

FY15 Technology Capital Budget Request

Presented to School Committee

December 3, 2013

WELLESLEY
PUBLIC SCHOOLS



FY15 Tech Capital Request

Focuses on:

Strategic Plan:

- Strategy 1: Focus on every child, in every classroom, every day
- Strategy 2: Invest in our educators
- Strategy 3: Provide broad-based learning opportunities as part of a world class public school system
- Strategy 4: Align resources with educational needs

Long Term Planning and Sustainability

FY15 Technology Overview

1:1 Expansion

- Grade 5 & 6 1:1 History and Update
- FY15 Expansion

Supporting Infrastructure

- Network
- Servers

Hardware:

- Computers, tablets, and accessories
- Centralized workgroup laser printers

Software:

- Costs listed in Operating Budget

1:1 Technology

1:1 History

- FY13 Grade 5 pilot at Schofield funded by WEF Grant and parent donation
- FY14 complete Grade 5 implementation:
 - District: iPads for students
 - WEF: iPads for Staff and PD
 - PTOs: Carts and associated A/V
- FY14 Grade 6 pilot in one house (House M - 4 classrooms)
- .80 FTE 1:1 Coordinator funded by District
- PD during summer and continuing throughout the year

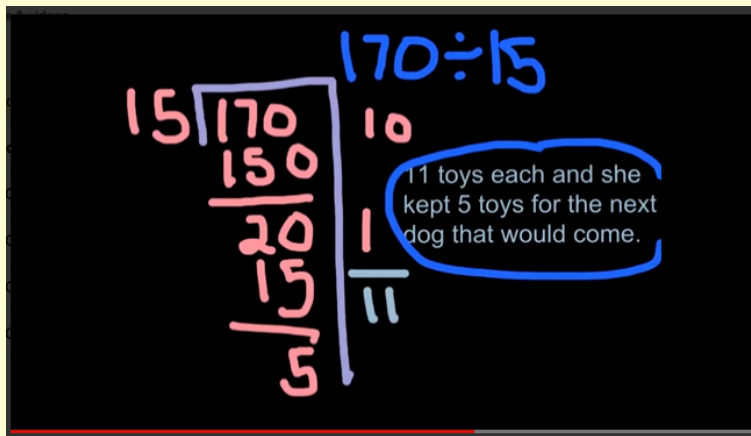
1:1 Implementation Update

- Every grade 5 classroom teacher attended 12 hour summer course
- More than 50% special area teachers trained
- All teachers report using iPads several times per week but many report using iPads daily
- iPads are used across all curriculum areas
- Teachers report using iPads to differentiate instruction
- 1:1 program evaluation committee is currently developing instruments to collect data and evaluate program

Classroom Use

“I have been able to do so much that I couldn't do without the iPads. My students have used Explain Everything [App] to create videos for math (demonstrating multiplication and division strategies).”

Molly D. Perkins
Grade 5 Teacher
Bates Elementary School



Original 1:1 Program Projected 5 Year Total

	Year 1	Year 2	Year 3	Year 4	Year 5
5th Grade Program	\$207,668	\$55,000	\$55,000	\$55,000	\$55,000
5th Grade Laptop Reduction Offset	\$(36,459)	\$-	\$-	\$-	\$-
Staffing	\$52,054	\$52,575	\$75,600	\$76,356	\$77,120
Grade 6-9 Program		\$132,616	\$209,443	\$285,161	\$278,402
Grade 6-9 Laptop Reduction Offset*		\$(24,050)	\$(24,050)	\$(36,075)	\$(24,050)
	\$223,263	\$216,141	\$315,993	\$380,442	\$386,472

Year 1: 5th Grade Program reflects total cost, all funding sources – District, WEF and PTOs

Years 2-5: Middle School Program reflects total costs, all funding sources except parent portion

1:1 Expansion

Grade 6 Expansion

- Parent-funded for student devices (lease or BYOD)
- District-funded staff devices
- District capital funding for iPads for Grade 6 covering financial need, loaners, and accessories (e.g. keyboards and cases)
- District capital funding for Projectors/Apple TVs for Grade 6 core classes

Grade 7 Pilot

- Re-purpose iPads from Grade 6 Pilot
- New Apps for Grade 7 Pilot from Operating Budget

