Smart Schools Investment Plan - Revised - 2018 Phoenix Plan

SSIP Overview

Institution ID

800000039925

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

Karl Seckner

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

3156951574

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

KSeckner@Phoenixcsd.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.

☑   Parents
☑   Teachers
☑   Students
☑   Community members
☐   The district was unable to meet with each group of stakeholders due to an emergency need as a result of the COVID-19 crisis.

5.   **Did your district contain nonpublic schools in 2014-15?**

☐   Yes
☐   Yes, but they have all since closed, moved out of district or are declining use of SSBA funds
☑   No

6.   **Certify that the following required steps have taken place by checking the boxes below:**

☑   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 school board was unable to conduct a hearing that enabled stakeholders to respond to the preliminary plan due to an emergency need as a result of the COVID-19 crisis.
☑   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.

6a. **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.**

Phoenix Central School District Smart Schools Initiative.pptx

6b. **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.**

/www.phoenixcsd.org/cms/lib/NY49000020/Centricity/shared/departments/technology/Smart%20Schools%20Initiative.pdf

7. **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.**

1,750

8. **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.

9. **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)

10. **Please upload a signed Memorandum of Understanding with all of the participating Consortium partners.**

(No Response)

11. **Your district's Smart Schools Bond Act Allocation is:**

$2,238,989

12. **Final 2014-15 BEDS Enrollment to calculate Nonpublic Sharing Requirement**

	Public Enrollment	Nonpublic Enrollment	Total Enrollment	Nonpublic Percentage
Enrollment	1,837	0	1,837.00	0.00

13. **This table compares each category budget total, as entered in that category's page, to the total expenditures listed in the category's expenditure table. Any discrepancies between the two must be resolved before submission.**

	Sub-Allocations	Expenditure Totals	Difference
School Connectivity	525,119.00	525,119.00	0.00
Connectivity Projects for Communities	0.00	0.00	0.00
Classroom Technology	1,115,925.00	1,115,925.00	0.00
Pre-Kindergarten Classrooms	0.00	0.00	0.00
Replace Transportable Classrooms	0.00	0.00	0.00
High-Tech Security Features	597,550.00	597,550.00	0.00
Nonpublic Loan	0.00	0.00	0.00
Totals:			

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SSIP Overview

	Sub-Allocations	Expenditure Totals	Difference
	2,238,594	**2,238,594**	**0**

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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.

   The district currently has a 1 Gbps internet connection for 1,750 students which exceeds the standard.
   Our current Smart School proposal will allow us to update the connectivity within our district to the current cabling standards.

   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). If the district currently meets the required speed, enter "Currently Met" in the last box: Expected Date When Required Speed Will be Met.**

	Number of Students	Required Speed in Mbps	Current Speed in Mbps	Expected Speed to be Attained Within 12 Months	Expected Date When Required Speed Will be Met
Calculated Speed	1,750	175.00	1000	1600	Currently Met

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

   The technology plan for Phoenix Central establishes a goal of a 1:1 initiative. Our district will be providing additional access points for better wireless connectivity in all buildings to ensure that students and teachers have minimal to zero internet interruptions. In addition to installing these wireless access points, we will be building a data center which will enable us to support the additional instructional demands required to support our programs.

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4. **Describe the linkage between the district's District Instructional Technology Plan and how the proposed projects will improve teaching and learning. (There should be a link between your response to this question and your responses to Question 1 in Section IV - NYSED Initiatives Alignment: "Explain how the district use of instructional technology will serve as a part of a comprehensive and sustained effort to support rigorous academic standards attainment and performance improvement for students."**

   Your answer should also align with your answers to the questions in Section II - Strategic Technology Planning and the associated Action Steps in Section III - Action Plan.)

   The district will use instructional technology to support rigorous academic standards and performance improvement for all students across socioeconomic, cultural, and linguistic differences. Technology will help all students to be 21st-century learners, that are college and career ready. Over time, all students will be equipped with a Chromebook device to improve academic performance. In addition, all staff members will be equipped with a Chromebook device and professional development in using the device, to help enhance student academic performance and rigorous standards.

