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COMMENTARY

Improving Equity and Access through Weighted Student Funding: Boston Public Schools (MA)

by John McDonough

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Improving Equity and Access through Weighted Student Funding: Boston Public Schools

| JOHN MCDONOUGH

The date, November 17, 2010, was extraordinarily important for the Boston Public Schools (BPS) financial team. It was the day my team and I, Chief Financial Officer of Boston

Public Schools, proposed a strategic restructuring of the BPS budget to help solve the district's financial challenges while meeting our academic goals. Several months before, in April 2010, I had presented the Boston School Committee with a multi-year budget that indicated a projected budget gap of \$63 million for FY2012, increasing to \$91 million in FY2013. By November, it had become clear to me that the funding system we were using was no longer effective in the current financial climate. The School Committee would begin meeting to deliberate on the budget in early February 2011, so we had three short months to come up with a solution to change the district's funding model to help close the budget gap.

This projected budget gap loomed before us at a time when we were confronted with an increasing number of initiatives and requirements from the

Massachusetts Department of Elementary and Secondary Education reflecting the state's Race to the Top priorities. We were also intent on making progress on our new strategic plan outlined by Superintendent Carol Johnson in 2009. The *Acceleration Agenda* has three main goals: (1) ensuring student proficiency on state tests, (2) closing gaps in student achievement and access to high-quality programs and resources, and (3) graduating students who are ready for college and career success.

For several years, my colleagues at BPS and I had been studying and contemplating implementing a weighted student funding (WSF) model. The severe fiscal challenges we were confronting, coupled with our drive to implement our new strategic plan, suddenly began to appear to us as an opportunity for a significant overhaul of our funding approach.

What is Weighted Student Funding?

The weighted student funding model allocates money based on students and their needs rather than based on programs, people, or other proxies for students' needs. The approach was first used by Edmonton Public Schools in Canada, and now is used in a number of large districts nationwide including San Francisco, Baltimore, Denver, Houston, and New York City. ▸

Editor's Note: From September 2010 through April 2011, BPS engaged The District Management Council to work with the district in developing and implementing its weighted student funding formula.

What is Weighted Student Funding?

Weighted student funding (WSF) is a budgeting process pioneered by the Edmonton Public Schools in Alberta, Canada, in 1976 under Superintendent Mike Strembitsky. WSF is now a staple in the majority of large, urban districts including New York City, Houston, San Francisco, and Baltimore, and is being used at the state level in Hawaii.

The basic tenets of WSF are: (1) funds follow students, rather than programs or staff, (2) per-student funding should vary according to a child's educational needs, and (3) funds arrive at schools as real dollars, meaning that principals have the authority to budget flexibly. Thus, under WSF, a school's budget is based on its enrollment and the educational needs of its students, rather than on the staff positions needed at each school, or the programs run by each school. This creates a system that is more equitable—each student receives the same amount of funding, regardless of school—and transparent, since the budget can be easily calculated. Changing the funding structure changes the incentive structure for schools as well, since the only way for schools to increase their budget is to attract more students or more high-need students. Schools have the budgetary authority to create programs for students, and now must compete with other schools in their district for students.

The WSF model assumes that the average student costs a certain amount to educate, and students with greater educational needs are given “weights” to reflect the increased cost of their education. Many districts, including BPS, provide all schools, regardless of enrollment and student body, with “foundation funding.” This amount is generally enough to cover the costs of a school's administrative staff, although a principal could choose to use it differently. A school's total budget can be calculated by determining the number of students with different educational needs multiplied by the weights associated with each student subgroup, added to the base amount of foundation funding (Exhibit A).

The particularities of a WSF model vary depending on the district context. The central office retains control over some parts of the budget, although the extent to which the budget is decentralized differs by district (Exhibit B). In Milwaukee, for instance, 95% of the district's budget is allocated through its weighted student formula, meaning that only 5% of the district budget is controlled by the central office.¹ Chicago Public Schools, by comparison, distributes only 52% of its budget through WSF.² The degree of centralization or decentralization has significant implications for the role of the principal.

