

# **AGENDA ITEM SUMMARY**

## **LEXINGTON SCHOOL COMMITTEE MEETING**

**TODAY'S DATE:** October 10, 2017

**REQUESTED MEETING DATE:** October 12, 2017

**AGENDA ITEM TITLE:** Proposed FY2019-23 Capital Projects - Schools

**PRESENTER:** Ian Dailey, Assistant Superintendent for Finance and Administration

**SUMMARY:**

The FY2019-23 Capital Request includes one capital project for the School Department under District Technology.

A summary listing including a detailed description of this project will be provided at the School Committee meeting. Previous years typically included two additional recurring projects, school furniture and school food service equipment.

The School Food Service Equipment item, which was funded through the School Department Food Service Revolving fund, was a place holder for replacement of assets within the program. This item has created more questions from the Capital Expenditures Committee and is unnecessary. The School Department will continue to repair and replace equipment that has exceeded its useful life through the regular operation of the Food Service program. Only when a major project is required will this be submitted going forward.

Additionally, in prior years, there had typically been a school furniture capital item. This capital item, particularly in recent years, funded the purchase of equipment that was broken and beyond repair, furniture for increasing enrollment, and furniture for new staff added during the budget process. Rather than have these necessary and required purchases, which are operational in nature, be subject to the capital budget process, administration plans to include funding in the operating budget going forward for these types of purchases. The Capital budget process will be reserved for truly unique, one-time, major capital investments should they arise.

Approval of this item simply allows the School Department to provide these projects to the Capital Expenditures Committee for their review as part of the budget development process. After working with the Town Manager and Capital Expenditures Committee, these projects will be discussed in further detail in January when the Superintendent's full recommended budget is presented.

**WHAT ACTION (IF ANY) DO YOU WISH SCHOOL COMMITTEE TO TAKE?**

- No action requested, this is a short update or a presentation of information.
- Request input and questions from the School Committee, but no vote required.

Request formal action with a vote on a specific item.

**If formal action is requested, please check one:**

This item is being presented

for the first time, with a request that the School Committee vote at a subsequent meeting  
or

with the request that the School Committee take action immediately

**If formal action is requested:**

Include a suggested motion or let \_\_\_\_\_ know if you need assistance preparing a motion.

**SUGGESTED MOTION:**

*Motion to approve transmittal of the attached proposed FY19-23 School Department Capital Projects to the Capital Expenditures Committee for their review.*

**FOLLOW-UP:**

**AMOUNT OF TIME REQUESTED FOR THE AGENDA ITEM:**

**ATTACHMENTS:**



# Town of Lexington

Department: Schools

## FY 2019-2023 Department Summary of Capital Improvement Projects

#	Priority	Project Name	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
945	1	LPS Technology Capital Request	\$1,715,300	\$1,750,700	\$1,249,600	\$1,712,100	\$1,793,220	\$8,220,920
<b>Department Totals</b>			<b>\$1,715,300</b>	<b>\$1,750,700</b>	<b>\$1,249,600</b>	<b>\$1,712,100</b>	<b>\$1,793,220</b>	<b>\$8,220,920</b>