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.

   Our goal is to sustain and expand a secure network that ensure students have reliable access to high-speed connectivity which will enhance their educational experience allowing educators to provide a rigorous 21st-century learning environment for all learners across socioeconomic, cultural, and linguistic differences, regardless of ability and need. Our ultimate goal is to have a WiFi access point in every classroom. To meet this demand, we plan on beginning with the classrooms that are using 1:1 devices. As we add more devices, we will add the appropriate number of access points to ensure appropriate connectivity. Our goal is quantified by calculating the number of students (1,750) divided by the capability of the access point (100 connections) which indicates that we require 175 access points. We are currently well below our goal.

6. **Smart Schools plans with any expenditures in the School Connectivity category require a project number from the Office of Facilities Planning. Districts must submit an SSBA LOI and receive project numbers prior to submitting the SSIP. As indicated on the LOI, some projects may be eligible for a streamlined review and will not require a building permit.**
   Please indicate on a separate row each project number given to you by the Office of Facilities Planning.

Project Number
46-20-01-06-7-999-BA1

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.**

Name	License Number
King and King	15925

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School Connectivity

9.   Public Expenditures – Loanable (Counts toward the nonpublic loan calculation)

Select the allowable expenditure type. Repeat to add another item under each type.	**PUBLIC** Items to be Purchased	Quantity	Cost Per Item	Total Cost
(No Response)	(No Response)	(No Response)	(No Response)	0.00
		0	0.00	0

10.   Public Expenditures – Non-Loanable (Does not count toward nonpublic loan calculation)

Select the allowable expenditure type. Repeat to add another item under each type.	**PUBLIC** Items to be purchased	Quantity	Cost per Item	Total Cost
Connections/Components	Teracai OM3 Fiber Optic Cabling installed NYSOGS rate of $10 per foot	1,676	10.00	16,760.00
Network/Access Costs	Dell Networking, Cable, SFP+ toSFP+, 10 GbE, Copper Twinax Direct Attach Cable 5 Meter CusKit	4	80.00	320.00
Network/Access Costs	Customer Kit, Dell Networking, Transceiver, SFP+ 10 GbE, SR	8	306.00	2,448.00
Network/Access Costs	Dell Networking, Cable, SFP+ toSFP+, 10 GbE, Copper Twinax Direct Attach Cable 3 Meter CusKit	4	61.00	244.00
Network/Access Costs	Dell EMC Networking S5248-ON	4	6,779.00	27,116.00
Connections/Components	Dell Storage SC 420, 1.9 TB. 12 GB RI SSD/SC420, 2.4 TB, SAS, 12Gb, 10K, 2.5HDD/Dell Storage SC420 enclosure, 2.5	2	56,891.00	113,782.00
Network/Access Costs	Ruckus ZoneFlex R720 wireless access point	50	655.00	32,750.00
Connections/Components	ISX0001340757-0002/ OGS Group 73600/ OGS Contract #PM68234	1	126,498.00	126,498.00
Network/Access Costs	Dell Networking, Transciever, SFP+, 10GbE, SR, 850nm, Wavelength, 200m Reach-Kit	10	155.00	1,550.00
Professional Services	Large Group Instruction Presentation System Installation	1	9,800.00	9,800.00
Network/Access Costs	NVIDIA Tesla M10 Servers	1	25,719.00	25,719.00
Network/Access Costs	HPE Nimble HF 20 Server	1	77,807.00	77,807.00
Network/Access Costs	HPE DL 380	1	90,325.00	90,325.00
		1,763	395,086.00	525,119

11.   Final 2014-15 BEDS Enrollment to calculate Nonpublic Sharing Requirement (no changes allowed.)

	Public Enrollment	Nonpublic Enrollment	Total Enrollment	Nonpublic Percentage
Enrollment				

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School Connectivity

	Public Enrollment	Nonpublic Enrollment	Total Enrollment	Nonpublic Percentage
	1,837	0	1,837.00	0.00