1:1 Expansion

Updated 5 Year Projection

	FY14 Current	FY15	FY16	FY17	FY18
5 th Grade Program	\$207,668	\$12,000	\$12,000	\$12,000	\$232,740
5 th Grade Offset	(\$36,459)				
Subtotal: 5th Grade Program	\$171,209	\$12,000	\$12,000	\$12,000	\$232,740
MS Program		\$139,320	\$166,136	\$178,582	\$71,120
MS Offset		(\$24,000)	(\$24,000)	(\$36,000)	\$0
Subtotal: Middle School		\$115,320	\$142,136	\$142,582	\$71,120
Total Capital	\$171,209	\$127,320	\$154,136	\$154,582	\$303,860
Staffing	\$52,054	\$65,068	\$90,719	\$91,626	\$92,542
Subtotal: Operating	\$52,054	\$65,068	\$90,701	\$91,626	\$92,542
TOTAL PROGRAM	\$223,263	\$192,388	\$244,837	\$246,208	\$396,402

Proposed Family Options

Option 1: Family provided iPad

- Instant loaner (temporary)
- Management license
- Standard app suite
- Parent training

Yearly costs for services \$40*

Retail Price iPad: \$499
Approved Case: \$ 30
***Service costs: \$120**
Total Cost: \$649

Option 2: Lease to Own iPad

- Instant loaner (temporary)
- Management license
- Standard app suite
- Parent training
- Device repair/replacement
- Accidental damage (2 incidents)

Estimated Cost: \$180*
Per installment,
4 installments
Total Cost: \$720

* Subject to actual device cost/payment schedule

Supporting Infrastructure

- Network
- Servers

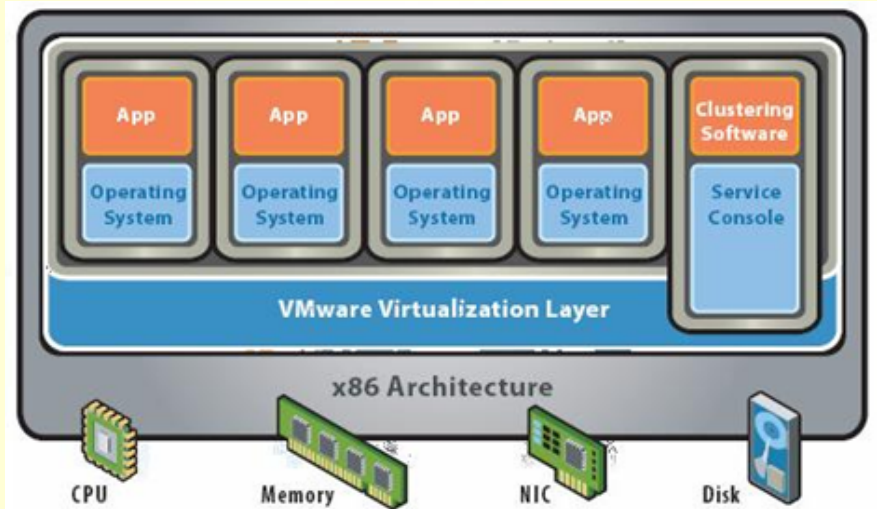
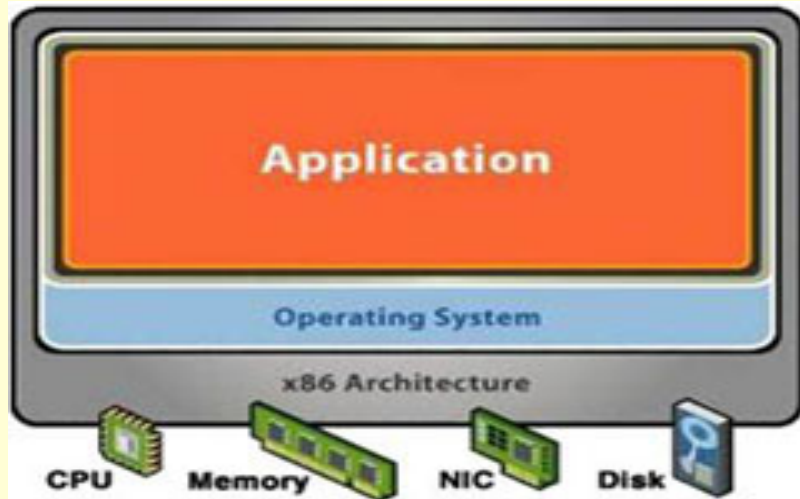
Supporting Infrastructure: Network

