

Bond & Mill Levy Oversight Committees

Technology Update

Denver Public Schools

May 6th, 2015



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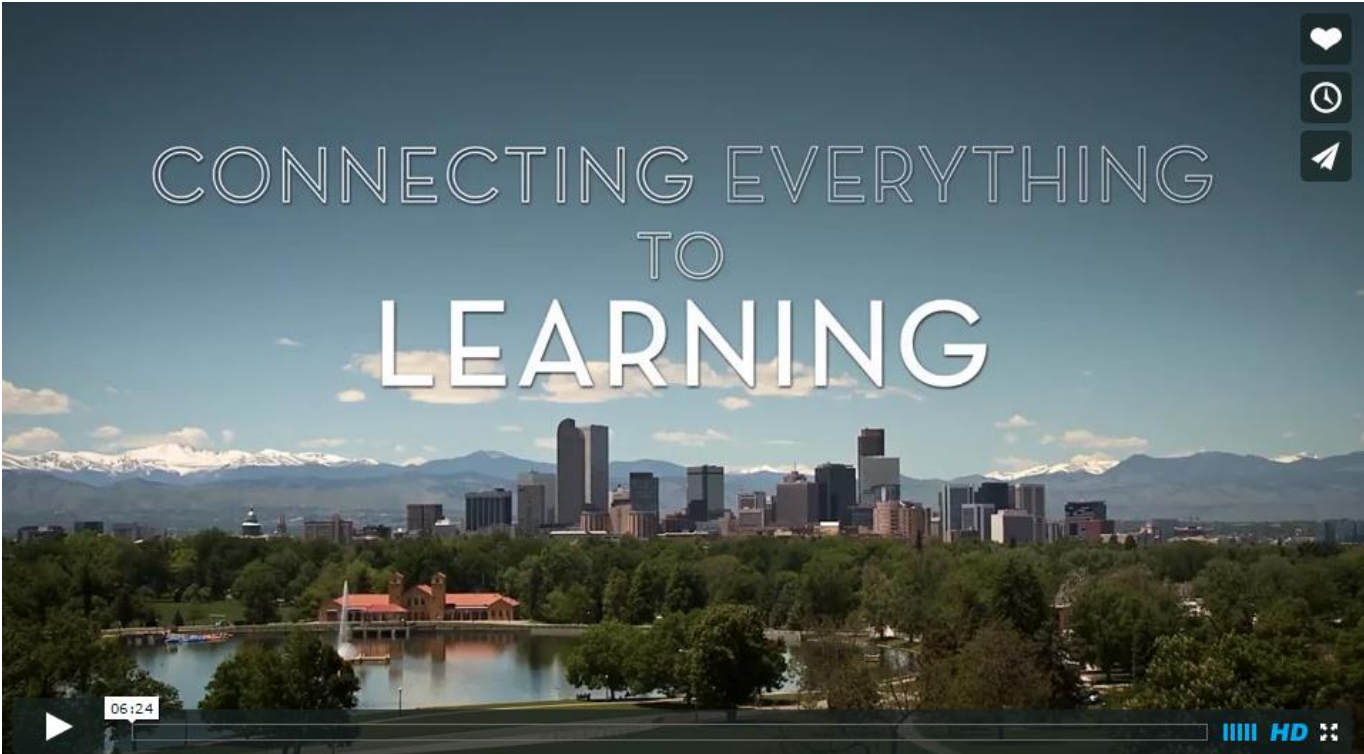


Agenda

- Ice Breaker
- A DPS Vision for Technology in the Classroom
- 2012 Bond Premium Allocation Tech Project Status
 - Classroom Technology Update
 - Mobile Device Management Update
 - Instructional Management System Pilot
 - Infor Payroll System Upgrade
- Appendix



Could this be DPS in 3 years?



<http://vimeo.com/97279994>

A Vision for Technology in Education

- What excites you about this vision?

