

Boston Public Schools Operational Review

April 2015

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This report was done as part of a review at the request of the Mayor's office in collaboration with the district. Findings are preliminary and indicate potential options for leadership consideration

What this work IS



- Exploration of potential options to improve student achievement, lower district costs and drive operational efficiency
- Estimates of ranges of cost reductions to identify magnitude of potential reinvestments made available through various options
- Collaborative idea generation and discussion with district to bring insights to light

What this work IS NOT



- These are not recommendations
 - Further analysis is required to identify specific opportunities and to implement
 - Public conversations about tradeoffs required for many options
 - Strategic process to weigh costs and benefits of options would be needed to transform to recommendations
- Exact analysis to predict how much money the district will have to reinvest to support students

The core focus of this review is on student outcomes in pursuing improved operational effectiveness and reduced costs, all while engaging and considering the needs of a broad range of stakeholders



Multiple considerations are essential

- Ultimately, improved student outcomes is the goal of any effort to reduce cost and inefficiency and reallocate those funds where they can do more for students
- Beyond students, considering the impact on teachers, parents, and other stakeholders is critical to identifying the most beneficial and feasible improvements

Opportunities for BPS have been prioritized while keeping all of these factors in mind



Glossary of terms



Term	Definition					
English Language Learner (ELL)	Students whose native tongue is not English and have not achieved fluency in English appropriate with their grade level					
Students with Disabilities (SWD)	Students who have been formally evaluated by BPS and have been found to have a disability that requires additional resources to meet the student need, beyond a traditional general education setting					
Inclusion	Inclusion classrooms are classrooms that support a mix of the general education and special education populations and is research proven to be a better approach to special education for the entire student population					
Individualized Education Plan (IEP)	When a student is classified as needing Special Education, an IEP is designed by the school team to meet that student's needs					
Occupational Therapy / Physical Therapy (OTPT)	OT is individualized support for students to help them acquire basic skills for daily living (e.g., self-grooming, self-feeding, self-dressing); PT is individualized support for developing motor skills (e.g., walking, jumping, lifting)					
Food and Nutrition Services (FNS)	FNS is the department responsible for delivering food to all BPS students					
Office of Instructional and Information Technology (OIIT)	OIIT is the BPS department responsible for delivering the technological services and hardware to the employees and the students of the district					
Pull-out vs. push-in	Current special education practices in BPS require the "pulling out" of students from general education settings to receive additional resources; a "push in" method leaves the student in the general education classroom, while ensuring that the resources meet her/him where they are					

Executive summary

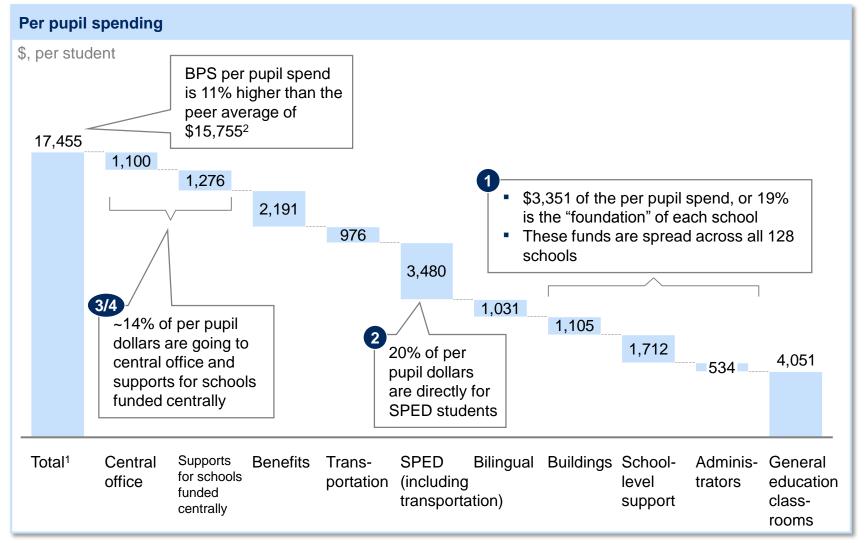


- BPS is a highly diverse public school system, with demographics much different from the City
 of Boston and SWD and ELL populations that outpace state and national averages
- While BPS pushes 55% of its funds to the schools, only 36% reaches all students in the classroom¹; BPS has a significant number of underutilized buildings and classrooms, spreading funds thin across the system and lessening the impact of resources on a per pupil basis
- After a broad scan, the Steering Committee focused the work against four potential areas of opportunity
- To concentrate resources more effectively for students, BPS can find ways to right-size the district to reflect current and projected BPS enrollment
- Over a quarter of the BPS budget goes towards Special Education, meaning that small potential changes in student classification can translate to large funds for reinvestment and better learning environments for students. A move towards inclusion, currently underway, has a 12-year horizon that if executed well will improve special education student outcomes and could potentially lead to more funds available for reinvestment
- 3) As BPS transitions to a new superintendent and potentially addresses overextension issues, the BPS central office will have an opportunity to address some of the misaligned parts of the organization, driving performance and...
- 4) ...potentially capturing operational efficiencies in other areas like transportation, food services and maintenance

