

ROBERT PATTISON Information Technology Director (617)-696-4470 x5509

TO: Mary C. Gormley, Superintendent

FROM: Bob Pattison, Information Technology Director

RE: <u>5 Year Capital Budget Expenses</u>

DATE: September 12, 2019

As requested by the Capital Improvement Planning Committee, I have attached the School Department's 5 year technology capital plan. This plan supports several key educational objectives and the technical objective of making the Milton Public Schools be a 1:1 computing environment by FY 22.

The vision of the Milton Public Schools is:

"The Milton Public School System is a dynamic community that challenges all students to thrive and achieve. Our schools provide a well-funded teaching and learning environment in state-of-the-art facilities. In partnership with the community, we equip our students with the skills and knowledge necessary to adapt and contribute to a changing world."

Its core values are:

- High Academic Achievement for all Students
- Excellence in the Classroom
- Collaborative Relationships and Communication
- Respect for Human Differences
- Risk-Taking and Innovation for Education

Students can benefit from the vast amount of digital resources available on the Internet; therefore, we need to provide all the tools necessary for teachers and students to access these resources. By getting wireless technology in the hands of as many students as possible, with a goal of 1 to 1 computing, students will have instant access to rich educational content conducive to independence of learning while also preparing them for the ever changing digital world.

Due to several computer labs being taken over as classrooms, we were able to reallocate those PC's and are able to remove the request for additional PC's for 1 year.

We make the following requests:

- **A. Server Replacement –** Scheduled replacement of aging servers that control the virtual server environment and backup of the entire system.
- **B. WiFi upgrades –** This request would expand the WiFi capabilities at the elementary schools and make them 100% 1:1 device ready. The increased WiFi capacity is necessary even without 1:1 due to the influx of wireless devices.
- C. End User Devices to keep up with 20% annual replacement Over the course of the building project we were able to replace almost 85 percent of existing computers in the district. Our goal is to replace aging computers every five years to maintain pace with the rapidly advancing PC technology. Based on this policy and an inventory of about 1200 PC's, we should be replacing about 240 PC's per year. The operating budget has not allowed that rate of replacement. We've only been replacing about 100 PC's per year. That has left us with a large percentage of our computers woefully slow and inadequate, many of which can't run the most recent SmartBoard software, sometimes leaving that vital teaching tool unused. Each year this target is not met, the problem compounds and we fall into a deeper hole where the computers that are 6, 7, and 8 years old can't run the required software and we can no longer support them. Another major reason this expenditure is necessary is to be prepared and up to date for MCAS testing requirements. Now that we have had widespread Chromebook usage for about 5 years, these same guidelines and replacement issues exist for Chromebooks.
- D. Chromebooks and Carts to make Pierce 1:1 In order to accomplish our goal of becoming a 1:1 district, wireless devices are required for all students. The Chromebooks are the most cost effective and versatile solution. This is the second step of large scale deployment of Chromebooks. This request would be to supply a cart with Chromebooks to each core class at Pierce. The benefits are many but most importantly:
 - 1. The devices would prepare for the students for the high school 1:1 environment and beyond (college)
 - **2.** Teachers would have the freedom to plan lessons using the devices without needing to fight over a limited number of carts
 - 3. Students with IEP's would have their own device for MCAS testing
 - **4.** Ease of management of devices