- What questions does this raise for you?

Overview of the Technology Bond Investments

	Category Investments	Budget	Premium	Total
Educational Technology	<ul style="list-style-type: none"> Investment in most critical and high priority projects to provide additional devices for student use, additional software tools, and improved data analysis capabilities Computer & Device funding directly to schools ** Investment in Assistive Technology for Special Needs students Investment in additional online assessment tools ** 	\$17.3M	\$4.5M	\$21.8M
Infrastructure	<ul style="list-style-type: none"> Significant wireless capacity improvements to support video streaming and “Bring your own device” models Increased cyber security Critical infrastructure replacements with minor improvements needed to support new systems 	\$11.8M		\$11.8
Operations Improvement	<ul style="list-style-type: none"> Interactive parent tools Investment in high priority projects for human resources (infrastructure, recruiting, principal effectiveness & teacher effectiveness support systems, payroll system upgrade **) Employee collaboration and information sharing system Mobile Device Management ** 	\$5.3M	\$2.5M	\$7.8
Total		\$34.4M	\$7M	\$41.4M

** Additional funding approved through 2015 Premium Allocation of 2012 Bond

2012 Bond Original & Premium Allocation – Classroom Technology

Total Budget - \$13,802,264 (\$10.1M Original 2012 Bond + \$3.7M Premium)

Description: Provide additional funds for meeting technology device needs in schools. Schools leaders to be given discretion regarding whether to purchase student or teacher devices.

Assumes:

- Original 2012 Bond - \$125/per pupil (K-12), \$62.50 per pupil (ECE)
- Premium Allocation - \$25 per pupil + \$125*1500 pupils (anticipated enrollment increase in 15/16) to provide enough \$ for additional purchases across schools for a total of \$2,425,000
 - \$750,000 for ‘boost funding’ for schools with special circumstances’ (e.g., support small schools in procuring at least one Chromebook cart). Formula to be developed
 - \$280,000 for resources to support and implement this new technology over two years
 - \$225,000 for electrical work

Note: \$25 per pupil would allow an ‘average’ elementary school of 450 students enough to purchase a classroom Chromebook cart or 20 average teacher laptops.

Benefits/Justification:

To continue progression toward a goal of all DPS classrooms outfitted to meet an evolving 21st century learning standard. Additional device funding will support the ongoing shifts to integrate technology into instruction in support of student engagement and student outcomes. Schools will have the opportunity to supplement existing technology or replace aging equipment. Once minimum school requirements have been met, schools will have flexibility regarding technology purchasing decisions to best meet the needs of their community.