BPS' per pupil spend is higher than peer averages - 36% of that spend gets to all students in the classroom



FOR DISCUSSION



¹ This excludes out of district tuition dollars, as those students are being educated outside of district, and grants

² Boston is more in-line when Cost of Living adjustments are made, or only compared to Northeastern cities, but still trends high

BPS Potential Opportunities





Opportunity to consolidate schools \sim \$1.7 - 2.2m/yr

plus ~\$4m one-

time per school

Key facts

- BPS enrollment down 17% over last 20 years and 50% since 1970s
- BPS currently has ~93K total physical seats with only ~54K seats filled
- The system is overextended with declining dollars stretched over same number of buildings and declining student count
- Consolidating schools could reduce annual spend by ~\$1.7-2.2M per school consolidated (~\$700K from non-teaching changes)
- Building sales could bring additional one-time ~\$4M per school consolidated, while avoiding additional, unneeded CapEx or could generate substantial ongoing income from leasing redundant properties
- Right-sized system would concentrate more dollars in fewer schools, improving quality and breadth of student resources

Opportunity to revisit and potentially accelerate SPED reforms ~\$17-21M in FY16¹

and ~\$40-50M

longer-term annually

- Moving Boston in-line with state and national averages can help improve student outcomes and translates to ~\$5M saved for every % point decline
- Shifting provision of paras and specialists² can yield reductions of \$15-\$20M, but requires discussions with stakeholders
- The financial implications of the move to inclusion, already underway, are not well understood and need to be analyzed more deeply given the potential range of impact
- Revisiting the current model in light of a deeper financial understanding and considering other models that other systems have found beneficial for their students could result in cost reductions of \$40-50m on an ongoing basis versus today's costs

Opportunity to reorganize central office and nonteaching staff ~\$25-30M ongoing reduction

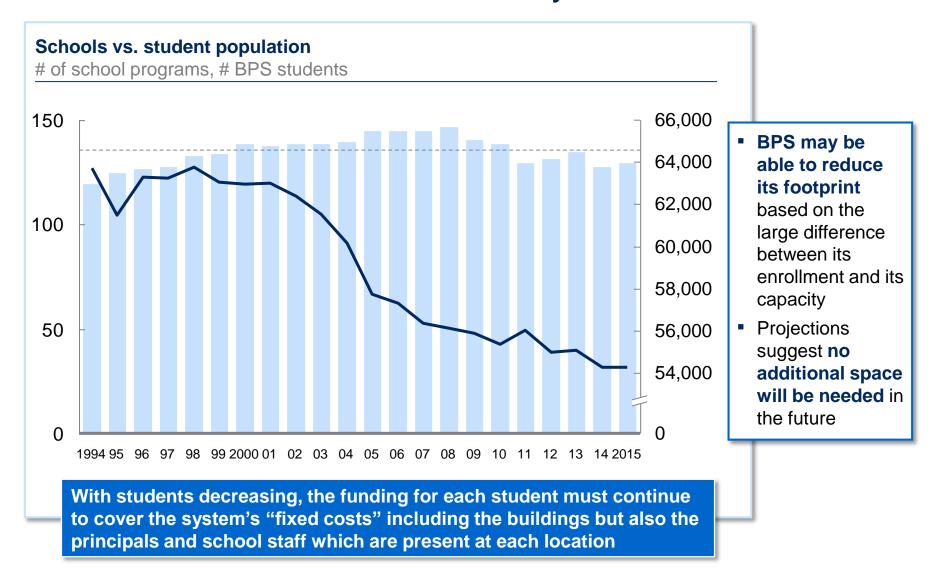
- Non-teaching staff to student ratios across the system are higher than peers and historic BPS levels, ~\$25-30M may be possible if staff levels realigned
- In early 2015, Superintendent had 13 direct reports, making system goal-setting, alignment and focus difficult. System goals were not tracked systematically, with a deep need for performance management systems to align central metrics that matter (e.g., number of students eating lunch, buses on time) with student outcomes and manage staff and system performance better. Incoming administration actively working to improve in these areas.

Opportunities to improve operations ~\$10-25m/yr

- Indicators of transport savings: BPS bus riders average a 0.16 mile walk to their bus stop, 59% of students walk less than a 0.25 mile, spend is ~10% of BPS budget, 20% of routes serve just 3% of students
- Moving to district-wide maintenance contract would align incentives with contractor and could save ~\$5M in annual maintenance costs²
- BPS is currently spending more per pupil on contracted meals, which student taste tests view as lower quality, and can improve participation, changes in delivery and participation could capture ~\$2-8M
- These funds provide a tremendous opportunity to reinvest in ways that improve outcomes for all students

