

Smart Schools Investment Plan - 2016-17 Version (Original) - Northville CSD_First_Submission_#1

SSIP Overview

Page Last Modified: 12/10/2018

Institution ID

800000051634

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

Leslie Ford

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

518-863-7000

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

lford@northvillecsd.org

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

First submission

3. All New York State public school districts are required to complete and submit a District Instructional Technology Plan survey to the New York State Education Department in compliance with Section 753 of the Education Law and per Part 100.12 of the Commissioner's Regulations. Districts that include investments in high-speed broadband or wireless connectivity and/or learning technology equipment or facilities as part of their Smart Schools Investment Plan must have a submitted and approved Instructional Technology Plan survey on file with the New York State Education Department.

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

☒ District Educational Technology Plan Submitted to SED and Approved

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

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

☒ Parents

☒ Teachers

☒ Students

☒ Community members

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

☐ Yes

☐ No

☒ N/A

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

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

- 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 Investment Plan, approved 6-2016.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.**

<https://sites.google.com/a/northvillecsd.org/ncsd/home/board-of-education/board-of-education-policies>

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.**

515

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:**

\$344,944

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	0
Connectivity Projects for Communities	

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	Sub-Allocations
	0
Classroom Technology	132,748
Pre-Kindergarten Classrooms	0
Replace Transportable Classrooms	0
High-Tech Security Features	0
Totals:	132,748

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Classroom Learning Technology

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

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

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

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

Northville Central School District exceeds the minimum requirement established by the FCC. The district classrooms are contained within one building. We currently have a contract with Spectrum (formerly Time Warner) for Dedicated Internet Access of 100M and are using E-Rate funds to assist in the purchase of this service. Fiber connects the 3 wiring closets within the building. We have a mix of POE and non-POE GB switches connecting to classroom spaces.

- 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	462	46,200	46.2	100	100	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 wireless access points (WAPs) in administrative areas and in alternating rooms throughout the building. Additionally, we have seven (7) external radios. While this generally meets our needs, we have seen a degradation of connectivity with increased usage of wireless devices. We find this especially so during large group use. Newer devices such as tablets also have issues in making a connection. Our ultimate goal is to update our wireless lan controller, upgrade our current wireless access points, and increase the number so that we would have wireless access points in every instructional area with additional wireless access points in heavy use areas, such as the media center.

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4. **All New York State public school districts are required to complete and submit an Instructional Technology Plan survey to the New York State Education Department in compliance with Section 753 of the Education Law and per Part 100.12 of the Commissioner's Regulations.**
Districts that include educational technology purchases as part of their Smart Schools Investment Plan must have a submitted and approved Instructional Technology Plan survey on file with the New York State Education Department.

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

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

Through the Smart Schools Investment Plan, the district plans to purchase LED interactive monitors, document cameras, and a web conference bundle. We will also be acquiring Desktops and Chromebooks along with storage/charging carts. These are already compatible with our system and will continue to be compatible as we upgrade in the future. Our electrical supply/infrastructure is already adequate to support additional devices.

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

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

To improve our instructional practice related to science, technology, engineering, arts and mathematics (STEAM) we need to make several purchases. Also, the SSBA funds will allow us to continue the expansion of our Google Suite For Education (GSFE) platform by putting more devices in the hands of students and teachers. The GSFE platform (Google Docs, Google Drive, Google Classroom, and Google sites) enables an incredible level of collaboration between students and teachers including (student-to-student, student-to teacher, and teacher-to teacher). GSFE allows students to not only work at their own pace, but it also allows students to communicate one on one with their teacher through email and comments. GSFE is also being used as a means of sharing between general education teachers and special-education teachers. This collaborative tool has increased the ability for special education teachers to review classroom teachers' lesson plans so that they can craft their plans for their individual students accordingly. Each of our special education classrooms will have laptops and Chromebooks that mirror the general education classrooms to ensure a seamless transition for students into the general education setting.

