


Shelton Public Schools

IT Department - COVID Response/5 Year Capital Plan



A laptop screen is shown in a dark, dimly lit environment. The screen displays a line graph with a blue line and a pie chart with green and blue segments. The text is overlaid on the screen in a large, white, sans-serif font. The text reads: "5 Year Capital IT Plan: The IT Department is committed to provide a secure, stable and robust network, 1:1 devices for all grade levels and learning tools and devices that support and enhance the districts teaching and learning efforts." The laptop keyboard is partially visible at the bottom of the frame.

5 Year Capital IT Plan: The IT Department is committed to provide a secure, stable and robust network, 1:1 devices for all grade levels and learning tools and devices that support and enhance the districts teaching and learning efforts.

The problem - Supporting four major and immediate needs while developing long term plans for the district in the middle of a pandemic.

The IT department is in a state of transition from replacing aging equipment while simultaneously supporting the influx of new devices and users.

Most of our network and servers are aging and EOL. At the same time the number of users and devices they are supporting has tripled.

- Devices for students
- Network and Servers
- Interactive Displays
- Devices for Teachers



The solution

Part 1

The IT department is gathering information on each of the four categories.

Information will be supplied to the BOE so that these issues can be identified, prioritized and sustained with a rolling five year plan.

A close-up photograph of a person's hands using a pen to draw on a blueprint. The background is blurred, showing some bokeh lights. The image is partially covered by a blue vertical bar on the right side.

The solution

Part 2

The plans will then be presented to the city and the BOA so that a new five year capital plan can be realized and fully funded.

Devices for Students - Chromebooks

The district owns a variety of Chromebooks that are in different stages of their product life. The IT department will be identifying the different chromebooks we have and the number of each as well.

There are many chromebooks that are EOL that we are using for the lower levels but need to be decommissioned.

- 684 Chromebooks we just purchased + 701 from the state will make us 1:1 from grade 5-12.
- K-4 would still need devices.
- Most full distance learning opt-outs have devices
- IT has manually repaired 250+ Chromebooks in-house since Spring and an additional 100 were repaired under warranty.

Devices for Students - Chromebooks

The immediate influx of devices were free. However, with more devices to maintain the effect on our five year plan will need to be recalculated. We also need to assess how many years of service are left for each device and how many are EOL. Once we know this we can estimate the number we will need to purchase each year.

- 800 units per year is in the existing plan. (\$260K) This cost may need to adjust higher.
- It may not be the same number of devices each year.
- A detailed report will be supplied to the board including the rotation strategy.

Devices for Students - Chromebooks

UNKNOWNNS

The IT Department will research and report the total number of devices and the age of each device. They will also determine the break-down of devices needed at each level.

- IT will provide
 - Total devices needed per grade
 - Age of each device
 - Years left, supported, testing
 - Date of 1:1 5-12
 - Date 1:1 k-4
 - # needed per year to maintain

Network and Servers -Immediate (Most items are not in the current plan)

There are several categories of Network and Server equipment. IT is in the first phase of replacing this equipment. Some can be replaced with a quote and some will need on premise audits.

Security software will also need to be acquired, implemented, and monitored

IT will provide a detailed report and recommendations based on the audit results and the quotes they receive.

- LAN Audit - \$9,292
 - Wireless Network Audit
 - Yearly Security Audit
 - Quotes for various network equipment, servers, storage, security software and support
 - Phone systems
 - We need the audits and quotes to determine dollar amounts and timeline
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Network and Servers -Immediate (Most items are not in the current plan)

UNKNOWNNS

Quotes and onsite surveys need to be scheduled. Each audit will have a cost and these audits will also determine what our needs will be. Service agreements are expiring and some equipment is EOL.

- IT will provide
 - Quotes for network and server needs
 - LAN audit report with recommendations
 - Schedule for WIFI and Security audit
 - Plan for implementing recommendations based on audits & quotes
 - Complete Inventory and Topology report that includes estimated EOL for all equipment.
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Interactive Displays -Immediate?

Current Promethean boards are over ten years old. That is more than you can expect.

IT feels this needs to be done next year instead of phasing in over 5 years. Will need to see quotes and descriptions on different devices. They are a 65" touch screen display.

- 114 Units per year is in existing plan (285K)
- Prometheans are passed the EOL
- About \$2500 each (\$1M)
- When will we be in class teaching to use them?

Interactive Displays -Immediate?

UNKNOWNNS

IT will research and determine a list of devices to consider. Input from each role that will use the devices would be preferred. The installation in each building will need to be planned and the cost determined.