12.   Total Public Budget - Loanable (Counts toward the nonpublic loan calculation)

	Public Allocations	Estimated Nonpublic Loan Amount	Estimated Total Sub-Allocations
Network/Access Costs	(No Response)	0.00	0.00
School Internal Connections and Components	(No Response)	0.00	0.00
Other	(No Response)	0.00	0.00
Totals:	**0.00**	**0**	**0**

13.   Total Public Budget – Non-Loanable (Does not count toward the nonpublic loan calculation)

	Sub-Allocation
Network/Access Costs	258,279.00
Outside Plant Costs	0.00
School Internal Connections and Components	257,040.00
Professional Services	9,800.00
Testing	0.00
Other Upfront Costs	0.00
Other Costs	0.00
Totals:	**525,119.00**

14.   School Connectivity Totals

	Total Sub-Allocations
Total Loanable Items	0.00
Total Non-loanable Items	525,119.00
Totals:	**525,119**

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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. **Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category.**

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)	0.00
		0	**0.00**	**0**

7. **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:	**0.00**

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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.

   The district currently has a 1 Gbps internet connection for 1,750 students which exceeds this standard.. Our current Smart School proposal will allow us to update the connectivity within our district to the current cabling standards.

   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). If the district currently meets the required speed, enter "Currently Met" in the last box: Expected Date When Required Speed Will be Met.**

	Number of Students	Required Speed in Mbps	Current Speed in Mbps	Expected Speed to be Attained Within 12 Months	Expected Date When Required Speed Will be Met
Calculated Speed	1,750	175.00	1000	1600	DNA

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.

   Our goal is to sustain and expand a secure network that insures students have reliable access to high-speed connectivity which will enhance their educational experience allowing educators to provide a rigorous 21st century learning environment for all learners across socioeconomic, cultural, and linguistic differences, regardless of ability and need. Our ultimate goal is to have a WiFi access point in every classroom. To meet this demand, we plan on beginning with the classrooms that are using 1:1 devices. As we add more devices, we will add the appropriate number of access points to ensure appropriate connectivity. Our goal was quantified by reviewing the instructional program in every space. We then calculated the number of students in those spaces and the demands of our 1 to 1 program. This calculation indicates that we require 175 access points. We are currently well below our goal.

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 devices that we intend to purchase below include;Intel Next Unit of Computing Kit NUC7i5BNK- mini PC-Core i5 7260U2.2GH, NVIDIA Tesla M10, Acer Spin 11 Chromebooks R751TN-C5P3- 11.6, Techno HD 48 x 48 CNC Router, Sphero SPRK+- The App Controlled Robot Ball, Large Group Instruction Control System: (2) Push Button Controllers, (2) 2 Gang, Celestron Digital Microscope Imagers, Large Group instruction Presentation System Installation, PASCO String Vibrator, HPE DL 380, Go Direct Temperature Probe, LSM1U Micro Adjustable Smart Board Fixed Wall Display Mount, PASCO PASPORT Visual Accelerometer, OptiPlex 24 7000 Series All-in-One (7450) Desktop, Large Group Instruction required Infrastructure: (2) Custom Lecterns, (4) Rack Shelves, (3), Large Group Instruction Presentation Recording System: (1) Camera with Receiver, (1) Ceiling Mount for Camera and (1) DSP, PASCO Sine Wave Generator, Roland VG-540 Printer/Cutter, Required cables and connectors for the Large Group Instruction Presentation System including SVHS, Audio, HDMI and connectors, MakerBot Replicator + 3D Printer, Lenovo Mirage Solo-Virtual Reality headset 5.5, Epilog Helix 60-Watt Engraver, Go Direct SpectroVis Plus Spectrophotometer, Hand-Grip Heart Rate Monitor, Go Direct Colorimeter, Lego EV3, Stratasys F 170 3D Printer, Cubelets Mini Makers Pack Item #: WL13762020, Anywhere Cart AC-CDW-36 36 Bay Secure Charging Cart with Cycle Timer, Cue Robot Item #: WL13765790, Lenovo Mirage-digital camera, PASCO Super Fan Cart, Roland BN-20 Printer/Cutter, Roland MDX-50 CNC Mill, Dot and Dash Robots, Go Direct Co2 Gas Sensor, Large Group Instructional Video Display system Video System (2) Diagonal Motorized Screens, (2) 7000 Lumen Laser Projector, (2) Lenses, (2) Mounts, (4) HDMI Extenders, (1) Matrix Switcher, Lenovo Virutal Reality Kit 24-Pack with 18-Month Warranty, PASCO PASPORT Rotary Motion Sensor, SMART Board 7075 interactive display with iQ and SMART Learning Suite, Roland GS-24 Vinyl/Cutter, Large Group Instruction Audio System: (12) ceiling speakers (white), and (1) Audio Amplifier, Go Direct pH Sensor, Techno HD-II 48, Logitech MK345 Wireless Combo- Full-sized Keyboard with Pam Rest and Comfortable Right-Handed Mouse, HPE Nimble HF20, PASCAR PAScar Blue, and VM Horizon License.. Phoenix Central Schools has maintained a strong infrastructure through several recent capital projects. Purchasing these devices willintegrate with our current infrastructure because we already have these devices in our district and the demands on our infrastructure will not change.