Classroom Tech – Purchase History: Bond

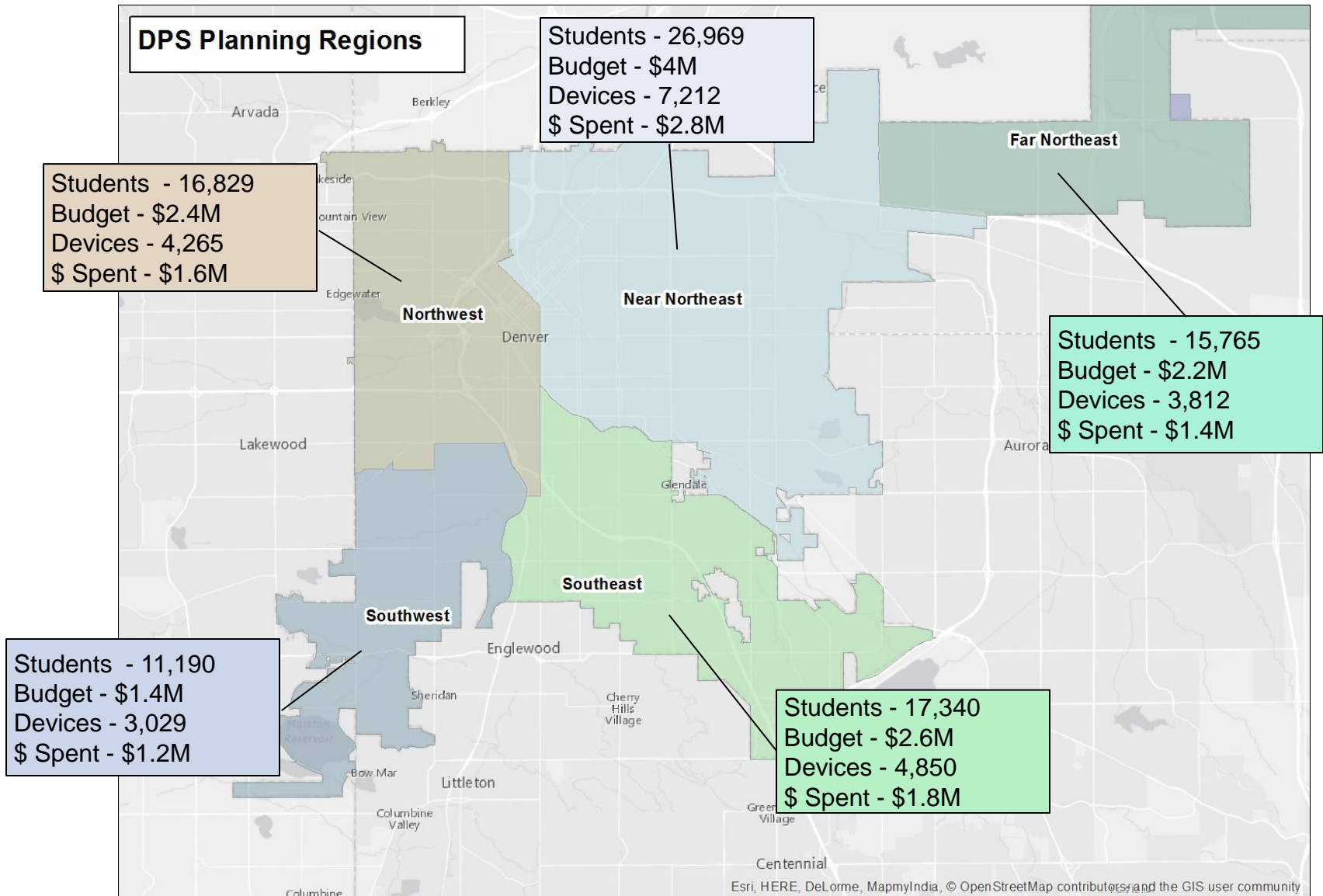
Original 2012 Bond

Item	#	\$
Laptops / Chromebooks	13,619	\$ 5,316,960
Accessories, Carts, Speakers, Printers	3,505	\$ 681,517
Licenses, Warranties, Shipping, Wiring, Other	1,983	\$ 362,987
Desktop Computers	1,443	\$ 925,873
Tablets	1,248	\$ 448,331
Interactive Whiteboards/Pads, Projectors, Clickers	378	\$ 392,179
Document Cameras	267	\$ 100,810
TOTAL	22,443	\$ 8,228,608