Approval by: \_\_\_\_\_

*(Department Head Signature required)*

10/12/2017 3:22:04 PM



# Town of Lexington - FY 2019-FY 2023 Capital Improvement Projects

**Project Name:** School District Technology **Date:** 10/10/17

**Submitted By:** Jennifer Judkins **Department:** Technology

**First Year Submission?:**      **Phone #:** 781-861-2580 x68099 **Email:** jjudkins@lexingtonma.org

## Description of Project:

### FY19 Technology Plan

1. Tech Workstations: Replacement of mobile devices (Ipads and chromebooks) for teachers, students and staff. Replacement of laptops for existing teachers and purchase of laptops for new staff.  
**Total Cost: \$252,000**
2. 1:1 Middle School Program: Replace Ipads for one grade level with Chromebooks.  
**Total Cost: \$204,600**
3. Elementary Mobile Devices: Address equity at elementary schools and expand device access through purchase of additional carts of Chromebooks for Bowman, Bridge, Estabrook, Hastings, Harrington. Purchase Chromebook cart for Fiske (Media Ctr). Purchase additional district computer carts.  
**Total Cost: \$177,600**
4. 1:1 at LHS: Begin implementation of a 1:1 device program at LHS (Chromebooks) for 2 grades  
**Total Cost: \$412,500**
5. STEM/Computer Science: Purchase Kibo robotic kits for all elementary schools; purchase Sphero robot kit for middle schools  
**Total Cost: \$27,600**
6. Upgrade District and Building Network Infrastructure: Upgrade infrastructure to support 1:1 program and handle increase in devices at K-8 level.
  1. Replace switches and wireless access points (WAPS) that have reached their end of useful life at Harrington, Clarke, and Diamond
  2. Add additional switches at Clarke and Diamond to handle increased wireless load. Implement wireless project at CO to bring enterprise level wireless access. Purchase equipment to prepare for bandwidth increase from 1GB to a minimum of 5GB for increased device counts.  
**Total Cost: \$350,000**
7. Interactive Projector/Whiteboard Units: Replace projectors in each school. This equips buildings with either a touch activated interactive system with a new ceramic whiteboard and speakers or an interactive TV. The replacements will begin with the oldest model per school until all systems are within a 4 year window with all of the same functionality.  
**Cost: \$216,000**
8. Server/Storage Infrastructure: Upgrade current Virtual environment to keep up with the needs of the district and online testing.  
**Cost: \$75,000**

**Total FY19 Technology Cost: \$1,715,300**

### FY20 Technology Plan

1. Tech Workstations: Replacement of mobile devices (Ipads and chromebooks) for teachers, students and staff. Replacement of laptops for existing teachers and purchase of laptops for new staff.  
**Total Cost: \$381,000**
2. 1:1 Middle School Program: Replace Ipads for one grade level with Chromebooks.  
**Total Cost: \$204,600**
3. Elementary Mobile Devices: Purchase additional carts of Chromebooks in every elementary school; Purchase additional district computer carts.  
**Total Cost: \$141,600**



## Town of Lexington - FY 2019-FY 2023 Capital Improvement Projects

4. 1:1 at LHS: Complete implementation of a 1:1 device program at LHS (Chromebooks) for all four grades (purchasing for 2 additional grades)  
**Total Cost: \$412,500**
5. STEM/Computer Science: Purchase Google Expeditions Virtual Field Trip kits for each elementary school.  
**Total Cost: \$57,000**
6. Upgrade District and Building Network Infrastructure:
  1. Replace wireless access points (WAP) at Harrington, Bridge, Bowman to High Capacity WAPs to handle increased Wifi connected devices.
  2. Add additional switches to Bridge, Bowman, and Harrington to handle power requirements for new WAPS.  
**Total Cost: \$158,000**
7. Interactive Projector/Whiteboard Units: Replace projectors in each school. This equips buildings with either a touch activated interactive system with a new ceramic whiteboard and speakers or an interactive TV. The replacements will begin with the oldest model per school until all systems are within a 4 year window with all of the same functionality.  
**Cost: \$216,000**
8. Server/Storage Infrastructure: Replace Cache servers needed to support online computer-based testing at the elementary schools; Add a second virtual server to allow for additional in-house file storage capacity as well as additional cache servers needed to support online computer-based testing at the middle and high schools.  
**Total Cost: \$180,000**

**Total FY20 Technology Cost: \$1,750,700**

### **FY21 Technology Plan**

1. Tech Workstations: Replacement of mobile devices (Ibads and chromebooks) for teachers, students and staff. Replacement of laptops for existing teachers and purchase of laptops for new staff.  
**Total Cost: \$531,000**
2. Elementary Mobile Devices: Replace end of life Chromebooks from elementary carts; Replace end of life iPads for K-2 elementary schools  
**Total Cost: \$185,400**
3. LHS Mobile Digital Music Lab: Mobile music lab will allow elective courses for non-performance track students to participate in digital music programming.  
**Total Cost: \$45,000**
4. STEM/Computer Science: Purchase classroom Makey Makey STEM Invention Literacy Kit for each elementary school.  
**Total Cost: \$4,200**
5. Upgrade District and Building Network Infrastructure:
  1. Replace WAPs at LHS
  2. Add power over Ethernet (POE) switches to accommodate new power requirements; Add additional wireless access points (WAP) as needed  
**Total Cost: \$248,000**
6. Interactive Projector/Whiteboard Units: Replace projectors in each school. This equips buildings with either a touch activated interactive system with a new ceramic whiteboard and speakers or an interactive TV. The replacements will begin with the oldest model per school until all systems are within a 4 year window with all of the same functionality.  
**Cost: \$216,000**
7. Server/Storage Infrastructure: Continue to improve infrastructure to meet the needs of the district.  
**Cost: \$20,000**