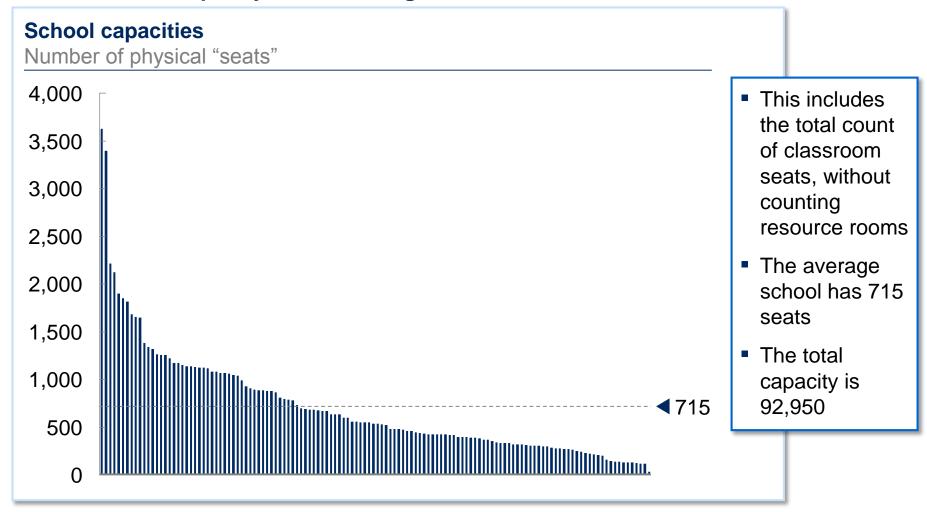


1 Since 1994, BPS student population has declined 17%, but the number of schools has remained relatively constant





1 The current 128 schools have enough physical seats to hold over 90,000 students, though BPS decisions on class size limits reduce the usable capacity below this figure

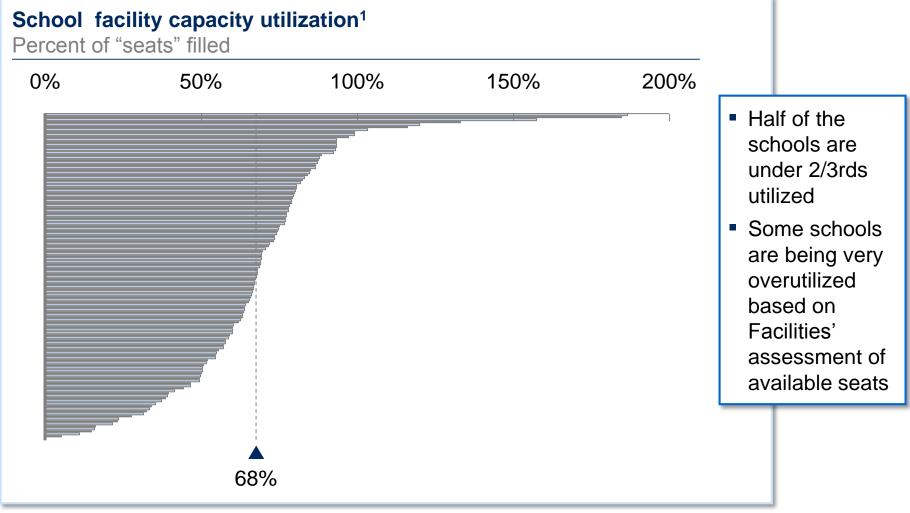


NOTE: This reflects all schools, including BPS charters

METHODOLOGY: Rooms and expected student capacities per room were counted by the facilities team.



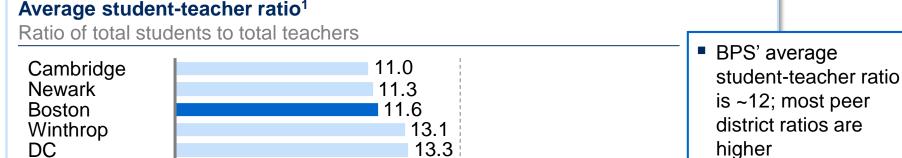
1 The extra seats are mostly well distributed across the district with an average of 68% utilization



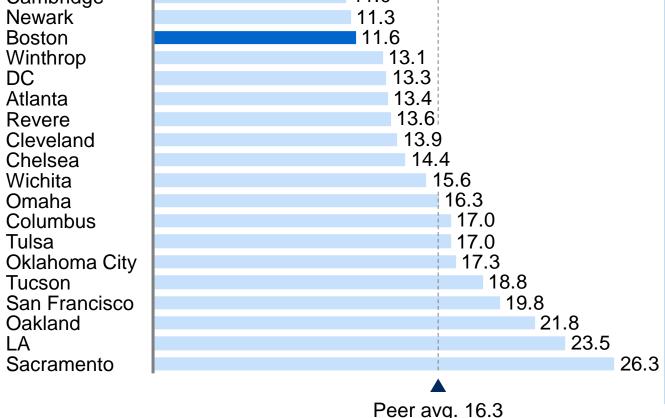
¹ Utilization calculated based on the number of students enrolled in a building vs. the theoretical capacity of the building which does not take into account BPS' approach to student teacher-ratio or the use of resource classrooms; this reflects all schools, including BPS charters



