



# Town of Lexington - FY 2020-FY 2024 Capital Improvement Projects

**Project Name:** LPS Technology Capital Request **Date:** 01-Oct-14  
**Project ID Number:** 945 **Revision Date:** 30-Oct-18  
**Submitted By:** Jennifer Judkins **Department:** Schools **Priority:** 1  
**First Year Submission?**  **Phone #:** 781-861-2580 x68042 **E-mail:** jjudkins@lexingtonma.org

## **Description of Project:**

### FY20 Technology Plan

1. Tech Workstations: Replacement of mobile devices ( iPads and chromebooks) including replacement of end of life teacher and student iPads and chromebooks plus end of life Chromebooks on carts.

Total Cost: \$351,300

2. 1:1 Middle School Program: Replace end of life iPads from one grade level with Chromebooks.

Total Cost: \$204,600

3. Elementary Mobile Devices: Purchase additional Chromebooks and mobile carts.

Total Cost: \$56,700

4. LHS1:1 Program: 1:1 device program for final two grade levels at LHS

Total Cost: \$412,500

5. STEAM/Computer Science: Purchase Google Expeditions Virtual Field Trip kits, videography kits and update Computer Science Lab at LHS.

Total Cost: \$68,800

6. Upgrade District and Building Network Infrastructure: Replace 130 WAPs at Harrington, Bridge, Bowman to High Capacity WAPs to handle increased Wifi connected devices. Replace existing POE switches to support new WAPs ( Bridge ( x2) , Bowman ( x2) , Harrington ( x3); Additional network cabinet for CO, additional 10 WAPS for district-wide replacements as needed.

Total Cost: \$183,000

7. Interactive Projector/Whiteboard Units: Replace 63 projectors district-wide to cover new classroom spaces & replace outdated equipment with pen-activated, interactive system or interactive TV + classroom speakers. Priority given to spaces without interactive projector or oldest/non-working systems.

Total Cost: \$252,000

8. Server/Storage Infrastructure: Upgrade existing virtual server and purchase a second virtual server to allow for additional in-house file storage capacity. Purchase additional cache servers needed to support online computer-based testing at the middle and high schools

Total:180,000

9. Backup Power Project: Add all HS data cabinets for VoIP & Network to emergency backup.

Total Cost: \$35,000

Total FY20 Technology Cost: \$1,743,900

### FY21 Technology Plan

1. Tech Workstations: Replacement of mobile devices ( iPads, and chromebooks) including replacement of teacher and student ipads, and chromebooks elsewhere. Replacement of end of life teacher laptops + provide laptops for new staff. Replace end of life Chromebooks from elementary carts. Replace end of life iPads for K-2.

Total Cost: \$716,400

2. STEAM/Computer Science: Purchase classroom STEM materials and physical computing hardware for increased computer science offerings.

Total Cost: \$49,200

3. Upgrade District and Building Network Infrastructure: Replace 186 WAPs at LHS, add ( 9 POE switches to accommodate new power requirements. Add 20 WAPs as needed.

Total Cost: \$248,000

4. Interactive Projector/Whiteboard Units: Replace 54 projectors district-wide to cover new classroom spaces & replace outdated equipment with pen-activated, interactive system or interactive TV plus classroom speakers. Priority given to spaces without interactive projector or oldest/non-working systems.

Total Cost: \$216,000



# Town of Lexington - FY 2020-FY 2024 Capital Improvement Projects

**Project Name:** LPS Technology Capital Request **Date:** 01-Oct-14  
**Project ID Number:** 945 **Revision Date:** 30-Oct-18  
**Submitted By:** Jennifer Judkins **Department:** Schools **Priority** 1  
**First Year Submission?**  **Phone #:** 781-861-2580 x68042 **E-mail** jjudkins@lexingtonma.org

5. Server/Storage Infrastructure: Continue to improve infrastructure to meet the needs of the district.  
 Total Cost: \$20,000

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

### FY22 Technology Plan

1. Tech Workstations Replacements: Replacement of 1:1 Chromebooks for MS/HS \* 3 grades. Replace end of life Chromebook carts district-wide. Replacement of end of life teacher laptops + new staff laptops.  
 Total Cost: \$1,153,900

2. STEAM/Computer Science: Physical computing/robotics materials, i.e. Raspberry Pi Cana Kits and accessories for MD.  
 Total Cost: \$6,600

