



**we  
are**



self-directed,  
lifelong learners



effective  
communicators



complex, creative  
& adaptive  
thinkers



collaborative  
& productive  
citizens



# Finance Committee

---

TECHNOLOGY PLANNING

DECEMBER 11, 2017

# 2018-19+ Technology Planning

## Learning Environment

- 1:1 Student Devices
- Staff Device Replacements
- Projector Replacements
- Labs/Desktops/Shared Spaces

## Network + Infrastructure

- Switch + Access + Capacity
- Wireless Network
- Funding Support (E-Rate)



# Looking Ahead -> Learning Environment

---

## OUR STORY (2012 -> TODAY)

- Commitment to technology for **learning**
- Investments + Growth in Network
- **Mobile** blooms - Wireless installed
- Welcoming **1:1**
- **Entry** to **cloud** services

## BEYOND TODAY (2019+)

- **GenOvation** culture
- Maintaining + **Norming 1:1**
- Optimizing + Securing the Network
- **Mobile** is king - Wireless **standard**
- **Cloud** services are **core**
- Labs/classrooms are changing

# 2018-19 Learning Environment Plans

---

## Initiatives/Projects

- 1:1 Learning: 2nd, 5th, 6th, 9th
- Staff device replacements + Expanded access
- Projector upgrades
- **Other updates** (labs, desktops, etc)

**Estimated Costs: \$650k (\$572k + **Other**)**

## 1:1 Learning (K-12)

- 1,615 student devices @ \$375,520 (Year 1)  
*Cash basis approx. cost: \$724,000*

## Staff Device Replacements

- 275 staff devices @ \$116,520 (Remaining Staff)  
*Cash basis approx. cost: \$300,000*

## Projector Replacements

- ~65 projectors @ \$80,000 (HES, FES)

# Looking Ahead -> Network + Infrastructure

---

## OUR STORY (2012 -> TODAY)

- Commitment to technology for **learning**
- Investments + Growth in Network
- **Mobile** blooms - Wireless installed
- Welcoming **1:1**
- **Entry** to **cloud** services

## BEYOND TODAY (2019+)

- **GenOvation** culture
- Maintaining + **Norming 1:1**
- Optimizing + Securing the Network
- **Mobile** is king - Wireless **standard**
- **Cloud** services are **core**
- Labs/classrooms are changing

# Evolving Needs

INFRASTRUCTURE IS THE  
BACKBONE OF THE 1:1 LEARNING  
ENVIRONMENT. AS NEEDS  
EVOLVE, SO TOO MUST THE  
HIDDEN EQUIPMENT AND WIRES



# Life Cycles

Target Replacement Cycles for Capital Equipment

---

## Student Devices

- K - 1 iPads: 3 years
- 2 - 8 Laptops: 3 years
- 9 - 12 Laptops: 4 years

## Staff Devices

- Laptops: 4 years

## Network + Infrastructure

Core Switches/Routers: 7 years

Access/PoE Switches: 7 years

Firewall: 4-5 years

Wireless Network: 5 years

Data Center: 5 years

## Projectors

- 7 years

# 3-Year Network Upgrade Plan

## Key Outcomes

- Network Equipment Upgrade + Consolidation
- LAN/WAN Capacity Increases
- Wireless Network Capacity

## Estimated Cost of 3-Year Plan

- **\$1.3 million**
- *E-Rate Offset: ~\$275k (max)*

\*Cost TBD; \*\*E-Rate Category 2 Expended

2018-19	2019-20	2020-21
<b>Network Equipment</b> <ul style="list-style-type: none"> <li>• All Cores</li> <li>• Access/PoE</li> <li>• Cabling</li> </ul>	<b>Network Equipment</b> <ul style="list-style-type: none"> <li>• Firewall*</li> <li>• Internet Bandwidth*</li> </ul>	<b>Network Equipment</b> <ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Capacity</b> <ul style="list-style-type: none"> <li>• 10Gb WAN</li> <li>• 10Gb LAN</li> </ul>	<b>Capacity</b> <ul style="list-style-type: none"> <li>• N/A</li> </ul>	<b>Capacity</b> <ul style="list-style-type: none"> <li>• N/A</li> </ul>
<b>Wireless Upgrade</b> <ul style="list-style-type: none"> <li>• N/A</li> </ul>	<b>Wireless Upgrade</b> <ul style="list-style-type: none"> <li>• 5 buildings</li> </ul>	<b>Wireless Upgrade</b> <ul style="list-style-type: none"> <li>• Remaining</li> </ul>
<b>Est Total for Year</b> \$448k (before E-Rate) (167k) Est. E-Rate	<b>Est Total for Year</b> \$410k (before E-Rate) (108k) Est. E-Rate**	<b>Est Total for Year</b> \$443k (before E-Rate) (0) Est. E-Rate**