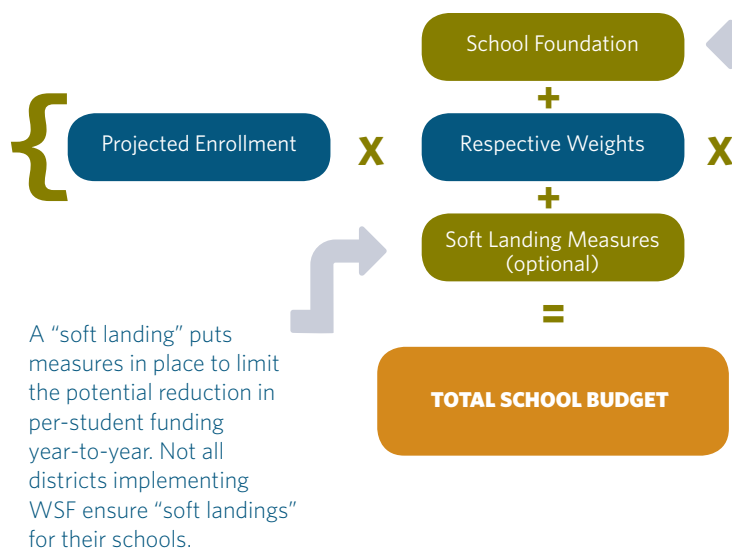
Determining weights is another major area of variation between WSF districts (Exhibit C). Districts must decide what the base weight should be for the average student, as well as which student subgroups should receive weights, and how much those weights should be. These conversations need to align with a district's theory of action and strategic agenda. For example, BPS leaders chose to add an additional school-level weight to schools with a concentration of poverty (defined as higher than the district average), as well as a weight to at-risk ninth graders. Houston ISD adds additional weights to students with high achievement scores, while Baltimore City Public Schools weights both students with high achievement and those with low achievement. Houston ISD also weights students who are highly mobile, as well as students enrolled in vocational education. These are tough decisions—WSF creates a zero-sum budget, meaning that in order to increase the weight for one student subgroup, the weight for another must be reduced. Having a theory of action helps district leadership make these decisions in a way that furthers the strategic goals of the district.

¹ National Education Association, “Weighted Student Formula: What is it and how does it impact educational programs in large urban districts?,” 2005.

² Ibid.

EXHIBIT A

How is a School Budget Calculated using Weighted Student Funding?



Source: DMC

EXHIBIT B

Who Controls What? Example of Budget Authority Split

Site Budget Responsibility		Central Office Budget Responsibility
Personnel	General education, AP, ELL, and Adjustment teachers and paraprofessionals	Special education teachers, paraprofessionals, and related service providers
	Substitutes—staff development absences	Substitutes—non staff development absences
	Librarians	Athletic coaches
	Counselors	Itinerant staff
	Building administration (Leadership and Support)	Custodial staff supplies, salaries & overtime
	Extra-duty pay for student activities	Food & Nutrition staff and services
	Parent liaisons	Maintenance & Grounds staff and supplies
	Benefits for all site-funded positions	Benefits for all centrally funded positions
Services & Supplies	SPED, ELL supplies, and PD	SPED assistive technology
	Replacement texts	Basic texts
	Library books & school supplies	Capital, Furniture & Fixtures, Telecom, Utilities
	School-based professional development	Professional Development Institutes
	Local test preparation and assessment	District-wide assessment
	Specialty programs	HR, IT, Business Services, Legal
	Extended learning opportunities	Transportation