3. Upgrade District and Building Network Infrastructure: Replace 98 WAPs (LHS x 5, HAR x 42, BOW x 26; Replace 7 POE Switches (HAR x 3, BOW x 2, BRI x 2) . 10 additional WAPs for locations TBD.  
 Total Cost: \$265,000

4. Interactive Projector/Whiteboard Units: Replace 54 projectors district-wide to cover new classroom spaces & replace outdated equipment with pen-activated, interactive system or interactive TV + classroom speakers. Priority given to spaces without interactive projector or oldest/non-working systems.  
 Total Cost: \$216,000

5. Server/Storage Infrastructure: Moving to more cloud based solutions, but will still need to maintain and upgrade existing hardware.  
 Total Cost: \$20,000.00

Total FY22 Technology Cost: \$1,661,500

### 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 end of life teacher laptops + provide laptops for new staff.  
 Total Cost: \$1,262,220

2. STEM/Computer Science: Update 2 computer lab spaces at LHS, Robotics kit replacements.  
 Total Cost: \$78,800

3. Upgrade District and Building Network Infrastructure: Replace end of life WAPs / Switches  
 Total Cost: \$300,000.00

4. Interactive Projector/Whiteboard Units: Replace end of life projectors x 40 units  
 Total Cost: \$216,000

5. Server/Storage Infrastructure: Continue to maintain non cloud based applications  
 Total Cost: \$15,000.00

Total FY23 Technology Cost: \$1,872,020

### FY24 Technology Plan

1. Tech Workstations: Replace end of life Chromebook carts district-wide. Replacement of teacher laptops + new staff laptops. Replace end of life desktops.  
 Total Cost: \$502,100

2. STEAM/Computer Science: Update Computer Science Lab @ LHS.  
 Total Cost: \$36,400

3. Upgrade District and Building Network Infrastructure: Replace end of life WAPs / Switches



# Town of Lexington - FY 2020-FY 2024 Capital Improvement Projects

**Project Name:** LPS Technology Capital Request **Date:** 01-Oct-14  
**Project ID Number:** 945 **Revision Date:** 30-Oct-18  
**Submitted By:** Jennifer Judkins **Department:** Schools **Priority:** 1  
**First Year Submission?**  **Phone #:** 781-861-2580 x68042 **E-mail:** jjudkins@lexingtonma.org

Total Cost: \$300,000

4.  Interactive Projector/Whiteboard Units: Replace end of life projectors x 40 units  
Total Cost: \$216,000

5.  Server/Storage Infrastructure: Continue to maintain non cloud based applications  
Total Cost: \$15,000.00

Total FY24 Technology Cost: \$1,069,500

### **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.

### **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.

### **Timeframe:**

### **Replace. Freq:**

0 Years

### **Stakeholders:**

Students and staff

### **Operating Budget Impact:**

### **Cost Analysis:**

**Funding Source:**  Levy  CPA  Revolving  State Aid  Water  Sewer  Recreation  Private  Other

### **Capital Funding Request**

945	2020	2021	2022	2023	2024	Totals
Site Acquisition	\$0	\$0	\$0	\$0	\$0	\$0
Design/Engineer	\$0	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0	\$0
Equipment	\$1,743,900	\$1,249,600	\$1,661,500	\$1,872,020	\$1,069,500	\$7,596,520
Contingency	\$0	\$0	\$0	\$0	\$0	\$0
<b>Totals</b>	<b>\$1,743,900</b>	<b>\$1,249,600</b>	<b>\$1,661,500</b>	<b>\$1,872,020</b>	<b>\$1,069,500</b>	<b>\$7,596,520</b>
CPA Amt. Req.	\$0	\$0	\$0	\$0	\$0	\$0

Recurring Cost

\$0.00

Maintenance Cycle

0 Years

### **CPA Purpose**

- Open Space
- Recreation
- Historic
- Housing

### **Basis of Cost Projection:**



## *Town of Lexington - FY 2020-FY 2024 Capital Improvement Projects*

**Project Name:** LPS Technology Capital Request **Date:** 01-Oct-14  
**Project ID Number:** 945 **Revision Date:** 30-Oct-18  
**Submitted By:** Jennifer Judkins **Department:** Schools **Priority** 1  
**First Year Submission?**  **Phone #:** 781-861-2580 x68042 **E-mail** jjudkins@lexingtonma.org

---

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