1 Declining enrollment coupled with a stable footprint drives a lower student-teacher ratio than peers



- If BPS were to meet peer average, they would carry ~1,300 fewer teachers, allowing for potential reinvestment of ~\$90-110M
- Any staffing changes would need to be considered vis-à-vis student interests



¹ These numbers include all students (e.g., SPED, ELL) across the peer set, so figures are comparable; BPS Facts At a Glance reports an average class size of 17.7 in general education, which is below state average of 18.8 and the contractually agreed to sizes ranging from 22 in PK-2 to 31 in grades 10-12





Other districts

Four other school districts that consolidated schools saw an average cost reduction of \$580K per school per year

- Milwaukee: \$330K per school per year with 20 closures
- Washington D.C.: \$726K per school per year with 23 closures
- Pittsburgh: \$668K per school per year with 22 closures
- Detroit: \$593K per school per year with 59 closures

Pew's research into savings found, "How much money is saved by closing schools depends in part on the degree to which closings are accompanied by job reductions..."

¹ Closing Public Schools in Philadelphia - Lessons from Six Urban Districts, the Philadelphia Research Initiative, PEW Charitable Trusts, October 19, 2011, page 6

1 Consolidation could allow BPS to redirect ~\$1.7M per school before property sales



	Description	Prior cost	Expected cost after consolidation	Potential reinvestment made available
Consolidate classroom staff	 With fewer classrooms, BPS could commensurately reduce teaching staff The average teacher – student ratio goes from 1:12 to 1:13 or 1:16 	\$3.8m	~\$2.3-2.8m	~\$1.0-1.5m
"Foundation" for school staff	 The "foundation" money² is no longer needed by the school 	\$200k	~\$0	~\$200k
Average custodial support	 Custodial support is no longer required at the building but may increase by 30%¹ at receiving schools 	\$166k	~\$50k	~\$116k
Average building maintenance	 Maintenance is no longer required but may increase by 30%¹ at receiving schools 	\$191k	~\$57k	~\$134k
Average utilities	 The closed buildings no longer needs to spend on utilities (including electric, gas, water, and telecom) 	\$260k	~\$0	~\$260k
			Total	~\$1.7- 2.2m

¹ Assumed based on interviews

^{2 &}quot;Foundation" money refers to the budget allocation that each school automatically receives for basic infrastructure/operation(e.g., to cover principal costs)

1 While the new funds will not be easy to unlock, they can help bring the promise of a better future for BPS



 Run-rate reductions garnered from consolidating schools

 One-time cash from property sales or alternative uses of consolidated schools

Potential areas that could be funded

- Expanded before- and after-school programming for students in all schools
- Guaranteed set of electives or specials at all schools (e.g., Physical Education, Art)
- Greater portfolio of teacher supports and resources (e.g., instructional coaches, first-year mentors, counselors)
- Funds to build a state-of-the-art high school and state-of-the-art lower schools

This illustrates potential areas that could be funded through realized reductions. The actual use of any funds saved would be decided in the same manner in which budgets are developed and funds are allocated today.

Source: BPS data

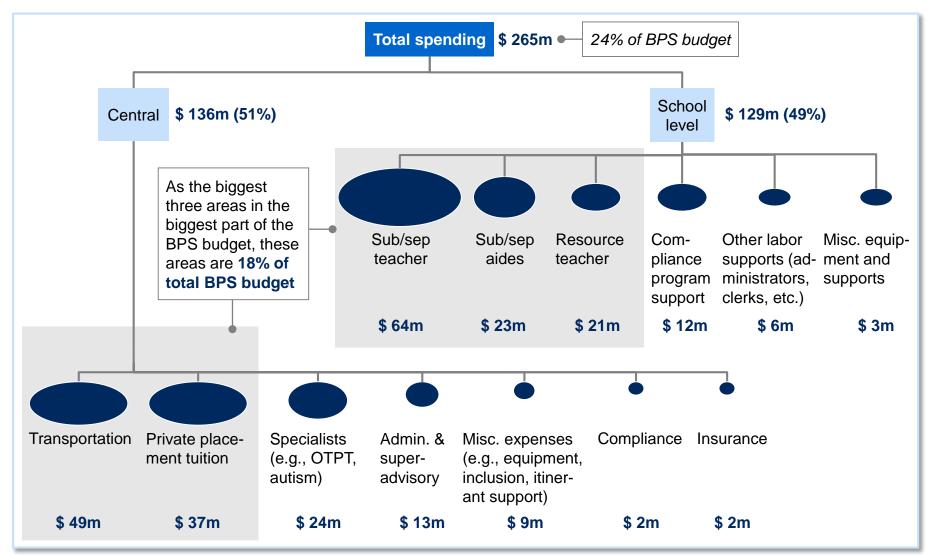
1 Additionally, BPS could recognize many other positive gains from consolidating schools



