Smart Schools Investment Plan(SSIP) Brookhaven-Comsewogue Union Free School District

Smart Schools Bond Act allocation - \$2,813,720 Smart Schools Investment Plan Application -\$1,809,435

Executive Summary

"In January 2014, Governor Andrew M. Cuomo called for New York State to invest \$2 billion in its schools through a Smart Schools Bond Act (SSBA) that will build out schools and classrooms for the 21st Century to ensure that our students graduate with the skills they need to thrive in the economy of today and tomorrow. Voters approved the Bond Act in November 2014."

(http://programs.governor.ny.gov/smart-schools-ny)

The above quote from the governor's office identifies the origination of the funds available for the Brookhaven-Comsewogue Union Free School District. The funds identified by the Department of Education for Comsewogue total \$2,813,720. Through the spring of 2017 the community was apprised of the passage of the Smart Schools Bond Act and now the next steps required to obtain the funds have been identified. Throughout the spring of 2017 and moving forward through the process, the school district has engaged with a multitude of stakeholders:

- 1. Parents via curriculum council meetings, technology meetings and board meetings
- 2. Teachers –via curriculum council meetings, technology meetings and board meetings
- 3. Students via curriculum council meetings, technology meetings and board meetings
- 4. Community members via curriculum council meetings, technology meetings and board meetings
- 5. Nonpublic school Sunshine Prevention Center

SSIP Process

The following steps must be completed to fulfill the requirement of the NY State Education Department and thus allowing access to the allocated funds:

- 1. The development of and BoE approval of a preliminary Smart Schools Investment Plan (SSIP) February 6th, 2017
- 2. Community sharing of Draft Smart Schools Investment Plan to allow for community feedback. Post on website for feedback after approved February, 2017
- 3. A public hearing allowing the District stakeholders to respond to the draft plan Board Workshop Presentation March 2nd, 2017
- 4. Final Smart Schools Investment Plan approved by the Board of Education March 6th, 2017
- 5. Submission of the investment SSIP to the NY Department of Education March, 2017

Key Initiatives for Smart School Funds

- 1 to 1 saturation in all schools to support curriculum and testing
- STEAM Exploratory Learning labs in all schools to support curriculum and exploratory learning vision

One to One Initiative

Through our one to one initiative, we offer students 21st Century skills and learning opportunities that are independent of time and location. This requires us to rethink every aspect of our education system. It demands more than teaching students to be problem solvers and effective collaborators. Students have the opportunity to be actively engaged in their learning through the support of a wide variety of technology infrastructure, computer and device hardware as well as support staff. With the 1:1 Chromebook initiative throughout the district, we look critically at our pedagogy and how we can move to more active learning in student-centered classrooms. Students engaged in active learning are making their own meaning and constructing their own knowledge in the process. The role of the teacher shifts from the teacher as the provider of educational services to student-as-worker - "sage on the stage" to the "guide on the side." Technology becomes a catalyst in this move to student-centered learning. All of our planning, teaching, and assessing is centered around the needs and abilities of students. We provide a learning environment that supports the strengths and needs of individual learners, preparing students to be college and career ready. Technology enables teachers to provide students with resources to meet their individual learning styles. We have already provided Chromebooks to all of our High School students and a portion of our Middle school and elementary students. We will continue with our district 1 to 1 initiative by saturating all schools with devices. The Smart School bond money will put a Chromebook devices in the hands of each student at Comsewogue. This will also open our students to the myriad resources available through Google for Education and allow access to a number of online resources and environments. Our one to one initiative supports Comsewogue's exploratory, constructivist learning vision.

Smart Schools fund allocation for the Chromebooks Initiative

Building	Device	Cost	# of Units	Total Cost
Boyle Road Elementary	ACER Chromebook R751TN w/Management	\$397	436	\$173,092
	MDM License	\$30	436	\$13,080
Terryville Road Elementary	ACER Chromebook R751TN w/Management	\$397	550	\$218,350
	MDM License	\$30	550	\$16,500
Clinton Avenue Elementary School	ACER Chromebook R751TN w/Management	\$397	553	\$219,541
	MDM License	\$30	553	\$16,590
Norwood Avenue Elementary	ACER Chromebook R751TN w/Management	\$397	479	\$190,163
	MDM License	\$30	479	\$14,370
Teachers - All Buildings	ACER Chromebook R751TN w/Management	\$397	302	\$119,894
	MDM License	\$30	302	\$9,060
			Total:	\$990,640

Building	Cart	Cost	# of Units	Total Cost
Boyle Road Elementary	Bretford 36U Charging Cart	\$1825	26	\$47,450
Terryville Road Elementary	Bretford 36U Charging Cart	\$1825	36	\$65,700
Clinton Avenue Elementary School	Bretford 36U Charging Cart	\$1825	36	\$65,700
Norwood Avenue Elementary	Bretford 36U Charging Cart	\$1825	23	\$41,975
			Total:	\$220,825

STEAM Initiative - Exploratory Learning Lab and Program

Comsewogue, is seeking to create a state-of-the-art STEAM exploratory learning lab and program for all students, K-12. The objective is that the STEAM lab and program will serve as a main hub for

exploratory learning. The initiative will support Comsewogue's constructivist, exploratory vision. Through activities, lessons, workshops and courses focused on STEAM education, Comsewogue will be able to enrich students' understanding of Science, Technology, Engineering, Arts and Mathematics in engaging and interactive environment.