SSBA will also allow us to:

- Enhance Differentiated Instruction: The technology purchases will allow students to work through a rigorous curriculum at their own pace and complete varying computer based activities at their own level.
- Expand Learning: In NCS, teachers have begun to use "Google Docs" in an effort to provide real time feedback for their students. Students can use their Chromebooks at home to continue their learning. Teachers also use the concept of "flipping the classroom," providing an opportunity for students to preview the next day's lesson.
- Reduction of Learning Gaps: Reading continues to be an area where we have the biggest gap. Using their Chromebooks as well as interactive LCD monitors/document cameras they can complete activities to help close this reading gap. The activities are all geared towards the student's individual learning needs. In the upper levels, we utilize a reading program called STAR.
- Students with Disabilities: In NCS, the CSE Chairperson has the authority to authorize any piece of assistive technology that will assist students with disabilities both in and out of the classroom.
- ELL learners will benefit from the technology purchased, as they will have access to programs that allow for translation. Although our ELL students primarily use English, translation programs are necessary so that we may communicate any needs and updates to their family. Google translate has been a powerful tool in helping us do that. We also use ClassDoJo and our Facebook platform to reach out to ELL families. It can tell us if there are any families who use the translation option. We can then determine if our message was received by our ELL families. Chrome books also offer spell check, which assists our students in writing. Spellcheck allows them to be successful when submitting written pieces. ELL students have the option of learning the material presented to them through technology in their classrooms. More technology in the classrooms allows ELL students a variety of modalities to receive the information presented.

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

The district currently uses a Google Suite For Education platform for collaboration and communication between students and teachers. Because this is a cloud-based system, students and their parents have access to this system from any web-enabled device at home or school. The use of Google classroom for assignments continues to grow among our staff. As we replace more of their laptops with newer technology, more teachers will begin to use this valuable communication resource. We also have a web-based parent/student portal through PowerSchool for communication of Grades and other information such as Bus Routes, Notices, etc. The district is also in the process of creating a Student Virtual Learning Academy with online classes offered to students accessible from home and school. Also, since we are a member of NERIC, the interactive LED monitors will allow faculty and students to participate in interactive Professional Development and virtual field trips. Lastly, with the purchase of a conference webcam we will be able to better utilize distance learning and all of its opportunities that it offers (so we can breakdown the walls of the classroom in a cost-effective way).

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."

All faculty has the opportunity to utilize HFM BOCES for their own high-quality professional development in many different areas, including but not limited to, technology, curriculum development, and assessment. The region also holds bi-monthly TAG meetings (Technology Advisory Group) for all administrators. These meetings also provide for robust networking opportunities. In NCS, we also have individual faculty that will assist others as needed. We work with neighboring schools on collaboration if there is a greater regional need for professional development. The District is currently expanding the role of our Teacher Leaders and teacher collaborators. NCS has also launched its own in-house PD strictly for technology and it's integration. These classes meet monthly and cover a wide range of topics.

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.**

School of Education, University at Albany, SUNY

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

518-442-5010

- 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.**

Jianwei Zhang

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**

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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	91,047
Computer Servers	(No Response)
Desktop Computers	11,110
Laptop Computers	9,600
Tablet Computers	(No Response)
Other Costs	20,991
Totals:	132,748

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

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this category, not under School Connectivity, where public school districts would list them.

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

Select the allowable expenditure type. Repeat to add another item under each type.	Item to be Purchased	Quantity	Cost per Item	Total Cost
Interactive Whiteboards	AQUOS Board Full-HD 70in Class - 69.5 in diagonal, UV2A LED, Interactive Touch Capable	31	2,731	84,661
Interactive Whiteboards	Wall mount for 60-70 in board	31	206	6,386
Other Costs	12' Certified HDMI Cables	31	45	1,395
Other Costs	Document Cameras - Hover Cam Solo 8	40	337	13,480
Other Costs	VADDIO CSAV System - Basic 1, conference =SHOT AV, Conferencing System - Bundle includes Camera, one tabletop microphone, one HDMI audio inserter kit	1	1,954	1,954
Desktop Computers	Dell Optiplex All-in-One - i7, 16 GB	10	1,111	11,110
Laptop Computers	Acer Chromebook R 11 C738T-C8Q2	30	320	9,600
Other Costs	Chromebook Management Console License	30	25	750
Other Costs	LocknCharge Chromebook Carrier (Charge Only)	2	1,706	3,412