Potential gain	Description
True neighborhood schools	 Parents, as evidenced in focus groups, highly value students remaining with the same neighborhood-based class throughout years of schooling
Consolidation of lowest- performing schools	 The district could move students from Level 4 and Level 5 to higher performing schools, improving the environment for those students and raising academic achievement in the district
Better targeting for Central Office support	 By consolidating schools, the Central Office would have fewer schools to cover with various forms of support, helping to prevent its resources from being stretched too thin
Increased instructional coherence across the system	 As part of the process of school consolidation, grade level configurations, programming, and feeder patterns could be made more consistent and coherent, improving system functioning for parents, students, and staff
Reduction in transportation complexity	 If school consolidations follow the neighborhood scheme, it would further reduce the need for transportation services in the district
Avoidance of building maintenance expenditures	 With up to \$600M in deferred maintenance on the books, consolidating schools could avoid this costly expenditure and also halt altogether potential investments that would be planned for existing buildings
Revenues from property sales/leasing buildings	 Many closed school buildings could be repurposed to support the community, or be sold/leased to generate revenue to support students

2 SPED is ~25% of the BPS spend and 73% of its costs are in 3 areas: classroom staff, transportation and private placements



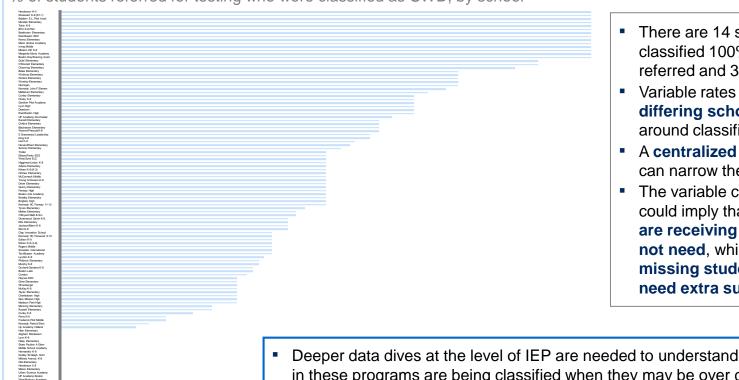


BPS schools are classifying students at widely variable rates





% of students referred for testing who were classified as SWD, by school



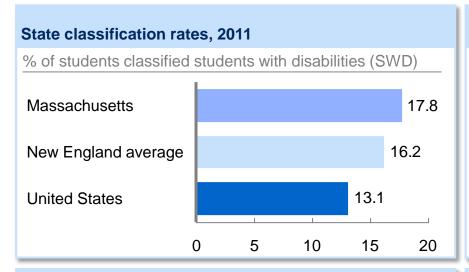
- There are 14 schools who classified 100% of the students referred and 35 who referred 0%
- Variable rates likely reflect differing school cultures around classification
- A centralized auditing process can narrow the band of variability
- The variable classification rates could imply that some students are receiving services they do not need, while others are missing students who do need extra support
- Deeper data dives at the level of IEP are needed to understand whether students in these programs are being classified when they may be over classified
- Cultural shifts in the district may be necessary to identify whether classification is systematically too high, or appropriate, given the student population

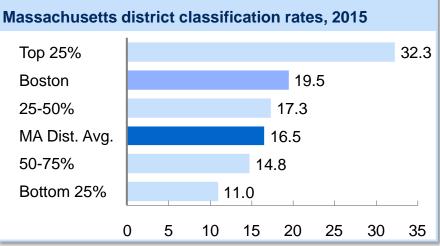
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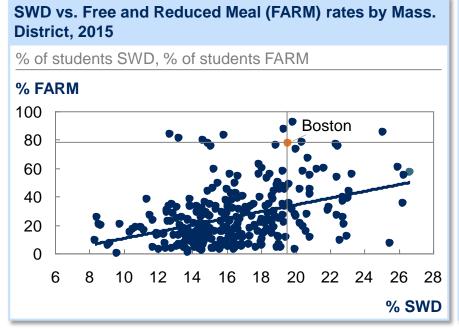
^{*} Schools with less than 200 student enrollments

2 BPS SPED classification is above MA average, well above nation









There are districts with similar challenges and lower SPED %

- Districts with equal or greater FARM, but lower SWD:
 - Revere
 - Everett
 - Brockton
 - Lynn
 - Chelsea
 - Springfield

2 BPS is increasing special education inclusion, a strong Public Scho Focus on Child research-based decision designed to benefit students with disabilities

Inclusion is good for both special education and general education students

- A 2014 state of Massachusetts report found that across the state, "students with disabilities who had full inclusion placements appeared to outperform similar students who were not included to the same extent in general education classrooms with their non-disabled peers."
- A 2013 BPS study found that general education students in inclusion classrooms performed 1.5x better on ELA MCAS and 1.6x better on Math MCAS²
- BPS had just 57% of SWD in inclusion classrooms in 2013

BPS is expecting to move to full inclusion as a district by 2019

- BPS aspires to move up to 80% of SWD into inclusion classrooms, leaving just those with disabilities that make inclusion inappropriate in substantially separate classrooms, movement of roughly 3,400 students
- The BPS plan is to create more inclusion classrooms at the K-1 and K-2 levels, to grow inclusion from the bottom, while moving K-5 classrooms into inclusion a zone at a time, at the rate of one zone a year, over five years

