

## Bloomfield Smart Schools Investment Plan (SSIP) Overview

What is the 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.

910 students and 185 staff for a total of 1,095

District's total Allocation of Smart Schools Bond Act funds: \$802,089  
remaining funds for Plan #2: \$350,352

Budget Sub-allocations by category that you are submitting for approval at this time.

School connectivity	\$65,150
Connectivity Projects for Communities	
Classroom Technology	\$283,920
Pre-Kindergarten Classrooms	
Replace Transportable Classrooms	
High-Tech Security Features	
Unallocated Funds	

### Timeline

- 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 public 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 was provided through local media and the district website for at least 2 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.

## **School connectivity**

1a. Please describe how your district already meets or is planning to meet the standard of 100 MBPS per 1,000 students within 12 months of plan submission.

The district currently meets this standard. We have 200 Mbps for our students

### 2. Connective Speed Calculator

	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	
Calculated speed	910	91000	91	200		

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

4. Describe the linkage between the district's District Instructional Technology Plan and the proposed projects. (There should be a direct link between 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?")

Having a strong infrastructure is vital for our district. Our staff and students have embraced digital technology in the classrooms. Our secondary students regularly use their chromebooks to access digital learning content. Digital learning content includes databases from our multi-media collection in our library, ebooks, audiobooks, content area specific websites, software subscriptions such as Edulastic, Khan Academy, Castle Learning, ixl Math, Mission US, and the collaborative tools in the Google Apps for Education suite of products. The secondary building has a state of the art Technology Lab that students use for learning CAD, 3D printing, CNC machine work, and laser engraving. Our multi-media lab has high end iMac computers and students have access to the full range of Adobe Creative Cloud products. In our elementary building students are learning keyboarding, coding, and other digital skills. The elementary students regularly make use of iReady for both math and ELA. Primary students have access to both iPads and the computer lab. Intermediate students have access to chromebooks in their classroom as well as the computer lab. A 3D printer was recently added to our Elementary Computer Lab so students can begin to learn those skills. A main focus for the Bloomfield District is making students into creators instead of just consumers of content.

Having access to a variety of technology tools and software and the robust infrastructure to support it is necessary.

5. If the district wishes to have students and staff access the Internet from wireless devices within the school building or in a 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 monitor the bandwidth usage in the district by taking random snapshots using graphical analysis monitoring tools at different times during the day. The technology staff also conducts periodic upload and download speed tests to ensure the fiber and wireless are performing at their industry standard prescribed rates.

6. Office of Facilities Planning will have to conduct a preliminary review of all capital projects, including connectivity projects. Project number:

7. Was your project eligible for an expedited review process?

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

9. If you are submitting an allocation for School Connectivity complete this table.

network/access costs	
outside plant costs	
school internal connections and components	\$42,000
professional services	\$9,400
testing	
other upfront costs	13,750
other costs	
totals	\$65,150

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

School Connectivity	item to be purchased	quantity	cost per item	total cost	
network/ access costs					
outside plant costs					
school internal connections and components	48 PoE Switch	14	\$3,000.00	\$42,000.00	\$42,000.00
professional services	server install	4	\$2,000.00	\$8,000.00	\$9,400.00
	switch install	14	\$100.00	\$1,400.00	
testing					
other upfront costs					
other costs	tape backup library	1	\$7,250.00	\$7,250.00	\$13,750.00
	tapes	1	\$6,500.00	\$6,500.00	
<b>totals</b>					<b>\$65,150.00</b>

### **Classroom Learning Technology**

1a. Please describe how your district already meets or is planning to meet the standard of 100 MBPS per 1,000 students within 12 months of plan submission.

The district currently meets this standard. We have 200 Mbps for our students

#### **2. Connective Speed Calculator**

	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	
Calculated speed	910	91000	91	200		

3. As a precondition to any purchase of devices using a Smart Schools allocation, a district must increase the number of school buildings that meet or exceed the Federal Communications Commission minimum speed standard of 100 Mbps per 1,000 students. Please describe how your district already meets or is planning to meet this standard within 12 months of plan submission.

We currently monitor the bandwidth usage in the district by taking random snapshots using graphical analysis monitoring tools at different times during the day. The technology staff also conducts periodic upload and download speed tests to ensure the fiber and wireless are performing at their industry standard prescribed rates.