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 addition, describe how the district ensures equitable access to instruction, materials and assessments and participation in the general curriculum for both SWD and English Language Learners/Multilingual Learners (ELL/MLL) students.

    Teacher differentiate instruction by selecting appropriate and targeted instructional tools for reaching students with different learning modalities. In addition to current methods, teachers will be able to select from Google Apps for Education as well as media-rich, interactive web resources in order to provide the most meaningful assignments for all students. Teachers are able to meet student accommodations and modify assignments when necessary. Using adaptive practice websites, students are to practice at their own level.

    With our Flipped Learning initiative, teachers will utilize the power of web based learning management system, Google Classroom, to distribute assignments and class work. With each student having access to their own Chromebook in classrooms with trained teachers, they can work real-time instead of just watching or listening.Students are engaged when using the Chromebooks which makes them more motivated to learn.

    Students with disabilities will have access to assistive technology in their classrooms without having to go to alternative sites to access speech to text and text to speech software. Additionally, students with disabilities will be able to access programs and support materials via graphic interface on their touch sensitive Chrome devices. This reduces the requirement and expand the opportunities for students who have limited motor skills, hand-eye coordination.

    ELL students will have ready access to Google translate and definitions of vocabulary words as they are reading and learning, rather than accessing these resources later after instruction. Both students will have access to Google Classroom and notes, and be able to modify the notes to meet their learning needs as the instruction takes place.

    By adopting and integrating the devices included in this proposal, instructors and classroom aides can focus on delivering services to all students rather than only the "regular" education students.Special needs students including learning disabled, English language learners, and students who are not performing at grade level will be able to access learning opportunities at their speed and with their strengths rather than being limited by their challenges.

    Our teachers have made a commitment to using their existing Interactive Whiteboards. The opportunity for enhance instruction, have interactive demonstrations, move seamlessly to video demonstrations, and participate in Peer review of individual efforts is very valuable. Students with learning disabilities or students who are not successful in a traditional lecture style classroom are more successful when these devices are used. Phoenix has existing Interactive White boards, but they are failing. Many are approaching 10 years of usage and they are not responding correctly. Phoenix wishes to use the Smart Schools funds to begin the replacement process on these devices.

    On occasion it is necessary to group the students for special presentations by staff, students or visiting "resources." Phoenix is proposing toto equip strategic rooms with Large Group instruction equipment. This would allow more than 20 or 25 to participate in those presentations. Video enhancement, sound enhancement and demonstration equipment can make these experiences successful.

    STEAM is an initiative to support Science, Technology, Engineering, Art and Math.