Managed Wireless Implementation

Schools	FY14	FY15*	FY16
WHS	Complete	Complete	Complete
WMS	Partial	Partial	Complete
Bates	Partial	Partial	Complete
Fiske	Individual wireless	Partial	Complete
Hardy	Individual wireless	Partial	Complete
Hunnewell	Individual wireless	Partial	Complete
Schofield	Individual wireless	Partial	Complete
Sprague	Individual wireless	Partial	Complete
Upham	Partial	Partial	Complete

Supporting Infrastructure: Servers

Physical to Virtual Server Migration



Physical to Virtual Server migration

- Cost Shifts: uneven capital expense to more stable operating expense
- Greater efficiencies

Supporting Infrastructure: Servers

Continuing migration from Physical to Virtual

	FY14	FY15	FY16
Physical Servers	24	14	4
Virtual Servers	2	2	2

Supporting Infrastructure: Servers

Benefits of Virtual Servers*

- **Green Data Centers**
 - Less space consumption
 - Lower power consumption
 - Less need for cooling solutions
- **Increased Infrastructure Flexibility**
 - Faster deployment of new servers
- **Reduced downtime**
 - Efficient Backup processes
 - Automated failover
 - Better data recovery
- **Reduced IT costs**
 - Less power consumption, cooling needs
 - More stable budgeting

**This strategy is also known as Private Cloud.*

Supporting Infrastructure: Servers Cloud-based Services

- Move Critical applications to remote hosted model
 - Powerschool
 - Gmail
 - Google Drive
- Provides greater backups and data recovery
- Further reduces the need for servers
- Shifts expenses from uneven capital expense over time to predictable operating expense

** This strategy is also known as Hosted Cloud.*

Supporting Infrastructure: Servers

Cloud-based Services

	Servers Eliminated	Server Costs
FY13:		
• Opals Library Circulation System	1	
• Snap – Health Software	1	
• School Messenger	1	
• Carbonite Client Backup Services	1	
FY14:		
• Web Server	1	
• Helpdesk system	1	
FY15:		
• Gmail Email System*	1	
• Google Drive*	5	
• PowerSchool*	<u>1</u>	
Total	13	(\$65,000)

Server estimate \$5,000 each.

Hardware

- Computers, tablets and accessories
- Centralized workgroup laser printers

PreK-12 Computers, Tablets and Accessories

- For staff and students
- Primarily shared mobile carts
- Continuously in demand
- Integrated into curriculum on a daily basis supporting instruction, differentiation, creation, innovation, assessment
- Supports new online DESE Assessment system PARCC field testing this spring with full implementation in FY15



Computers, Tablets and Accessories

Device Life-Cycle

- Desktop - 7 years
- Laptop - 5 years
- Tablet - 4 years
- Projectors – 7 Years
- Smart Boards – 7 Years

Printers

- Replacing classroom inkjets with centralized workgroup LaserJets over 2 year period.
- Lower maintenance and repair costs
- Cost savings on toner (remanufactured toner cartridges)
Example Savings:
 - \$.098 savings per page B&W page
 - \$.035 savings per page Color page

Software

- Learning Management System (LMS)
- Found in Operating budget

Summary

			Expenditures per Fiscal Year				
Code#:	Request Type	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
Rep-01-Rep17	Replacement of Equipment	\$360,041	\$495,764	\$483,865	\$810,228	\$864,139	\$483,352
New01-New14	New Requests	\$222,928	\$162,532	\$318,184	\$298,785	\$91,159	\$76,628
	Other (Shipping/ Handling/ Installation)	\$7,500	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Total Technology Capital Requests		\$590,469	\$660,296	\$804,049	\$1,111,013	\$957,298	\$561,980

