

Vision For Technology

The District has convened a diverse planning committee for Technology Integration called the Transformational Technology Task Force. This Task Force includes students, parents, teachers and administrators and has met four times per year since 2012. In January 2015, the Task Force adopted statements representing its vision for Technology:

A Vision Grounded in the Student Experience: (Transformational Technology Task Force: January 2015)

- *Higher levels of student engagement and differentiation*
- *Students as producers of learning (rather than consumers): Creating and Publishing Thinking:*
 - *Kids coming to school to do something with information not get information*
 - *Students using a choice of apps and technology to complete a project/assignment—specific topic or requirements, but open-ended goal or product*
 - *Creation of multi media products shared with a global audience- the world coaching the student not just the teacher*
 - *Collaborators rather than isolated workers*
 - *Kids creating Khan Academy rather than going to Khan Academy*
- *Technology is a natural part of the work not something planned for. Technology is a functional tool embedded naturally into what students do each day.*
- *Technology access needs to be ubiquitous and start for all students as they enter formal schooling.*
- *Access and equity in learning- greater background knowledge for all students.*
- *While some work will still require traditional wired or wireless machines, student work will increasingly be completed using mobile tablets accessing web-based software and learning management systems.*

Needs Assessment

The Sweet Home CSD has in place at the Middle and High School level a 1:1 technology program with iPads being distributed to each student in grades 6-12. As it looked to the future, the District performed a needs assessment and presented it at the May 2015 of the District's Transformation Technology Task Force.

The Sweet Home CSD has in place a robust infrastructure for technology in many areas of the District. This infrastructure includes state of the art switch gear at the High and Middle School and a strong system of wireless access points with strong saturation at the High and Middle Level (1:1/2 classrooms) but weak at the elementary level (1: 2.5-3.0 classrooms). In terms of processing speed, the wireless hubs at the High School run at 1 GB and the Middle School at 300 MB. The elementary wireless hubs are at 100 MB. We have quality servers that are all new or recently updated with strong storage and processing capacity.

At the user level, the Sweet Home CSD has a 1:1 computing program in place for middle and high school. 2000 iPads have been deployed with a sustainability plan based on a use of the middle school devices for three years before rotating devices back to elementary levels. The District is committed to maintaining the replacement of student devices without "one shot" assistance from Bond acts or other donations that will undermine necessary sustainability planning. Classroom sets of pluggable auxiliary keyboards have been purchased to facilitate longer production of word-processed work. A combination of local and categorical funds will be used to procure new iPads for incoming grade six and nine students. Twelfth grade devices will rotate back as replacement/ loaners and for staff use.

Teacher/ administrator laptop computers were recently replaced. Laptop and desktop computers for students and clerical staff are older and becoming more difficult to service. Classroom projectors have

been installed into 95% of all classroom space district wide. However, these machines are aging out and beginning to fail.

The District has a network of 280 security cameras and six NVR server/ recorders. Several are older and nearing end of useful life. A number of cameras, many of which were purchased 7-8 years ago, are aging out and in need of replacement.

Planning and Engagement

The District has decided to use the Transformational Technology Task Force as its engagement element to bring students, parents, teachers, and administrators into the process. At the May 2015 Task Force Meeting, the team was presented with key planning considerations/ questions in looking forward:

- *What is critical to maintain the strength of current system?*
- *What progress are we making in our Digital Conversion?*
- *How do we build our capacity to expand our use of tablet/web based computing to the elementary level? What is needed for that work?*
- *What is our need for devices for staff?*
- *Will we be ready for computer based testing (i.e. PARRC)?*
- *How do plan for sustainability over the long term?*
- *How do we maximize all available resources?*

Our systems engineer identified a series of needs related to our technology infrastructure and user devices. The team members were asked to prioritize those needs by considering two questions:

- *Importance: What is the urgency of the identified need?*
- *Urgency: How quickly must the need be addressed? Critical/ Immediate, Essential/ Short Term (1-2) years, Important/ Long Term (3+ years)*

As a result of that meeting, the following needs were identified as critical or essential:

- Improve saturation and speed of Wireless network
 - Replace and Upgrade the Elementary Switches
 - Improve saturation/number of access points at Elementary
 - Increase the Speed/ capacity of Wireless Access Points at MS
- Restore/ Add Security Cameras Capacity:
 - Security Cameras: Increase Coverage/ Improve picture quality in key areas
 - Replace out of date NVR
- Create capacity for replacement of classroom projectors.
- Student Keyboard Sets: Secondary and Elementary

Smart Schools Investment Plan: Preliminary Plan

The Smart Schools Investment Plan identifies seven categories for allowable expenditures of funds allocated by the Smart Schools Bond Act. The Sweet Home CSD has been allocated \$1,891,997 through this act. The District's general strategy is to use the SSBA funds to support the continued development of the District's technology infrastructure rather than focus upon student devices.

The Act allows expenditures in the following categories: School connectivity, Connectivity Projects for Communities, Classroom Technology, Pre-kindergarten classrooms, Replacement of Classroom Trailers, and High-Tech Security Features.

The District is proposing the following expenditures as part of its initial use of its allocation to

- Replacing the switchgear at the elementary level.
- Purchase 80 new wireless access points for the middle school. The current WAP's will be relocated to the elementary school to establish 1:1.2 WAP's per classroom at the elementary level.
- Replace two NVR servers to enhance the storage and back up capacity of our high tech surveillance system.
- Purchase 30 web-based cameras for the most critical areas of Middle and High Schools.. Other cameras can be rotated to other locations.
- Purchase up to 133 new LED projectors for classroom use to replace failing projectors and provide a reserve of replacements as others go off line. This will allow formation of a replacement fund/ cycle for new projectors. 13 projectors would be available to loan to St. Christopher's School.

Smart Schools Investment Plan Category	Recommended Use of Funds	Rationale	Sub Allocation
School Connectivity	Purchase new switch gear for the four elementary schools.	New switches will improve speed and connectivity of machines to handle the demands of streaming video and computer adaptive testing.	\$200,000
School Connectivity	Purchase new 1GB wireless access points for Middle School. Reuse current WAPs at elementary Schools- with initial emphasis at intermediate.	Expansion of 1:1 program will require stronger attention to wireless connectivity.	\$100,000
High Tech Security Features	Replace three NVR servers to ensure data quality and protection.	Current NVR's have failed frequently and have left "holes" in data recorded	\$15,000
High Tech Security Features	Replace 25 cameras at high School and 25 cameras at middle school. Add 5 cameras at each elementary school.	Current cameras are original equipment and up to 30 are not functioning. New cameras will be deployed in the most critical areas. Existing cameras will be redeployed to other locations.	\$70,000
Classroom Technology	Purchase 120 classroom LED projectors for Sweet Home CSD Purchase 20 laptop computers to loan to Private School Students at St. Christopher's School.)	Current projectors are five years old and run continuously. This will allow us to replace almost half of projectors. (120@\$850/projector) Computers for student use at St. Christophers	\$100,000
			\$11,000
Total Sub-allocation			\$496,000

This investment plan would facilitate the improved connectivity of students and enhance the capacity of computer based, computer adaptive testing for purposes of screening and progress monitoring. It would also facilitate development of project based learning- storage and streaming of video. The plan would allow us to expand technology/ 1:1 computing to the elementary level by building an infrastructure capable of handling web-based traffic.

Anticipated Timeline

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| • November 2015 | BOE Approval of Preliminary Plan |
| • November/ December 2015 | Stakeholder Feedback, Expedited SED Review |
| • December 2015 | Public Hearing: December 15 BOE Meeting |
| • January 2016 | BOE Approval of Final Plan, submission to SED |
| • March/ April 2016 | SED Approval |
| • April-June 2016 | Complete work/ Apply for reimbursement |

For any questions related to our Smart Schools Investment Plan, please contact the Superintendent of Schools, Anthony Day (aday@sweethomeschools.org) or Robert Ehlenfield, systems engineer (rehlenfield@sweethomeschools.org).