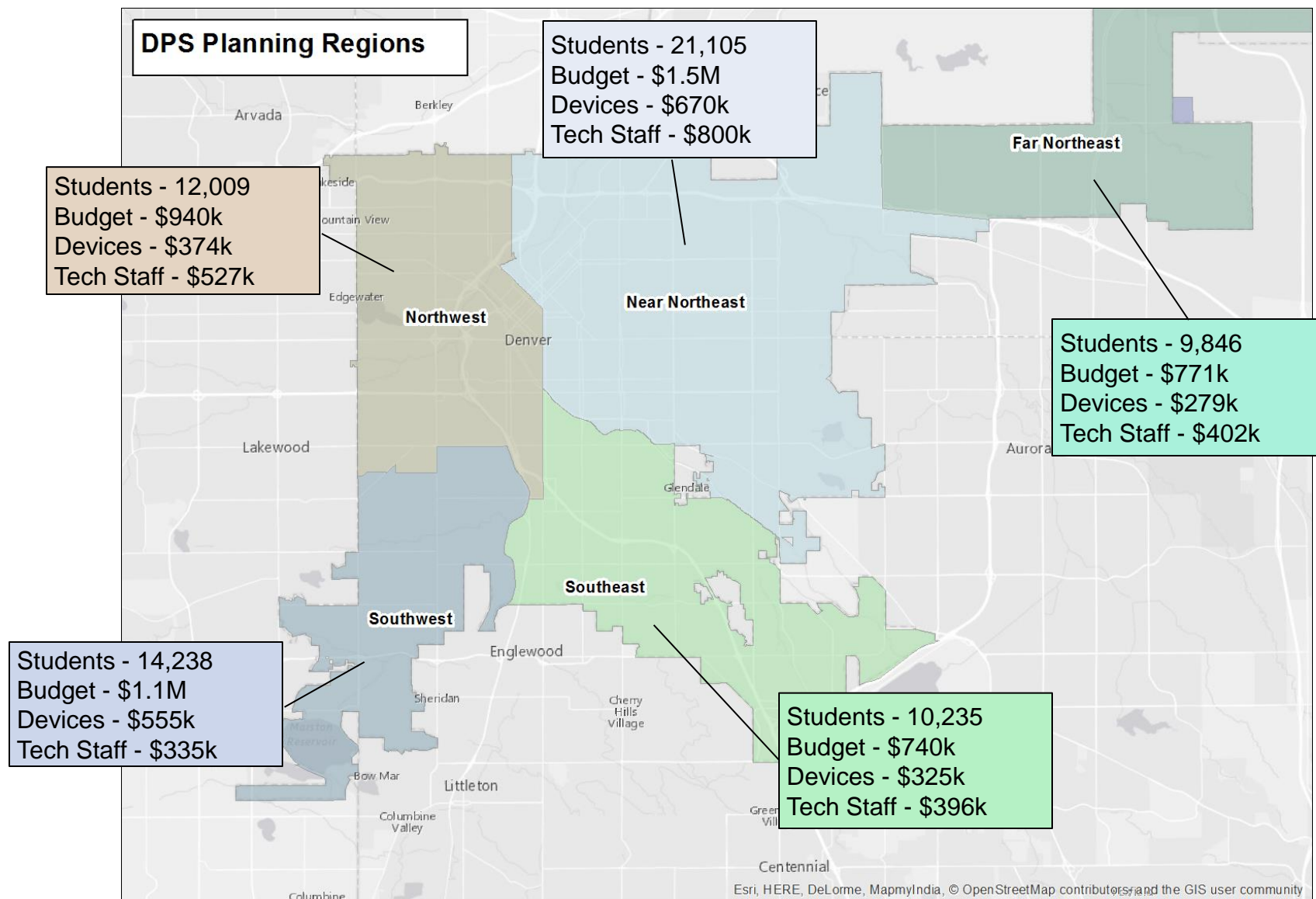
2015 Bond Premium

Item	#	\$
Laptops / Chromebooks	883	\$ 327,018
Interactive Whiteboards/Pads, Projectors, Clickers	51	\$ 38,618
Licenses, Warranties, Shipping, Wiring, Other	51	\$ 7,338
Desktop Computers	37	\$ 23,923
Accessories, Carts, Speakers, Printers	20	\$ 16,762
Document Cameras	1	\$ 351
Tablets	0	\$ 0
TOTAL	1,043	\$ 414,009

Classroom Tech Regional Spend: 2012 Bond (Incl. Premium)



Classroom Tech Regional Spend: 1998 & 2012 Mill Levy (FY '13/'14)