Source: DMC

EXHIBIT C

Variation in Weights Between Four WSF Districts

	Baltimore	Houston	Denver	Boston
Base Weight (1.0)	\$4,785	By grade level \$3,379-\$3,415	\$3,335	\$3,658
Foundation	N/A	By school size	N/A	\$200k
School / Grade Level	N/A	For Base	N/A	1.80-1.30, decreasing with age
Achievement	High: 0.45 Low: 0.45	High: 0.12	N/A	N/A
Poverty	High School only: 0.18	0.15	0.08-0.09, increasing with grade level	0.10, additional 0.10 for concentration
SPED	Range (0.99-1.66)	0.15 (w/o SPED Staffing)	2 Levels: 0.11 or 0.07	Range (1.0-6.00)
ELL	N/A	0.10	N/A	Range (0.25-1.0)
Other	N/A	Mobility: 0.10 Vocational Ed: 0.35	N/A	At-risk 9th grade: 0.2

Source: DMC analysis of data available from respective districts

A small base sum to ensure school “viability,” which at minimum supports a principal and a clerk.

Base Funding Factor

The dollar amount associated with a 1.0 weight (the average student).

Once an amount is allocated to the central office for essential system-wide services such as transportation and other administrative functions, the budget is allocated to schools. In Boston, each school receives a base amount from the central office—generally enough to cover several key administrative positions. After that, the amount of funding a school receives is based on the number of students and the needs of those particular

to funding, it makes budgeting more predictable and very transparent.

Our Existing System: Funding Programs and People

Historically, Boston Public Schools used a staff-based funding model, with some differentiation based on program models. When it was developed, this was a rational, effective approach to resource allocation that was responsive to the district's needs and was methodical and predictable. It had served the interests of BPS well.

As time progressed, however, things changed. BPS began confronting ongoing fiscal challenges in FY2004. These challenges resulted in the annual layering of new budget adjustments upon previous years' adjustments. This, combined with some of the district's investments in initiatives aimed at improving student achievement, had the unintended consequence of contributing to inequities within the district, and undermined the fundamental rationale behind the historical budgeting model. The budgeting process was no longer equitable or transparent, creating a perception of differential treatment within the district. The perception was that budgets were based on who you knew, rather than on a methodical or predictable basis. Weighted student funding is a more appropriate funding model for BPS at this point in our history: it is consistent with our strategic direction of providing equity and access, and has facilitated other major systemic changes within the district.

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students. Some children have greater needs, such as students with disabilities or English Language Learners, and therefore receive a greater amount. School budgets are calculated by multiplying the number of students enrolled by the weights for each student. Schools with greater concentrations of high-need students thus receive a greater allocation so that they can properly educate their high-need students. From my standpoint as CFO, not only does this model increase equity and access

EXHIBIT 1

Inequities Between High Schools under the Previous Funding Model

School	FY12 Enroll.	% Poverty	% SPED	% ELL	FY11 Avg. Per Pupil	FY12 Prelim. Per Pupil	Soft Landing Per Pupil	FY12 Adj. Per Pupil
High School A	387	70%	47%	8%	\$7,975	\$8,629	0	\$8,629
High School B	306	67%	18%	4%	\$7,955	\$6,660	\$388	\$7,048

Source: Boston Public Schools

Let me share with you a good example of funding under the old model, and how it changed with the adoption of WSF. Two high schools with similar total enrollment numbers received virtually identical funding under our historical model (Exhibit 1). While that may sound fair, a closer examination showed that one school had twice the number of ELL students, and two-and-a-half times the number of special education students. In essence, one of these high schools was underfunded, and its students were likely not receiving the support they needed since the school budget did not accurately reflect the needs of the school's students.

Manipulating the existing budget system was requiring an increasing number of financial and budgeting gymnastics that undermined the original rationale of the budget. Our business had become how to make each school and program continue, rather than to clearly and strategically align the district's resources with its goals. I was only too happy to stop trying to maintain and build upon a labyrinth-like budget machine and replace it with a straightforward, easy-to-understand system that aligned with our strategic objectives. Rarely do we have the opportunity to look at leveraging resource allocation in a way that enables district reform to take place within a framework that makes absolute sense. WSF provided us with that opportunity.

Why was WSF the Best Choice?