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.

Our plan was submitted and the district received email approval on 9/22/2015. The official letter was received 10/2/2015.

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 Technology Department and the Buildings and Grounds departments work closely together. The district's electrical and HVAC are adequate to support the technology we plan to purchase. The district upgraded the wireless access points and wiring during the 2016-2017 school year to support the number of mobile devices on the network. As technology is reviewed for future purchases, compatibility is always checked against our current platforms and systems.

6. Describe how the proposed technology purchases will:

- a. enhance differentiated instruction
- b. expand student learning inside and outside the classroom
- c. benefit students with disabilities and English language learners; and
- d. contribute to the reduction of other learning gaps that have been identified in the school 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 Section E, Question 2, 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 participate in the general curriculum?")

As part of a universal design approach to differentiated instruction, and supporting students with disabilities, we make use of the variety of assistive technology tools that are developed for use with Google Chrome and Google Apps for Education. These include speech-to-text and text-to-speech applications, the ability to enlarge print, simplify web pages, word prediction support, and access to word processing. These tools provide all of our students with the ability to fully participate in classroom learning activities. Having a chromebook per student makes providing access to all of these tools, as they are needed, efficient. Several students with disabilities have been piloting these tools and we know they are effective in improving student learning.

Another part of our Universal Design for Learning is classroom amplification systems. We have tested several and found they improve the learning environment for all students, especially those students with auditory processing difficulties.

As the district looks at personalized learning for students, the planned technology purchases support both students and teachers as provide individualized instruction. This primarily occurs through the use of adaptive software such as iReady and ixl. The use of software such as Castle Learning, Edulastic, Quizziz, Google Forms, and PearDeck provides real time formative assessment data for teachers as they plan instruction and AIS support for students. Teachers also differentiate for students by providing them choice in showing mastery of content. This could be through student created short videos, interactive slide presentations, infographics, websites, and blog postings, to name a few examples.

As of submission of this plan, the district does not have any students identified as English Language Learners enrolled in the district. Should students with this need enroll, the district has a variety of digital tools that would support their learning and instruction.

7. Where appropriate, briefly 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.

Despite the small size of the district, students have access to a variety of college credit bearing courses. However, there are students that may want to access additional courses that the district cannot provide. By providing students with their own chromebook, it eliminates one barrier to providing access to an online course or distance learning opportunity should the student want to take one of these courses.

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. This should be aligned with Section F, Question 1 of the district's 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."

With advances in current technology, professional development can happen in many different formats. The district encourages staff to build personal learning networks and include a variety of professional development formats as part of their personal professional development plan. The goal of all district sponsored professional development is to create training opportunities that are easily accessible, develop a common language among users regarding technology lexion, and promote the integration of technology into rich and rewarding learning experiences for our students. The focus of our professional development has been, and will continue to be:

- Using software that provides formative assessment data for individual students
- Finding and integrating high quality digital resources into instruction
- Content creation tools: Video software, presentation software, collaboration software
- Assistive Technology that supports all learners using Universal Design
- Using technology as a global citizen: Video conferencing, blogging, digital portfolios
- Technology tools to connect with teachers in other districts and regions to share best practices and resources, and tools to manage and organize digital resources and content

9. District's 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 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 institution that you contacted.

SUNY Brockport

9b. Enter the primary institution phone number.

(585) 395-2510

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. Thomas Hernandez

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 district?

No

Questions 10a, 10b, and 11 do not apply as we do not have nonpublic schools.

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 as 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 an inventory system as described above.

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

Interactive whiteboards	
computer servers	\$64,000
desktop computers	
laptop computers	\$41,400
tablet computers	
other costs	\$178,520
total	\$283,920

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."

interactive whiteboards					
computer servers	server 2016	4	\$16,000.00	\$64,000.00	\$64,000.00
desktop computers					
laptop computers	chromebooks	230	\$180.00	\$41,400.00	\$41,400.00
tablet computers					
other costs	short throw projectors	50	\$1,300.00	\$65,000.00	\$178,520.00
	mounting hardware	50	\$200.00	\$10,000.00	
	speakers	50	\$300.00	\$15,000.00	
	redcat amplification system	60	\$1,368.00	\$82,080.00	
	chromebook license	230	\$28.00	\$6,440.00	
<b>total</b>					<b>\$283,920.00</b>