Instructional Technology Planning Process

- Following Passage of 2012 Bond and Mill, Ed Tech Coordinators worked with each school to fill out an Instructional Technology planning form.
- Components of Instructional Technology Planning Form include:
 - School fills out **Current Status** for Technology Equipment
 - **Equipment - Student Access** applies to useable student devices, e.g., *desktop computers, laptops, netbooks, iPads*
 - **Equipment – Classroom Instructional Technology** applies to useable instructional devices, e.g., document cameras, interactive whiteboards, etc., available as a percentage of the number of classrooms in use.
 - **Assessment – School testing environments to ensure sufficient devices for online assessments**
 - School fills out **Professional Development Plan** in Support of the Instructional Technology Vision for the School
 - School fills out **Action Plan and Budget for Current School Needs As Well As Building Capacity for Technology in Support of the Instructional Goals of the School**
- Coordinator needed to approve plans and moved school to ordering process
- Coordinator reviews plan as needed and approves bond purchases

Classroom Tech – Sample Elementary School Scenario

522 Students

Grades ECE – 5th

3 Classes / Grade



Inventory

#	Device	Age	Users	Funding Source
28	Desktop Computers	4 Yrs	School Computer Lab	Parent Committee
150	Chromebooks	2 Yrs	3 rd – 5 th Grade (5 carts)	2012 Bond
30	Desktop PCs	4 Yrs	1 st & 2 nd Grade Classroom Stations	Local Business Donation
15	iPads	<1 Yr	Kindergarten Classroom Stations	2012 Bond Premium
35	Laptops	2-5 Yrs	Teachers (SPED, Specials, GT, Intervention, Classroom)	2012 Bond & GF
10	Interactive whiteboards, printers, other	varies	Spread across classrooms and office staff	2012 Bond & GF
223	Total Student Devices			

Funding Picture

- One Time: \$125/pp from original 2012 Bond = **\$65,250**
 - 5 Chromebook carts = \$56,250
 - 9 Teacher laptops = \$5,400
 - 1 Interactive White Board = \$2,250
 - 2 Printers = \$1000
 - Misc items = \$350

- One Time: \$25/pp from Premium = **\$13,050**
 - 15 iPads = \$6,180
 - Remaining funds = \$6,780

- Annual Mill Levy Funds = \$67/pp = **\$34,974**
 - .5 FTE for Tech Teacher

Classroom Tech – Sample Scenario Result

- This relatively well equipped sample has **223** total student devices, **1 : 2.3** ratio of devices to students.
 - 1 : 1.5 ratio at grades 3-5 (excluding the computer lab)
 - 1 : 4.1 ratio at grades ECE – 2nd (including computer lab)
- Of the total student devices:
 - 26% are 4 years old or older
 - 67% are 2 years old
 - 7% are new
- Of the teacher devices (35)
 - 62% are 5 years old
 - 28% are 2 years old
 - 10% are new
- To **maintain** the same amount of technology and reach the target of devices 4 years old or less, the school needs:
 - \$15,240 to replace the computer lab devices next year
 - \$12,600 to replace 21 teacher laptops next year
 - \$9,000 to replace the 1st & 2nd grade computer stations with Chromebooks
 - \$1,600 to replace 2 printers, a projector, and various replacement parts
 - Total = **\$38,440**

■ Additionally...

- Several teachers are requesting Interactive White Boards for their classrooms.
- A 4th grade teacher would like to pilot test a 1:1 initiative with her students.
- The tech support representative is requesting additional release time to meet the demand.
- Teachers are asking the tech teacher for support with digital lesson planning.



Classroom Tech – Conclusion

- Our investments have made a significant positive impact in the availability and usability of the technology in our schools.
- The one time infusions of funds are enabling us to add meaningful levels of technology into our schools.
- The recurring Mill Levy funds are insufficient to maintain current technology levels and to meet staff needs.



Thank you for your support to date... we will be back for more!