**Total FY21 Technology Cost: \$1,249,600**



## Town of Lexington - FY 2019-FY 2023 Capital Improvement Projects

### **FY22 Technology Plan**

#### 1. **Tech Workstations:**

Replacement of 1:1 Chromebooks for MS/HS – 3 grades; replace end of life Chromebook carts district-wide; replacement of teacher laptops and new staff laptops; replace damaged devices in 1:1 program  
**Cost: \$1,174,500**

#### 2. **STEM/Computer Science:** Raspberry Pi Cana Kits and accessories class set for middle schools **Cost: \$6,600**

#### 3. **Upgrade District and Building Network Infrastructure:** Fiber and Wifi network upgrades **Cost: \$300,000**

#### 4. **Interactive Projector/Whiteboard Units:** Replace projectors in each school. **Cost: \$216,000**

#### 5. **Server/Storage Infrastructure:** Moving more to cloud based solutions, but will still need to maintain and upgrade existing hardware. **Cost: \$20,000**

**Total FY22 Technology Cost: \$1,712,100**

### **FY23 Technology Plan**

#### 1. **Tech Workstations:**

Replacement of 1:1 Chromebooks for MS/HS – 3 grades; replace end of life Chromebook carts district-wide; replacement of teacher laptops and new staff laptops; replace damaged devices in 1:1 program  
**Cost: \$1,262,220**

#### 2. **Upgrade District and Building Network Infrastructure:** Continue 5 year replacement of Middle School Wifi network with newest technology. **Cost: \$300,000**

#### 3. **Interactive Projector/Whiteboard Units:** Replace projectors in each school. **Cost: \$216,000**

#### 4. **Server/Storage Infrastructure:** Continue to maintain non cloud based applications. **Cost: \$15,000**

**Total FY23 Technology Cost: \$1,793,220**

### **Justification/Benefit:**

The proposed capital expenditures will:

- Increase student access to devices to allow for innovative learning methods that integrate supportive technologies, problem-based approaches and higher order thinking skills
- Upgrade existing infrastructure to address current needs as well as provide flexibility to adjust to future requirements and emerging technologies
- Support expanded ESE mandated MCAS next generation online testing, specifically grades 3 & 6 for spring 2019

### **Impact if not completed:**

Without the proposed funding, access to devices will remain limited and as a result, the ability for our students to develop critical 21st century digital proficiencies will be compromised. This funding is key to meet the current and future needs given the increasing number of devices on the network and shift towards expanded, media-rich student and teacher uses.



# Town of Lexington - FY 2019-FY 2023 Capital Improvement Projects

**Basis for Projection:**

See description of capital request, based on needs/projects in each respective year.

**Stakeholders:**

Students and Staff

**Operating Budget Impact:**

**Cost Analysis:** (double click on box and select "checked")

**Funding Source:**  Levy Supported  State Aid | Enterprise  Water  Sewer  Recreation  CPA  Private Funding

**Capital Funding Request**

	2019	2020	2021	2022	2023	Totals
Site Acquisition						
Design Engineer						
Construction						
Equipment	\$1,715,300	\$1,750,700	\$1,249,600	\$1,712,100	\$1,793,220	\$8,220,920
Contingency						
Totals	\$1,715,300	\$1,750,700	\$1,249,600	\$1,712,100	\$1,793,220	\$8,220,920
<b>CPA Amount</b>						

<b>Oper. Bud. Impact</b>	
<b>Recurring Cost</b>	\$ <input type="text" value=""/> .00
<b>Maintenance Cycle</b>	<input type="text" value="0"/> Years
<b>CPA Purposes</b>	
<input type="checkbox"/> Open Space	
<input type="checkbox"/> Recreation	
<input type="checkbox"/> Historic	
<input type="checkbox"/> Housing	