    In an effort to enhance differentiated instruction, our Tech team recommended an upgrade and expansion to the Art and Technology learning labs. These labs provide opportunities for our 21st century work force trainings. The team is proposing a CNC Router, a Milling Machine, a Strata 3D printer, and an Epilog Helix 60 Watt engraver. These are devices that many of our students will need experience on to enter the 21st century work force. Many students are provided videos of these devices. Using the Smart School funding, we want our students to have hands on experiences.

    Our Science teachers have buried us in requests to move from theory to practice. A strategy that will benefit all of our students including those who are successful with applied learning in a flipped classroom. They have asked us to included robotic simulators. You will also see numerous PASCO lab devices to modernize our Biology, Chemistry and Physics labs.

    Finally, all these exciting experiences will push our existing server infrastructure to the limits. That is why the district is proposing the upgrade of their traditional storage servers and their NVidia Art and Graphics servers. Students need reliable storage devices focused on them and their efforts. These are listed in the Connectivity portion of the application.

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.**

While the proposed acquisitions will not directly impact the parents in the Phoenix community, Phoenix Central Schools supports a robust Parent Portal where parents can review their student's attendance, academic progress and attendance in real time.
The proposed technology purchases will enhance help the district facilitate technology-based regional partnerships. As a Google Classroom district the devices will allow every classroom to be a distance learning classroom via Google Hang Outs, email, and preplanned distance learning activities offered through CiTi BOCES.

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."

Teachers will continue to follow our currently Flipped Learning implementation plan. Once teachers attend a two- day Flipped Learning training they are provided with a class set of Chromebooks.Throughout the year, teachers have the opportunities to attend multiple technology training to continue to grow and enhance their understanding of the Flipped Model.In addition to training surrounding the principles of Flipped, teachers are also able to attend technology training surrounding a variety of other topics, including but not limited to, all aspects of Google, digital breakouts, formative assessments, WeVideo, Kahoot, etc.
In addition to training provided throughout the school year, we also provide technology training throughout the summer. Summer training is offered to allow teachers to refresh their current skill set in the principles of Flipped Learning as well as integrating Google and other technology tools into their classrooms.
Finally, we have 3 Itinerant Teachers from our local CiTi BOCES who work with our teachers on a regular basis, acting as technology coaches and mentors as they provide content specific technology support for to our teachers.

9. **Districts must contact one of the SUNY/CUNY teacher preparation programs listed on the document on the left side of the page 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 Oswego

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

315-312-2102

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.**

Pam Michel

10. **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.

11. **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.

12. **Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category.**

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	VM Horizon License	1	53,586.00	53,586.00
Other Costs	PASCAR PAScar Blue	4	50.00	200.00
Other Costs	Logitech MK345 Wireless Combo-Full-sized Keyboard with Palm Rest and Comfortable Right-Handed Mouse	75	25.00	1,875.00
Other Costs	Go Direct pH Sensor	19	89.00	1,691.00
Other Costs	Large Group Instruction Audio System: (12) ceiling speakers (white), and (1) Audio Amplifier	1	2,175.00	2,175.00
Other Costs	Roland GS-24 Vinyl/Cutter	1	3,340.00	3,340.00
Interactive Whiteboards	SMART Board 7075 interactive display with iQ and SMART Learning Suite	73	5,699.00	416,027.00
Other Costs	PASCO PASPORT Rotary Motion Sensor	7	169.00	1,183.00
Other Costs	Lenovo Virutal Reality Kit 24-Pack with 18-Month Warranty	3	16,770.00	50,310.00
Other Costs	Large Group Instructional Video Display system Video System (2) Diagonal Motorized Screens, (2) 7000 Lumen Laser Projector, (2) Lenses, (2) Mounts, (4) HDMI Extenders, (1) Matrix Switcher	1	22,416.00	22,416.00
Other Costs	Go Direct Co2 Gas Sensor	19	199.00	3,781.00
Other Costs	Dot and Dash Robots	1	700.00	700.00
Other Costs	Roland MDX-50 CNC Mill	1	17,900.00	17,900.00
Other Costs	Roland BN-20 Printer/Cutter	1	12,153.00	12,153.00
Other Costs	PASCO Super Fan Cart	7	260.00	1,820.00
Other Costs	Lenovo Mirage-digital camera	1	290.00	290.00
Other Costs	Cue Robot Item #: WL13765790	2	200.00	400.00
Other Costs	Anywhere Cart AC-CDW-36 36 Bay Secure Charging Cart with Cycle Timer	42	900.00	37,800.00
Other Costs	Cubelets Mini Makers Pack Item #: WL13762020	1	1,390.00	1,390.00