Based on our research, and having spoken with other large urban districts that had implemented versions of the weighted student funding model, I was confident that the WSF approach would be the best solution for us long-term. The system is clear, transparent, and rules-based; anyone who knows the number and type of students and the weights can calculate a building's budget. Resources are distributed equitably, and WSF allows us to align resources and create incentives in line with our *Acceleration Agenda* (Exhibit 2).

EXHIBIT 2

Boston Public Schools' Acceleration Agenda outlines the district's three major goals and the key strategies we will undertake to achieve them.

Weighted student funding falls under the strategy of Redesigning district services for effectiveness, efficiency, and equity.



Source: BPS

We Had to Move Quickly

With three short months to develop a new resource allocation approach, we had to move quickly. The District Management Council was engaged to provide technical assistance as well as to help design and assist BPS in implementing a process to bring about the large change in the way we did things.

From the start, we understood that implementing WSF would be a transformational change that went beyond just figuring out dollars and cents. We recognized the need to garner widespread understanding and support in order to be successful. A key factor in bringing this about was creating a working group of approximately 60 leaders from various central office departments, principals, and other key stakeholders, such as the mayor's office. This group came to be known as the "Group of 60," and they provided important ideas, vital feedback, and necessary perspectives to be able to implement such a wholesale change in such short time. ▸

For example, this group helped determine what the percentage split should be between the central office and the school buildings. They were surprisingly candid on what parts of the system they wanted direct control over at the building level versus what they thought should be handled centrally. They also provided valuable input into how weights should be determined and what they should be. While at times it was difficult to coordinate such a large and diverse group of people, the Group of 60 was essential in order to generate buy-in from all parts of the organization.

From my standpoint as CFO, not only does this model increase equity and access to funding, it makes budgeting more predictable and very transparent.

How much Centralization?

As we set out to design and implement WSF in Boston, one of the first key issues we had to address was the amount of budgetary authority that would be controlled by the central office versus the individual schools. Historically, since the central office determined each school's budget, schools had the incentive to get the most for themselves regardless of the effects on the entire system. Moreover, with funding tied to programs and people in each building, there was a great deal of discussion on how to justify the budget allocation.

With WSF, that all changed. After much debate and consideration, Boston decided to keep control of approximately 45% of the total budget, including services and programs such as employee benefits, transportation, custodial services, and special education itinerant services. Every district has different reasons for controlling various programs centrally. For example, in Boston, keeping special education itinerant services at the district level rather than pushing it out to schools was crucial in garnering parental support for the new budget

model. We also required certain things—funding for special education, English Language Learning, and academic support—to be in every school's budget, and we implemented a deliberate budget check process to ensure that each school's budget meets the needs of its students.

Once we determined what needed to be controlled centrally and what could be pushed out to schools, we provided the base amount for administrative purposes and allocated the rest of the dollars based on number of students and their weightings.

Determining Weights to Further Strategic Objectives

One important aspect of WSF that appealed to our team was that the weights could be determined based on student needs and district priorities, and thus could be aligned to the district strategy. In essence, weights translate into additional dollars. For example, we provided additional weights to elementary students, students who were struggling, students who were economically disadvantaged, etc. Many of the weights we implemented are common to large urban districts using WSF and the dollar amounts associated with them reflected what we believed to be adequate funding based on historical data.

There were two areas that were particularly important to Dr. Johnson and were strategic priorities of the *Acceleration Agenda*; we ensured that weights reflected these priorities. The first was providing extra resources to schools with a large number of students in poverty. While most districts add an additional weight for children in poverty, we went a step further by according a weight based on the concentration of poverty. This extra weighting recognizes that concentrated poverty exacerbates challenges to educators, and that students in these schools have greater needs than students in other schools. Another priority was to create a weight for ninth-grade students who are at risk of dropping out of school. Research shows that we have only a small window of time to reach these kids before they drop out of high school altogether. Providing extra funding for these students allows high schools to target more

resources to these higher-need students and may even save us money in the long-term by avoiding expensive remediation efforts such as credit recovery, not to mention societal losses. While we knew of no other WSF district using this weighting criteria, Superintendent Johnson felt it was necessary to include this weight in Boston due to the importance we have placed in our strategic plan on creating college and career-ready students, and on improving our graduation rates.