2012 Bond Premium Allocation – Mobile Device Management (MDM) Phase 1

Budget - \$1,320,000

Description: Purchase and implement a solution to assist with managing and maintaining the influx of new student devices. Depending on the type of device, installing new software or upgrading system settings can be an extremely time consuming process for schools. This solution will decrease maintenance, increase usability, and decrease downtime for iPads and Windows devices.

Funding to support software licenses, site support, implementation planning, and hardware

Benefits/Justification:

As schools continue to invest in technology (via general fund, Mill Levies and the Bond), this solution will greatly increase the utility of these investments, decrease the administrative time necessary for maintaining and managing devices, and reduce the risk of loss. This investment frees up time for school and central office personnel while also providing more useful technology devices. Estimated time savings of nearly 5 hours per iPad cart for initial set up or software change.

The number of iPads in the district has more than doubled since 2010-2011 from 5000 to over 11,000 today. We are projecting to have over 14,000 iPads by next school year.

Status:

- Target is to have most schools enrolled into the MDM solution by the end of the 14/15 school year.
- Issued the RFP in March and selected AirWatch on-premise solution in April.
- Team is beginning contract negotiations and understanding support service options.
- Team is interviewing for support resources in April. Surge temp support will be contracted in association with the implementation plan once a solution is selected.

2012 Bond Premium Allocation – Instructional Mgmt. System (IMS) Pilot

Budget - \$862,000

Description: First phase of a project to select and pilot an Instructional Management System (IMS) replacement. Key functionality used by teachers for delivering assessments and locating curriculum. This software application would provide a single, user friendly hub for teachers to locate and utilize curriculum and content, align curriculum to standards, create and administer online tests and quizzes, and review a student's assessment data.

Benefits/Justification: This project is in direct response to the needs of our teachers who are requesting functional improvements over the existing Schoolnet system, customer service improvements, performance improvements, and improved ease of use. If an improved system is implemented, it will continue to support the instructional shifts by directly enabling our teachers and supporting teacher created and teacher-shared assessments. A key priority articulated in the Denver Plan is supporting our teachers with quality instructional tools, and this update is an important way to provide rigorous resources/supports for instructional practices and assessments.

Status:

- The RFP process is underway, with 10 vendors responded. Response review is in progress preparing for a May selection.
- The scope of pilot has been determined and team is working on identifying pilot participants.

2012 Bond Premium Allocation – Infor Payroll System Upgrade

Budget - \$1,150,000

Description: Upgrade Infor S3 Payroll & Finance System in order to maintain product support beyond 2016.

Benefits/Justification: The Infor version 9 application was released in 2013, this project will keep us on the current, supported version of the software for our HR/Payroll and Finance applications. Version 10 will be a major application upgrade to take advantage of product enhancements and includes a new look and feel for the S3 product. DPS is contractually required to stay on current versions of the Infor software in order to maintain support from the vendor for production issues. We have a commitment from Infor that our existing platform will be supported through January 2017. Estimating a 12-18 month project execution, we would target an RFP release for February 2015 and planning to start no later than May 2015 to ensure adequate time for completion.

Status:

- Planning has begun. The internal governance team is evaluating the benefits of performing a skip upgrade to version 11 rather than v10.
- Bid process started for Lawson/Infor consulting services support and have confirmed the bidder short list.