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Classroom Learning Technology

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	Stratasys F 170 3D Printer	1	26,374.00	26,374.00
Other Costs	Lego EV3	4	399.00	1,596.00
Other Costs	Go Direct Colorimeter	6	119.00	714.00
Other Costs	Hand-Grip Heart Rate Monitor	12	119.00	1,428.00
Other Costs	Go Direct SpectroVis Plus Spectrophotometer	6	399.00	2,394.00
Other Costs	Epilog Helix 60-Watt Engraver	2	24,744.00	49,488.00
Other Costs	Lenovo Mirage Solo-Virtual Reality headset 5.5	1	400.00	400.00
Other Costs	MakerBot Replicator + 3D Printer	3	3,564.00	10,692.00
Other Costs	Required cables and connectors for the Large Group Instruction Presentation System including SVHS, Audio, HDMI and connectors	1	660.00	660.00
Other Costs	Roland VG-540 Printer/Cutter	1	25,417.00	25,417.00
Other Costs	PASCO Sine Wave Generator	7	270.00	1,890.00
Other Costs	Large Group Instruction Presentation Recording System: (1) Camera with Receiver, (1) Ceiling Mount for Camera and (1) DSP	1	8,898.00	8,898.00
Other Costs	Large Group Instruction required Infrastructure: (2) Custom Lecterns, (4) Rack Shelves, (3)	1	7,225.00	7,225.00
Desktop Computers	OptiPlex 24 7000 Series All-in-One (7450) Desktop	173	700.00	121,100.00
Other Costs	PASCO PASPORT Visual Accelerometer	1	200.00	200.00
Interactive Whiteboards	LSM1U Micro Adjustable Smart Board Fixed Wall Display Mount	73	249.00	18,177.00
Other Costs	Go Direct Temperature Probe	19	69.00	1,311.00
Other Costs	PASCO String Vibrator	7	75.00	525.00
Other Costs	Celestron Digital Microscope Imagers	19	109.00	2,071.00
Other Costs	Large Group Instruction Control System: (2) Push Button Controllers, (2) 2 Gang	1	2,732.00	2,732.00
Other Costs	Sphero SPRK+- The App Controlled Robot Ball	1	1,200.00	1,200.00
Other Costs	Techno HD 48 x 48 CNC Router	1	31,771.00	31,771.00
Laptop Computers	Acer Spin 11 Chromebooks R751TN-	375	385.00	144,375.00

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Classroom Learning Technology

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be Purchased	Quantity	Cost per Item	Total Cost
	C5P3- 11.6			
Desktop Computers	Intel Next Unit of Computing Kit NUC7i5BNK- mini PC-Core i5 7260U2.2GH	75	350.00	26,250.00
		1,051	**274,739.00**	**1,115,925**

13.   **Final 2014-15 BEDS Enrollment to calculate Nonpublic Sharing Requirement (no changes allowed.)**

	Public Enrollment	Nonpublic Enrollment	Total Enrollment	Nonpublic Percentage
Enrollment	1,837	0	1,837.00	0.00

14.   **If you are submitting an allocation for Classroom Learning Technology complete this table.**