- IT will provide
 - List of devices to choose from
 - Pros & Cons of each device
 - Teacher & Admin input/suggestions
 - Installation requirements
 - Cost Analysis

Devices for Teachers - Immediate

Some teachers have 2 year old Chromeboxes. (can be repurposed)

When teachers are working from home they can connect to the school network via remote services with personal devices. This is a major security issue and also has FOI complications.

- Chromeboxes are in existing plan (250K)
- Use these funds for pc laptops that can be taken home.
- Will also have a built in camera

Devices for Teachers - Immediate

IT is recommending that we acquire pc laptops for teachers and not chromebooks.

More functionality with higher processing capability is necessary for teachers including greater program compatibility

- Capable of running more programs
 - Will have a wired network connection.
 - Will also have a built in camera
 - Easier to obtain
 - Much greater processing capability essential for teachers and staff
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Finances

Finance had calculated a Debt Services plan that would finance these expenses over five years at about 2% with a gradually increasing cost to the city.

This is a very cost effective way to plan and purchase these capital expenses, but the plan will need to be recalculated.

- Existing plan
 - Year 1: 114K
 - Year 2: 260K
 - Year 3: 401K
 - Year 4: 541K
 - Year 5: 662K
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Finances

UNKNOWNNS

The number of devices and the network and server changes will require the IT Department to work with Finance to develop a new five year plan. This plan will be updated on a yearly basis. It will also be part of the Finance Committees items to review on a monthly basis.

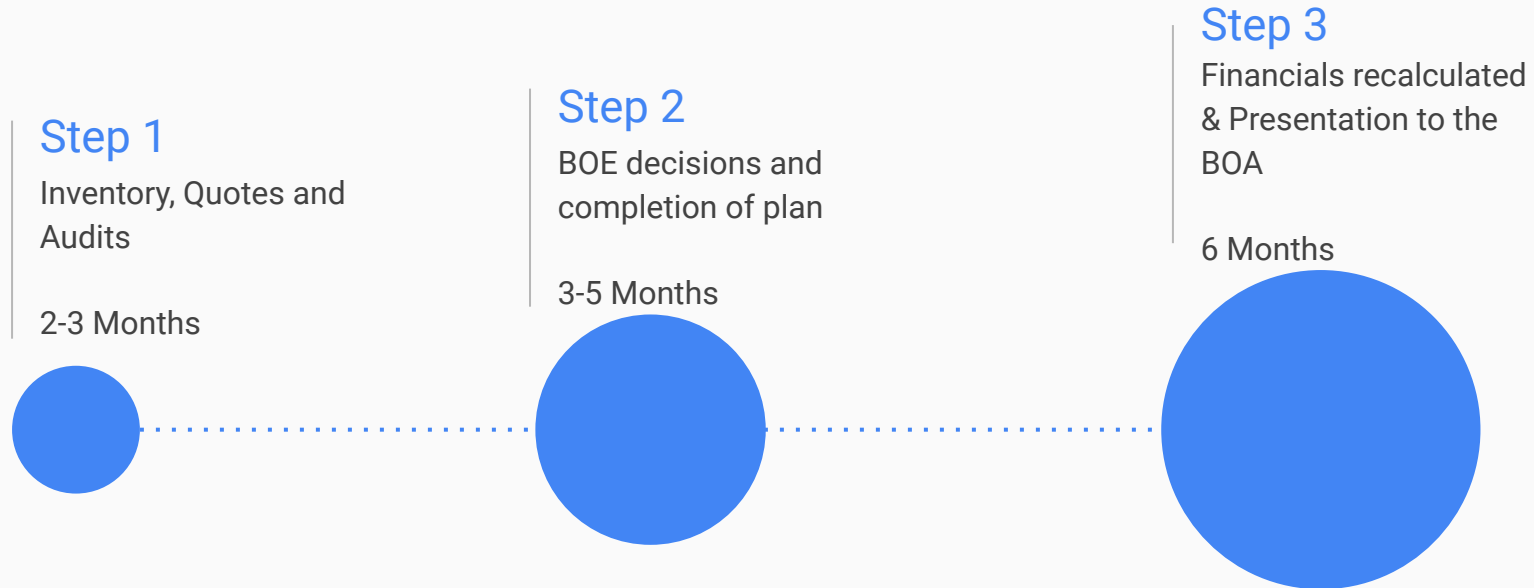
- IT & Finance will provide
 - Year 1: ????
 - Year 2: ????
 - Year 3: ????
 - Year 4: ????
 - Year 5: ????
 - Details of equipment being purchased each year.

5 Year Plan

A rolling five year plan will need the information from IT to complete



ITs priority and focus needs to remain on the start of school while this is completed



The End