400
Other Costs	Bump Armor GTX 30002 Protective Case 12	250	28	7,000
Desktop Computers	Dell Optiplex 3040 Small Form Factor Computer	100	611	61,100
Other Costs	Dell Adapter DisplayPort to VGA	100	18	1,800
Other Costs	CAT5 to USB Extender Cable	100	87	8,700
Other Costs	Otter Apple Defender Eldora Black Pro	100	46	4,600
Other Costs	Lego Education WeDo 2.0 Core Set Robotics	100	176	17,600
Laptop Computers	ACER Chromebook C740-C4PE 11.6	300	264	79,200
Interactive Whiteboards	SMART Board 65	6	3,999	23,994
Other Costs	15-foot HDMI Cable with Ethernet M/M	6	28	168
Interactive Whiteboards	Rail System/Mount for SMART Board 65	3	249	747
Interactive Whiteboards	iRover2 Portable Mount for SMART Board 65	3	1,370	4,110
Other Costs	Digital STARLAB Portable Planetarium	3	46,030	138,090
Desktop Computers	iMac 21.5 Intel Core i5 8 GB LPDDR3 SDRAM 1 TB	7	1,249	8,743

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Pre-Kindergarten Classrooms

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)
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.

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Pre-Kindergarten Classrooms

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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Replace Transportable Classrooms

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)
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)

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High-Tech Security Features

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.**

(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. **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)