Making Trade-offs

As a zero-sum budgeting structure, WSF forced us to be explicit about trade-offs that were reflected in our weighting, even if some of these decisions were difficult and emotionally painful. We had to ask ourselves: “Does this type of student-need represent something the district values to such an extent that we are willing to fund it at the expense of other students?” The truth was, with the prolonged fiscal crisis in the country, we had essentially spent down all the “cushion” we ever had; as much as we had hoped to find extra funds, there was only a finite amount of money. As painful as it was for us to acknowledge that we couldn’t fund everything, it gave us a chance to explain the process of trade-offs to many stakeholders and have them share in our important strategic decision-making.

As you can imagine, we got a lot of push back from parents about the weights—why couldn’t we add a weight for this program, or that type of student? For instance, there was a group of parents that was pushing back against our decision not to provide extra funding for dual-language programs. In the past, we either made reductions away from the classroom to fund these programs, or just refused the request without a good way of explaining why we could not fund them. This time it was different. We sat down with them and explained that we were dealing with a zero-based budget, and funding their children’s dual-language program meant a reduction in the per-pupil amount for all other children. After careful consideration, they ultimately decided that they weren’t sure that their child’s education should come at the expense of another child whose needs may be even greater

than theirs. This was really powerful. It was a significant milestone for us, and for them. Parents were starting to understand the nature of WSF, and that we had to be strategic in deciding what we do and do not fund. A dual-language program is still something we’re thinking about, as is alternative education, but we’re not there yet.

Weighted Student Funding Increases Transparency

The transparency provided by the WSF model was an important consideration for us, especially given the perception that had existed under the previous model that resource allocation was based on history, or worse yet, who you knew, rather than an equitable, rules-based process. Not only is the WSF allocation model easier to explain to the public, it also makes it easier for the public to understand where the money is going. In a meeting explaining



the model to our principals, one principal calculated on a piece of paper the amount his school would receive under the WSF system, to the dollar. Anyone can calculate the budget of the school down the street—all you need to know is the enrollment of the school in terms of various student subgroups, and the weights (i.e., the additional cost to educate) ▷

for each subgroup. Since the same amount of money is being spent on children with the same needs across the district, the math is pretty easy. That equality of funding per student-need provides a high degree of transparency in the budget. Since all of these numbers are made public, there is less political influence to increase funding for one subset of the student population at the expense of another.