	Public School Sub-Allocation	Estimated Nonpublic Loan Amount (Based on Percentage Above)	Estimated Total Public and Nonpublic Sub-Allocation
Interactive Whiteboards	434,204.00	0.00	434,204.00
Computer Servers	0.00	0.00	0.00
Desktop Computers	147,350.00	0.00	147,350.00
Laptop Computers	144,375.00	0.00	144,375.00
Tablet Computers	0.00	0.00	0.00
Other Costs	389,996.00	0.00	389,996.00
Totals:	**1,115,925.00**	**0**	**1,115,925**

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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 new 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. **Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category.**

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)	0.00
		0	0.00	0

6. **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:	0.00

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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. **Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category.**

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)	0.00
		0	0.00	0

5. **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:	**0.00**

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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.**

Phoenix Central School wishes to provide a learning environment that is safe and secure. To accomplish this the district developed a school safety assessment and plan. One of the priorities of that plan is for the district proposes to use Smart Schools bond funds to secure and harden interior and exterior doors. This will include purchasing lock systems with deadbolt capabilities to secure classrooms. This will also include applying fracture resistant coating to the glass surfaces in ever classroom door.

The product of this initiative will be classroom doors that can be secured against any intruder creating a safe haven for students. The doors will prevent intruders from entering, and individuals in the halls from using the windows in the doors to endanger the students.

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. Smart Schools plans with any expenditures in the High-Tech Security category require a project number from the Office of Facilities Planning. Districts must submit an SSBA LOI and receive project numbers prior to submitting the SSIP. As indicated on the LOI, some projects may be eligible for a streamlined review and will not require a building permit. Please indicate on a separate row each project number given to you by the Office of Facilities Planning.**

Project Number
46-20-01-06-7-999-BA1
46-20-01-06-7-999-005

3. **Was your project deemed eligible for streamlined Review?**

☒ Yes
☐ No

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

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

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

Name	License Number
King and King	15925

5. **Please detail the type, quantity, per unit cost and total cost of the eligible items under each sub-category.**

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
Approved Door Hardening	Replace interior double door hardware	2	3,750.00	7,500.00
Approved Door Hardening	New lockset at classroom entry door	225	750.00	168,750.00
Approved Door Hardening	Door hardening at existing interior vision panels in doors scheduled to remain (small square vision light, 1sf)	20	70.00	1,400.00
Approved Door Hardening	Door hardening at existing interior vision panels in doors scheduled to remain (narrow vision light 2.5sf)	120	180.00	21,600.00

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High-Tech Security Features

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be purchased	Quantity	Cost per Item	Total Cost
Approved Door Hardening	Interior vision panel hardening at Cafeteria (180sf)	1	15,000.00	15,000.00
Approved Door Hardening	New secure door hardware @ pair of doors (electronic)	4	6,000.00	24,000.00
Approved Door Hardening	Replace interior door hardware at large group spaces with electronic lockdown capibilities (price per door leaf)	51	5,225.00	266,475.00
Approved Door Hardening	Replace exterior FRP door leafs and frame	3	3,750.00	11,250.00
Approved Door Hardening	Door hardening at existing large interior vision panels scheduled to remain at large group areas (18sf)	8	1,250.00	10,000.00
Approved Door Hardening	Door hardening at existing door sidelights scheduled to remain (12sf)	45	800.00	36,000.00
Approved Door Hardening	Replace exterior FRP door hardware	3	3,000.00	9,000.00
Approved Door Hardening	Door hardening at existing interior vision panels in doors scheduled to remain (half vision light 4 sf)	55	275.00	15,125.00
Approved Door Hardening	Replace interior double leaf egress doors	2	3,600.00	7,200.00
Approved Door Hardening	Door hardening at existing small interior vision panels scheduled to remain at large group areas (30sf)	2	2,125.00	4,250.00
		541	**45,775.00**	**597,550**

6. **If you have made an allocation for High-Tech Security Features, complete this table.**
   Enter each Sub-category Public Allocation based on the the expenditures listed in Table #5.

	Sub-Allocation
Capital-Intensive Security Project (Standard Review)	0.00
Electronic Security System	0.00
Entry Control System	0.00
Approved Door Hardening Project	597,550.00
Other Costs	0.00
Totals:	**597,550.00**