¹ Review of Special Education in the Commonwealth of Massachusetts: A Synthesis Report," August 2014

² Office of Special Education City Council presentation, June 2014

2 The cost of migrating students from substantially separate classrooms into inclusion is highly dependent on two core assumptions

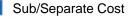
HIGHLY PRELIMINARY

Average number of sub-separate students moving into each inclusion classroom ²									ach	
		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
New Gen Ed	5	240	136	84	52	31	17	5	-3	-10
classrooms	4	206	113	67	39	20	7	-3	-11	-17
needed per 10 inclusion	3	173	91	50	25	9	-3	-11	-18	-24
classrooms	2	139	68	33	12	-2	-12	-20	-26	-30
opened ¹	1	105	46	16	-1	-13	-22	-28	-33	-37

¹ For example, 5 means that for every 10 new inclusion classrooms, 5 new General Education classrooms would need to be created to maintain compliance with the model

² For example, 2.0 would mean that an inclusion classroom would typically be 18 General Education students and 2 Special Education students, whereas 4.0 would mean typically there would be 16 General Education students and 4 Special Education students in a classroom

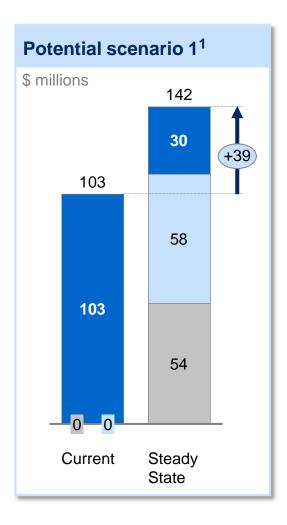
2 Financial implications of supporting the transition of substantially separate students into inclusion vary significantly based on core assumptions and approach

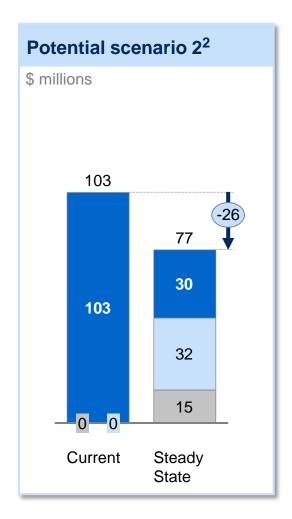


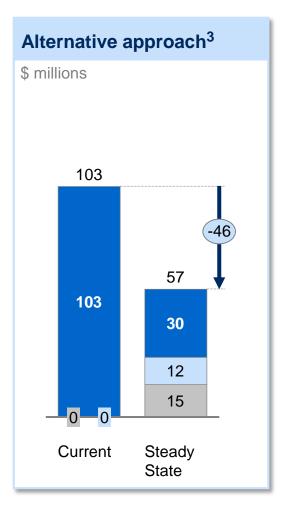
New Inclusion Cost

New Gen Ed Cost

ESTIMATED



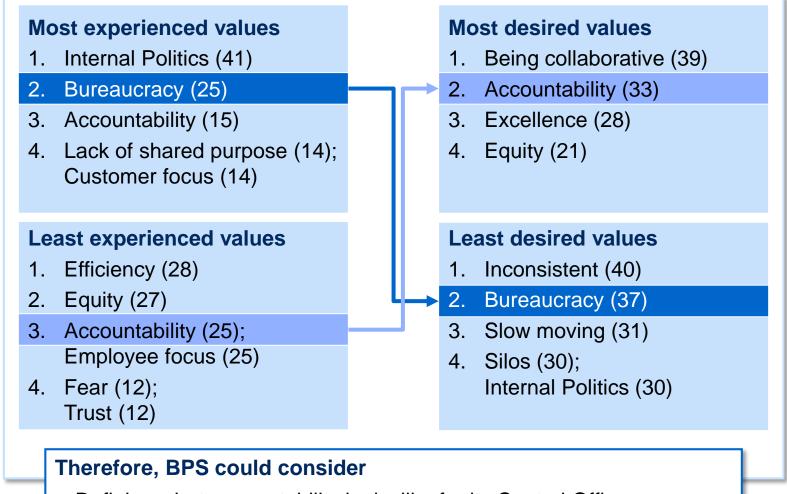




3 Values survey reveals there is a desire for more accountability and less bureaucracy in the Central Office



SURVEY CONDUCTED FEB. 2015



- Defining what accountability looks like for its Central Office
- Reducing the internal politics and bureaucracy currently experienced

In early 2015, goal alignment within departments was strong, but there was not strong consensus on what the District's goals were



"When we set our goals as a department, we make sure that we start with the district's goals and then determine what ours should be." – Cabinet Department leader

"I don't even know what the district's or superintendent's goals are [...] it's too unclear. Our only mission ... is to avoid lawsuits." – Cabinet Department leader