With the growing importance and focus on hands-on and practical application, STEAM (Science, Technology, Engineering, Art and Mathematics) education provides students with an interdisciplinary approach to learning. A state-of-the-art STEAM Lab and program at Comsewogue would allow the district to be a leader in STEAM education at the local and state.

The goal of the STEAM initiative is to enable students at all levels an engaging and interactive STEAM education experience. By giving students positive STEAM experiences we hope to inspire them to pursue education in STEAM related fields.

The STEAM Exploratory Learning Lab will showcase state-of-the art equipment, resources and technology in order to engage, inspire and foster learning. The lab can be host to special sessions for students coming to the lab to experience learning in a STEAM environment. Through guided and independent lessons, students will be able to learn about, and create their own STEAM related, exploratory projects. Students will be able to showcase their projects to other students, faculty and visitors. The length and scope of the lesson activities would depend on the particular topic chosen. Lessons would be exploratory and interdisciplinary in nature but topics might include:

- Coding and Robotics
- 3D Engineering and Design
- Game-based Learning Environments
- Modular Computing
- Virtual Reality Experiences
- Programming and Communication

Smart Schools fund allocation for the STEAM Exploratory Learning Labs and Program

Building	Device	Cost	# of Units	Total Cost
Comsewogue HS	Makerbot	\$3000	2	\$6000
	HP Sprout Pro	\$3200	15	\$48,000
	HTC Vive	\$786	15	\$11,790
	GTX1070 Backpack PC	\$2288	15	\$34,320
	Google Expeditions 30 set	\$9500	4	\$38,000
JFK Middle School	Makerbot	\$3000	2	\$6000
	HP Sprout Pro	\$3200	15	\$48,000

	HTC Vive	\$786	15	\$11,790
	GTX1070 Backpack PC	\$2288	15	\$34,320
	Google Expeditions 30 set	\$9500	3	\$28,500
Boyle Road Elementary	Makerbot	\$3000	2	\$6000
	HP Sprout Pro	\$3200	15	\$48,000
	Google Expeditions 30 set	\$9500	3	\$28,500
Terryville Road Elementary	Makerbot	\$3000	2	\$6000
	HP Sprout Pro	\$3200	15	\$48,000
	Google Expeditions 30 set	\$9500	3	\$28,500
Clinton Avenue Elementary School	Makerbot	\$3000	2	\$6000
	HP Sprout Pro	\$3200	15	\$48,000
	Google Expeditions 30 set	\$9500	3	\$28,500
Norwood Avenue Elementary	Makerbot	\$3000	2	\$6000
	HP Sprout Pro	\$3200	15	\$48,000
	Google Expeditions 30 set	\$9500	3	\$28,500
			Total:	\$596,720

Sunshine Prevention Center

Comsewogue met with Sunshine Prevention Center and based on the formula calculated that Sunshine Prevention Center would be entitled to \$1250.00. We consulted with them and based on the discussion Sunshine Prevention Center determined they would like to have two mounted Smart TVs to be used to connect

devices and allow the students/teachers pull up information to share in the classrooms to be used for instruction.

Building	Device	Cost	# of Units	Total Cost
Sunshine Prevention Center	Smart TV 55 inch 1080P - Samsung or Vizio (Non-Public)	\$600	2	\$1200
	TV Mounts (Non-Public)	\$25	2	\$50

Initiatives	Costs
One to One Chromebooks	\$990,640
One to One Charging Carts	\$220,825
STEAM Lab and Program Costs	\$596,720
Sunshine Prevention Center	\$1250
Security and Infrastructure Costs	TBD
Overall Costs:	\$1,809,435

Amendment May 2020

Due to COVID-19 Outbreak we will be adjusting how we handle our Chromebooks for our students. In an effort to move 1:1 take home for Middle School, we will need less carts than initially planned. We are moving away from carts at the Middle School level (JFK) and assigning Chromebooks to directly to the students due to sanitary concerns and to promote remote learning from home.

Additionally, we will be buying different computers than the HP Sprouts. We purchased a few HP Sprouts and found that our students did not utilize the extra features of the HP Sprout, so we are going to with a more powerful standard computer.

Lastly, we found that the Google Expeditions were better than the higher end VR Backpacks and VR Headsets, so we will no longer be purchasing them.

One to One / STEAM - Amendment 1

Item	Quantity	Cost Per Item	Total Cost
Acer r752T Chromebooks	330	\$387.00	\$127,710
Bredford 36U Charging Carts	-70	\$1,825.00	-\$127,750
GTX Backpack Computer	-28	\$2,288.00	-\$64,064
VR Stations	-28	\$786.00	-\$22,008
View Sonic LED Monitor	25	\$325.00	\$8,125
BTO HP Z4 G4 W-2223 1/16 WP	25	\$2,705.00	\$67,625
Chrome Licenses and Fees	330	\$30.00	\$9,900

Desktop Computers	\$75,750.00
Laptop Computers	\$127,710
Other Costs	-\$203,922.00
Total Change:	-\$462.00