WSF Changes Incentives to Align with the Acceleration Agenda

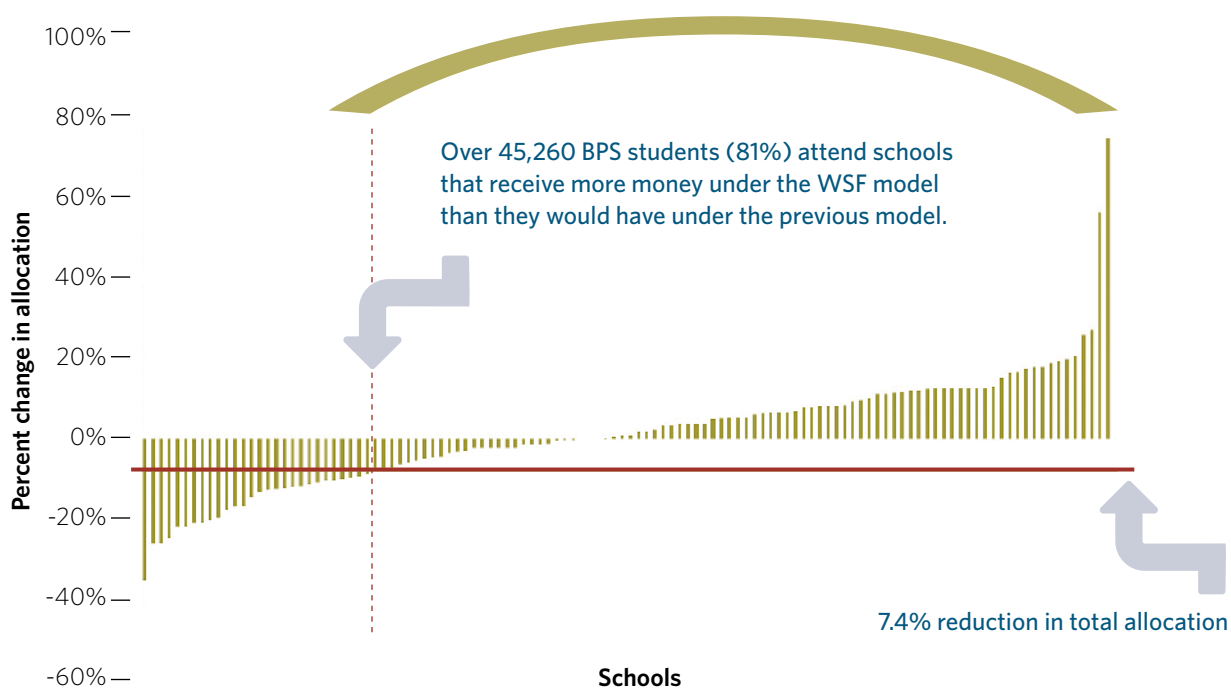
Weighted student funding gave BPS a mechanism to fund its students, not its adults, buildings, or programs. This realization brought about some interesting outcomes. Since the only way a school could increase its budget was to increase the number of students it serves and/or the types of students it serves, schools had incentives they hadn't had

before to increase their enrollment and enhance delivery of services. The incentive structure literally changed overnight. For example, the new incentive structure under WSF helped the district move forward on serving students with disabilities, one of the objectives of our *Acceleration Agenda*. The number of schools in the district with special education programs increased so that more students could attend school in their home zones, and they would need to make fewer transitions. WSF helped by providing schools with the extra funding they need to meet the educational needs of these students. We were able to get buy-in from special education and ELL groups because this new funding structure helped move their change agendas forward as well. We can now leverage our resources in a way that best aligns with our strategic agenda, and will help all of our students succeed.

EXHIBIT 3

Percent Change in FY2012 School Allocations: Historical Model vs. WSF

If Boston Public Schools had continued with the historical model, all schools would have received a 7.4% reduction in their total allocation. 81% of BPS students attend a school that receives more money under the WSF model than it would have had we continued with the previous model.



Source: BPS

Soft Landing

Implementing WSF meant a significant overnight change in the dollar amount each of our 131 schools would receive. Virtually no one received the same amount as the year before. As it turned out, when we applied our new proposed funding approach, 81% of students would now be in schools that received greater funding than they would have in FY2012 under the previous model (Exhibit 3). At the same time, many schools would receive significantly less funding than in the previous year.

It was easy to figure out what to do with the schools that were set to receive more money than they had before—we would give them the money they need. It was much harder to figure out what to do with the schools that were set to receive substantially less than they had before, and hard to figure out how to do both at the same time.

Since we were dealing with a fixed amount of funds to allocate, we couldn't give some schools more without taking it from somewhere else, but what should be done with schools whose budget might be cut by as much as 40% in one year? We discussed the idea of incrementally increasing some schools' budgets at the same time that we incrementally decreased others. But, Superintendent Johnson said, "No, that's not fair to those students that deserve that money. You have to find another way." That's how we developed the "soft landing." We had established a significant reserve in our budget planning that enabled us to fund "soft landings" so that those schools receiving the most dramatic decreases would be able to transition to the new budget level over two years. We were also deliberate in building financial strategies that were dependent upon grants to fund some school supports that were not scalable across the district. This allows schools some flexibility in either adjusting their programmatic model to fit their current budget, or increasing their enrollment. Since different schools were affected in different ways, schools needing a "soft landing" were divided into categories and received differing amounts of buffer. These determinations, like all the changes made with WSF, are rules-based and not school-specific. Keeping things rules-based helps us maintain transparency, consistency, and equity. The central office is still working with the "soft

landing" schools to help them become financially sustainable, and they have generated a lot of discussion for how to change and improve WSF in the coming years.