Strengths

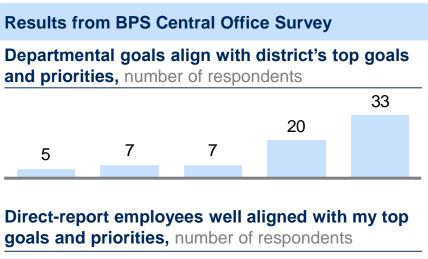
- The employees in every department seem very well aligned with their departmental goals
- A few departments ensure that their departmental goals tie directly to the district's goals

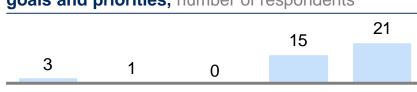
Areas for improvement

- There is no consensus across the departments about what the district's goals actually are
- Some goals are shared by multiple departments (e.g., adjusting the liaison structure to better serve the schools) but there is little-to-no collaboration in accomplishing these goals leading to poor returns

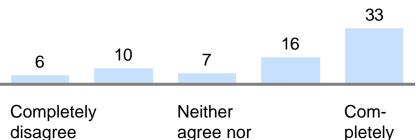
Great examples in departments:

 Academics – Ensures that initiatives and goals directly tied to the district's goals









disagree

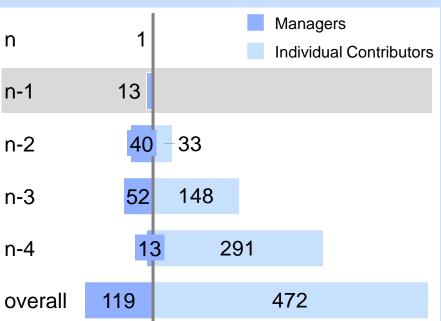
agree

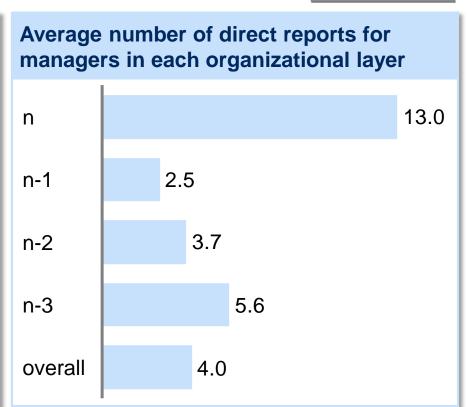
3 In early 2015, the Central Office organization pyramid was standard with some exceptions



Total number of managers and individual contributors in each organizational layer

n 1 Managers



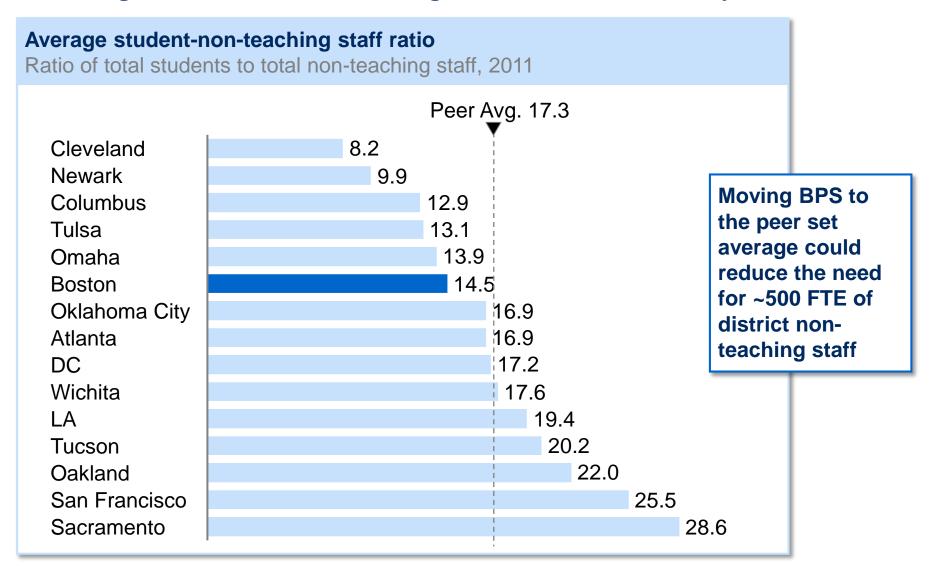


Observations

- BPS had an average of 4.0 direct reports per manager (2-15 across departments)
- Departments vary in how many Assistant Directors they have (0-9 per department)
- While the pyramid looks mostly standard, there were 13 direct-reports at the top level



3 BPS is within range of peers, but still supports a lower than average student to non-teaching staff ratio across the system



Potential action items





Opportunity to consolidate schools

~\$1.7 – 2.2m/yr plus ~\$4m one-time per school

2

Opportunity to revisit and potentially accelerate SPED reforms

- ~\$17-21M in FY16¹ and ~\$20-40M longer-term annually
- Opportunity to reorganize central office and non-teaching staff
 ~\$25-30M ongoing
- Opportunities to improve operations ~\$10-25m/yr

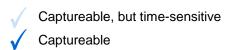
reduction

Decisions / actions

 Given calendar constraints, strategic decision to address district overextension and consolidate schools in next few years would need to happen immediately for planning to begin