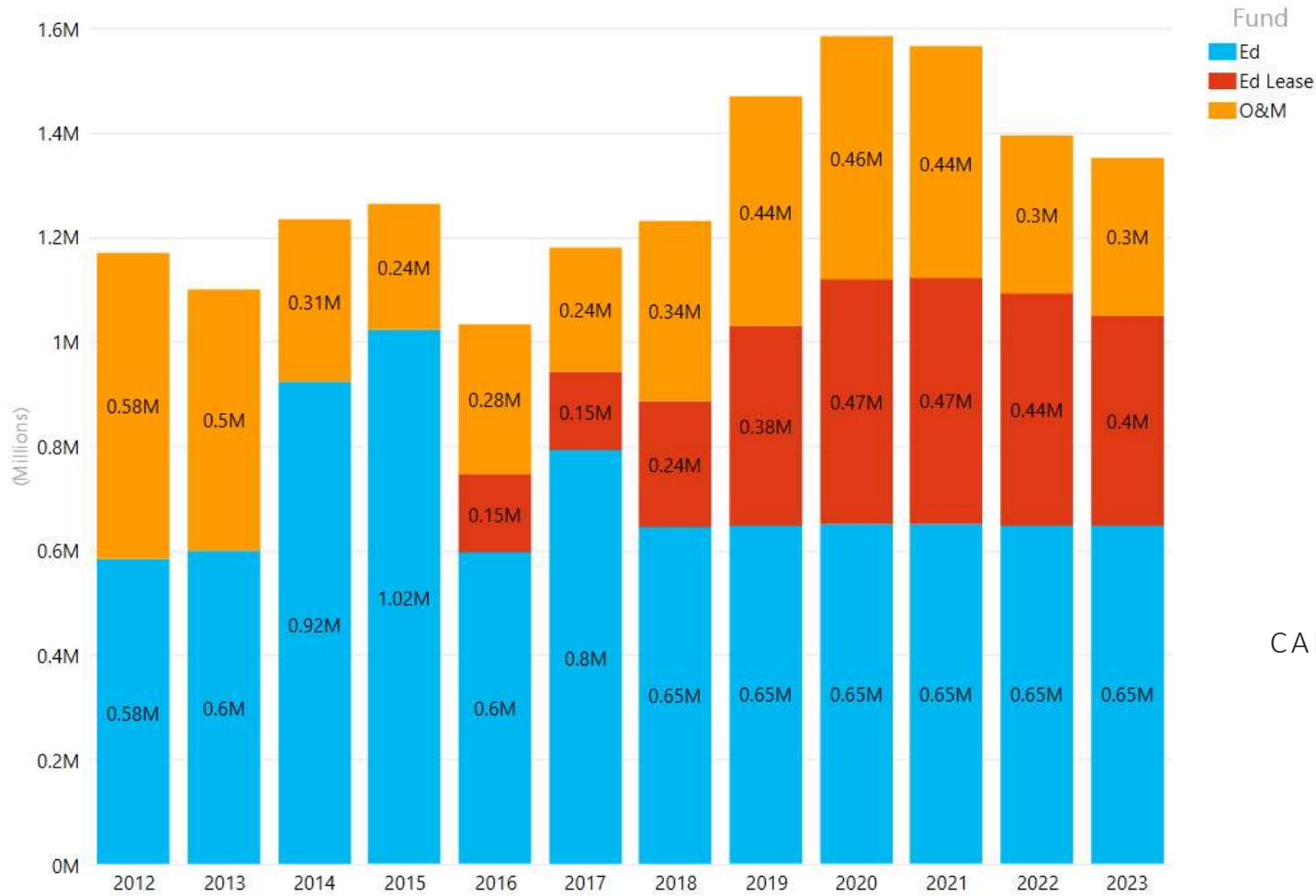


# 2018-19 Cost Summary

---

Fund	Capital Need
Ed	\$650,000 Projected - \$572,000 (defined)
O&M	\$448,000 Projected ( <i>Year 1 of Network Refresh</i> )
Offsets	\$205,000 (Technology Service Fee) \$167,000 (E-Rate Category 2)
<b>Total/Net Amounts</b>	\$1,098,000 (before offsets) \$ 893,000 (after Technology Service Fee) \$ 726,000 (after E-Rate Category 2)

Budget by School Year, and Fund



# Trend Data

CAPITAL SPENDING OVER TIME

# Next Steps

---

- Approval to move forward
- E-Rate bid process (time sensitive)
- Continue to refine estimates / needs
- Seek BOE approval of 2018-19 Technology Plan

Questions / Feedback