Appendix

Educational Technology Projects Spend Forecast

Child Identifier	Project	Budget	Spend Forecast	Remaining	Notes / Status
GB20648	Classroom Technology	\$ 10,122,264	\$ 10,120,308	\$ 1,956	Budget will be fully spent by end of 2015.
GB20646	Assistive Tech for Special Education Students	\$ 1,000,000	\$ 999,979	\$ 21	Budget will be fully spent, estimating by end of Q2 2016.
GB20647	Educational Application Expansion (Schoolnet, LEAP)	\$ 920,573	\$ 917,846	\$ 2,727	Additional spend likely occur 2016-17.
GB20645	Assessment Tools & Data Access	\$ 3,783,645	\$ 3,778,864	\$ 4,781	Budget will be fully spent - estimated end of Q2 2016.
GB20649	IT Improved Data Analysis Architecture	\$ 700,000	\$ 700,000	\$ -	Project started, tools soon to be purchased.
GB20650	Collaboration Tools	\$ 250,000	\$ 250,000	\$ -	Project not started, RFP to be complete May 2015.
GB20839	Student Outcomes	\$ 387,503	\$ 387,503	\$ -	Additional FTE support as a subset of Assessment Tools & Data starts in Q2 2015.
GB20909	EdTech Program - Overhead	\$ 158,060	\$ 154,560	\$ 3,500	FTE support
GB21166	Classroom Technology - Devices	\$ 3,680,000	\$ 3,677,178	\$ 2,822	Project underway, expected spend completing by Dec 2015.
GB21167	Instructional Mgmt System (IMS) Pilot	\$ 862,000	\$ 859,038	\$ 2,962	RFP is in progress.
		\$ 21,864,045	\$ 21,845,275	\$ 18,770	

IT Infrastructure Improvement Projects Spend Forecast

Child Identifier	Project	Current Budget	Spend Forecast	Remaining	Notes / Status
GB20651	Enterprise Infrastructure Refresh	\$ 5,000,000	\$ 5,000,000	\$ -	Project is beginning Q2 2015.
GB20652	Cyber Security	\$ 300,000	\$ 300,000	\$ -	Undergoing a 3rd-party IT security audit to target investments.
GB20653	Identity & Asset Mgmt.	\$ 900,000	\$ 900,000	\$ -	Project in Planning phase.
GB20654	Wireless Network Upgrades	\$ 5,000,000	\$ 4,991,248	\$ 8,752	RFP for Q2 2015, with projected start in Q3.
GB20910	IT Infrastructure - Overhead	\$ 562,208	\$ 551,019	\$ 11,189	FTE support
		\$ 11,762,208	\$ 11,742,267	\$ 19,941	

Operational Improvement Projects Spend Forecast

Child Identifier	Project	Current Budget	Spend Forecast	Remaining	Notes / Status
GB20655	Intranet	\$ 495,066	\$ 486,997	\$ 8,069	Project is underway with planned go-live in summer 2015.
GB20656	Principal Effectiveness	\$ 700,000	\$ 691,992	\$ 8,008	
GB20657	HR Talent Acquisition	\$ 1,389,150	\$ 1,422,608	\$ (33,458)	Budget overruns covered by HRIS Systems project, project complete.
GB20658	Teacher Effectiveness System Enhancements	\$ 850,000	\$ 848,094	\$ 1,906	
GB20659	HR Infrastructure	\$ 179,654	\$ 168,694	\$ 10,960	
GB20660	Tririga - Additional Modules	\$ 200,000	\$ 200,000	\$ -	Project begins summer 2015.
GB20661	Interactive Parent Tools	\$ 200,000	\$ 200,000	\$ -	Project to begin Q3 2015.
GB20906	Lawson GHR	\$ 827,964	\$ 827,964	\$ -	Project complete.
GB20914	HRIS Systems	\$ 186,882	\$ 171,444	\$ 15,438	Project funds used across multiple HR initiatives. Funds will be fully utilized.
GB20664	IT Contingency	\$ 298,436	\$ -	\$ 298,436	
GB21168	Mobile Device Mgmt. Solution	\$ 1,320,000	\$ 1,308,204	\$ 11,796	Project began Q1 2015, RFP completing, and additional staff add planned for implementation/support.
GB21169	Infor Payroll System Upgrade	\$ 1,150,000	\$ 1,150,000	\$ -	Project Planning phase underway as of Q2 2015.
		\$ 7,797,152	\$ 7,475,997	\$ 321,155	