- Given the calendar and union restrictions, a decision on outsourcing paraprofessionals and specialists would need to be made immediately, with potential repercussions weighed
- Develop robust understanding of financial implications of approach to inclusion
- Reassess pace, approach, and transition plans for SPED inclusion strategy with the aim of shortening time to benefits for students
- Decisions to reassess SPED rates and classifications would require decision and cultural shifts
- Decisions around central office and non-teaching staff alignment would need to happen as footprint considered to align support as befits new district
- Consider building capacity to execute and support near-term priorities while aligning staff around clear goals
- Review current non-teaching staff allocations and ratios to understand benefits to students and assess opportunities for reallocation
- Dive deeper into specific levers to identify and realize transportation savings
- Outsourcing custodial and maintenance services can capture savings immediately, but may require a reduction in unionized employees
- Moving toward in-housing all food services needs to be researched and aligned with capital planning process

Overview of BPS opportunities





1		Ac	ctivity			Potential opportunity	Near- term	1-2 years	3+ years	One- time	
	Opportunity to consolidate	Consolidate schools				~\$1.7m /yr per school consolidated (~\$700K non-teaching costs)			\checkmark		
	schools	•	Sell/repurpose school buildings		school buildings	~\$4M one-time per school				\checkmark	
2	Opportunity to	•			approach to inclusion and	up to ~50M /yr after full phase-in (cur	r. FY26)		√		
	revisit and potentially accelerate SPED reforms	•	consider alternatives Shift paraprofessional ² provision			~ \$9-11M /yr	\checkmark	\checkmark	\checkmark		
		٠	Shift provis	sion	of related services ²	~\$8-10 M /yr	√	\checkmark	\checkmark		
	Opportunity to reorganize central office and non-teaching staff	•	 Align non-teaching staff across the system to be more in-line with peers 			~ \$25-30M /yr		√	√		
4		T	ransport	•	Reduce current \$113M transport budget by 5-10%	~ \$6-11M /yr	√	\checkmark	\checkmark		
		F	Food	•	Target meal participation to improve revenues	~\$5 M /yr	√	√	√		
	Opportunity to improve	S	Services		Centralize food preparation	~\$1-3 M /yr		\checkmark	\checkmark		
	operations		NAL	/lain-	•	Reduce spend on night custodian workers ²	up to ~\$3M /yr	√	√	√	
			enance	•	Contract all maintenance with a single contractor ²	~\$1-3M /yr	√	\checkmark	\checkmark		

These funds provide a tremendous opportunity to reinvest in ways that improve outcomes for all students

APPENDIX



The approach to the operational review shifted from a broad scan



Progress review

to deep dives

Data collection	and
interviews	

High-level diagnostic

Deep-dive on priority areas

Opportunity development

Activities •

- Collect existing data and reports based on data request
- Identify internal and external stakeholders for interviews and focus groups
- Begin scheduling and conducting interviews and focus groups
- Start initial analysis and benchmarking

- Conduct high-level quantitative and qualitative analysis across the 25 areas, including benchmarking
- Review previous reports, studies, reviews, etc.
- Analyze the BPS budget
- Collect input on priority operational areas from internal and external stakeholders through interviews, focus groups, and other forums

- For the prioritized areas, review diagnostic findings and identify gaps vs. best practice
- Conduct additional deepdive analyses to assess efficiency and effectiveness opportunities
- Prioritize areas with greatest opportunity to explore further

- Prioritize improvement opportunities based on impact toward BPS' mission and strategic goals
- Identify short term and long term actions for implementation
- For priority opportunities, provide rationale, estimates of costs and cost reductions, and practical implementation guidance

Outcomes •

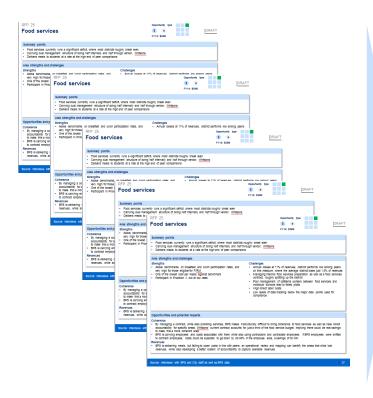
- Synthesis of initial key themes and learning
- Overview of BPS' fiscal and operational health across each of the 25 areas
- Identification of priority areas for deep-dives
- Interim workshops as requested by the City
- Detailed diagnostic of priority areas
- Workshop to align on next steps for BPS in capturing opportunities

A high-level scan informed the Steering Committee's prioritization of areas for deeper exploration



CONCEPTUAL

High-level scan across 25 areas...



...informing Steering Committee prioritization...

- From data and interviews, the Steering Committee considered the size of the opportunity in terms of benefits to students, cost reductions, and efficiency
- From this approach, 11 areas emerged in two groups as potential Phase 2 targets

...leading to prioritized areas for deeper exploration

- District overextension
- Special Education
- Central Office/Organization
- Additional operational savings