



**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

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- **GenOvation** culture
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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)*

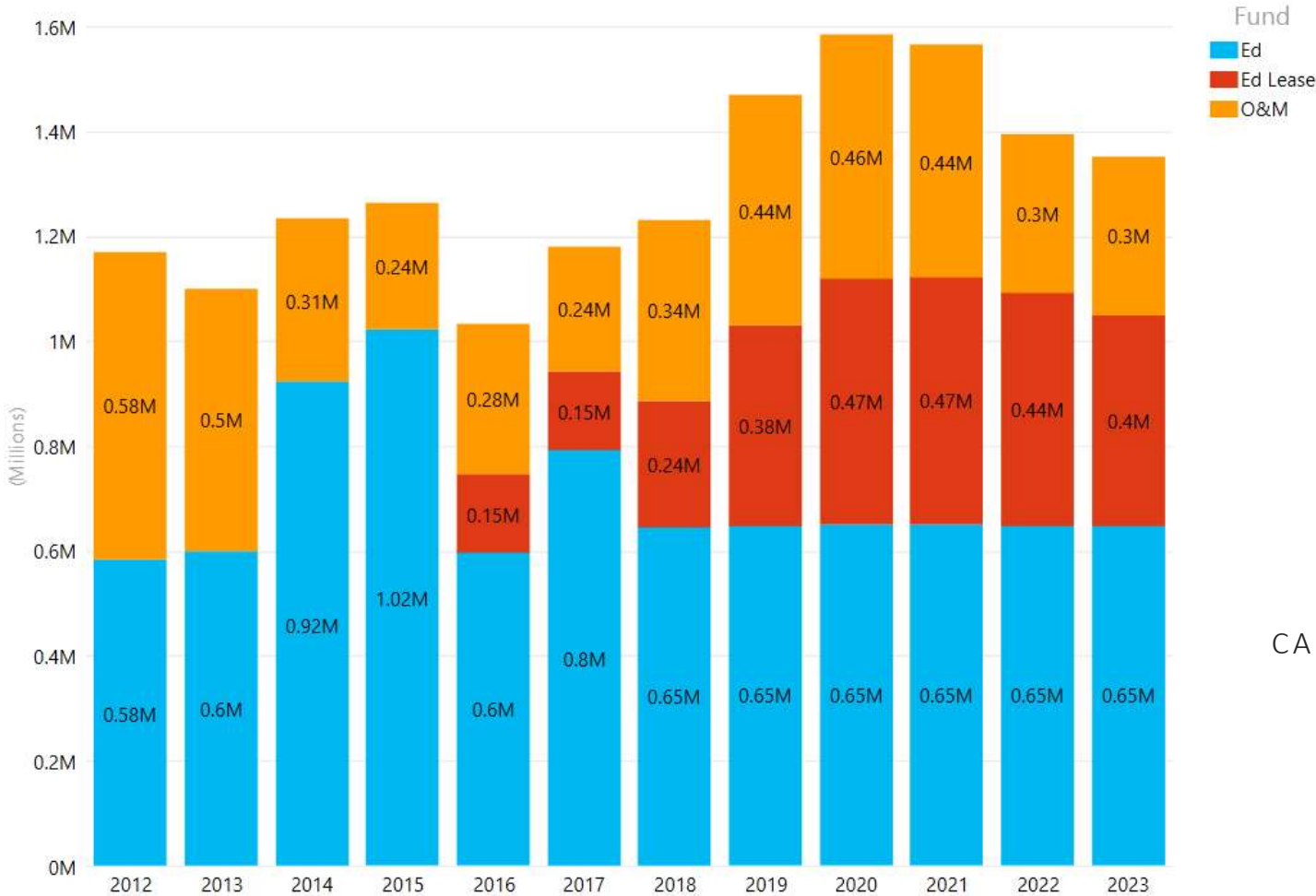
*Cost TBD; **E-Rate Category 2 Expended

2018-19	2019-20	2020-21
Network Equipment <ul style="list-style-type: none"> • All Cores • Access/PoE • Cabling 	Network Equipment <ul style="list-style-type: none"> • Firewall* • Internet Bandwidth* 	Network Equipment <ul style="list-style-type: none"> • N/A
Capacity <ul style="list-style-type: none"> • 10Gb WAN • 10Gb LAN 	Capacity <ul style="list-style-type: none"> • N/A 	Capacity <ul style="list-style-type: none"> • N/A
Wireless Upgrade <ul style="list-style-type: none"> • N/A 	Wireless Upgrade <ul style="list-style-type: none"> • 5 buildings 	Wireless Upgrade <ul style="list-style-type: none"> • Remaining
Est Total for Year \$448k (before E-Rate) (167k) Est. E-Rate	Est Total for Year \$410k (before E-Rate) (108k) Est. E-Rate**	Est Total for Year \$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)
Total/Net Amounts	\$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 / spring deadlines)
- Continue to refine estimates / needs
- Seek BOE approval of 2018-19 Technology Plan

Questions / Feedback