Replacement

Ref #:	Project Description	Expenditures per Fiscal Year					
		FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
REP-1	Desktop Mac Replacement	\$13,624	\$120,000	\$62,880	\$145,672	\$102,704	\$13,624
REP-2	Desktop Windows Replacement	\$8,379	\$0	\$1,862	\$31,654	\$931	\$1,862
REP-3	Laptop Mac Replacement	\$178,932	\$213,000	\$159,692	\$567,580	\$361,712	\$308,000
REP-4	Laptop Windows Replacement	\$1,034	\$0	\$1,034	\$3,102	\$1,034	\$1,034
REP-5	Grade 5 iPad Replacement	0	\$12,000	\$12,000	\$12,000	\$232,740	\$12,000
REP-6	Netbook Replacement	\$0	\$0	\$0	\$0	\$0	\$0
REP-7	Alphasmart Neo & Neo 2 Replacement	\$0	\$0	\$0	\$0	\$0	\$0
REP-8	Workgroup Laser Printer Replacement	\$4,075	\$4,075	\$5,705	\$6,520	\$6,520	\$6,520
REP-9	Network Inkjet Printer Replacement	\$2,250	\$2,250	\$2,250	\$2,250	\$6,520	\$6,520
REP-10	Network Infrastructure Replacement	\$85,912	\$85,733	\$150,489	\$0	\$65,000	\$65,000
REP-11	Server Replacement	\$14,699	\$16,800	\$10,000	\$10,000	\$16,800	\$16,800
REP-12	UPS Replacement	\$9,044	\$3,044	\$3,000	\$3,000	\$3,000	\$3,000
REP-13	Projector Replacement	\$25,642	\$20,642	\$54,133	\$0	\$40,838	\$25,642
REP-14	Projector Lamp Replacement	\$12,650	\$14,720	\$17,020	\$19,550	\$22,540	\$19,550
REP-15	Digital Video Camera Replacement	\$2,580	\$2,580	\$2,580	\$2,580	\$2,580	\$2,580
REP-16	Flatbed Scanner Replacement	\$300	\$0	\$300	\$5,400	\$300	\$300
REP-17	Document Scanner Replacement	\$920	\$920	\$920	\$920	\$920	\$920
Total Capital Requests		\$360,041	\$495,764	\$483,865	\$810,228	\$864,139	\$483,352

New

Ref #:	Project Description	Expenditures per Fiscal Year					
		FY2014	FY2015	FY2016	FY2017	FY2018	FY2019
NEW-01	Tablets for Elementary Special Education	\$0	\$3,222	\$0	\$0	\$0	\$0
NEW-02	Smartboard/Projector Installations	\$27,783	\$0	\$19,845	\$0	\$0	\$0
NEW-03	Bates Cafeteria Projection System	\$0	\$0	\$0	\$0	0	\$5,601
NEW-04	Bates Cafeteria Audio System	\$0	\$0	\$0	\$0	0	\$6,408
NEW-05	Computers for Enrollment and Program Changes	\$24,105	\$15,000	\$15,149	\$15,149	\$15,149	\$15,149
NEW-06	Tablets to Support New Evaluation System	\$9,823	\$3,000	\$0	\$0	\$0	\$0
NEW-07	1:1 Tablet Program for Grade 6	\$55,097	\$107,320	\$102,136	\$112,582	\$71,120	\$44,580
NEW-08	Projector/Apple TV installation for Grade 6	\$0	\$20,000	\$40,000	\$30,000	\$0	\$0
NEW-09	IPads and Carts for Grade 4 (1 cart per school with accessories (cart, case, keyboards)	\$0	\$0	\$108,864	\$0	\$0	\$0
NEW-10	Projector/Apple TV installation for Grade 4 (21 classrooms)	\$0	\$0	\$27,300	\$0	\$0	\$0
NEW-11	IPads and Carts for Grade 3 (1 cart per school with accessories (cart, case ,keyboards)	0	\$0	\$0	\$108,864	\$0	\$0
NEW-12	Projector/Apple TV installation for Grade 3 (21 classrooms)	0	\$0	\$0	\$27,300	\$0	\$0
NEW-13	Work group Printing Transition Middle School	\$3,260	\$0	\$0	\$0	\$0	\$0
NEW-14	Work group Printing Transition Elementary	0	\$13,990	\$4,890	\$4,890	\$4,890	\$4,890
	Other technology items purchased in FY14	\$102,860	\$0	\$0	\$0	\$0	\$0
	Total Capital Requests	\$222,928	\$162,532	\$318,184	\$298,785	\$91,159	\$76,628

FY15 Technology Capital Budget Request

QUESTIONS