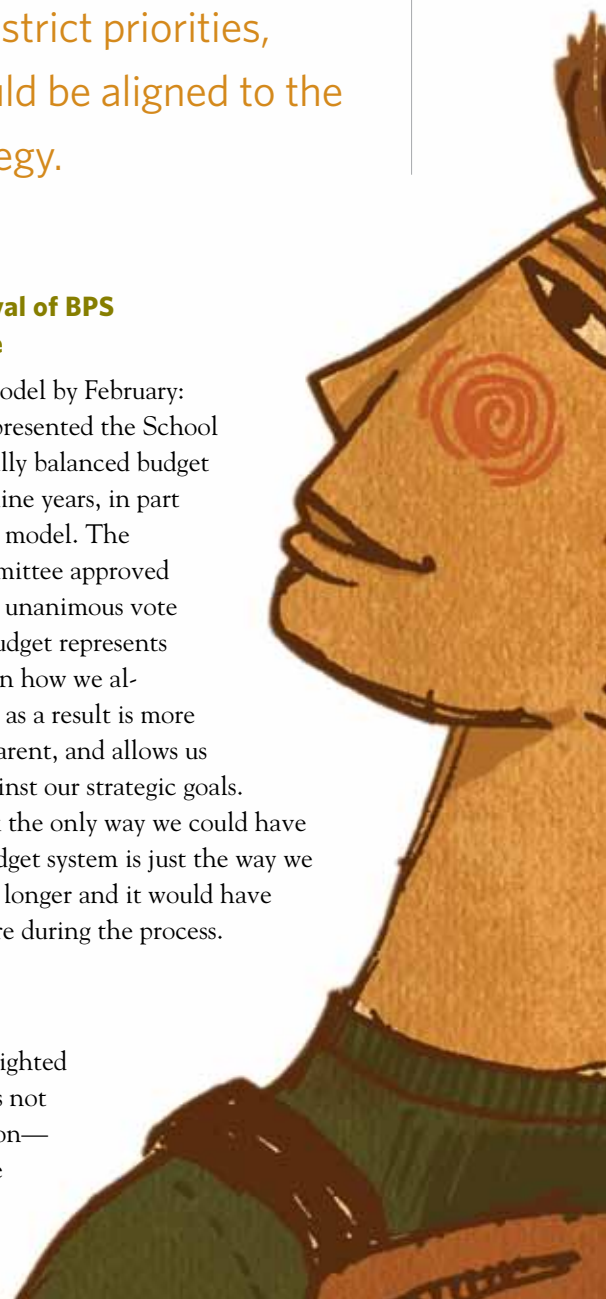
One important aspect of WSF that appealed to our team was that the weights could be determined based on student needs and district priorities, and thus could be aligned to the district strategy.

WSF Wins Approval of BPS School Committee

We had a working model by February: on February 2, BPS presented the School Committee with a fully balanced budget for the first time in nine years, in part due to the new WSF model. The Boston School Committee approved the 2012 budget in a unanimous vote on March 23. The budget represents a fundamental shift in how we allocate resources, and as a result is more equitable and transparent, and allows us to make progress against our strategic goals. In retrospect, I think the only way we could have shifted the entire budget system is just the way we did it—quickly. Any longer and it would have stalled out somewhere during the process.

Rolling out WSF

As it turned out, Weighted Student Funding was not entirely new to Boston—the funding structure of our pilot schools (public schools >



with greater local autonomy) has always been based on a student-based allocation. This helped us roll out WSF across the whole district because it was something that already had a demonstrated track record. This is not to say that we were not constructively challenged along the way. For instance, Boston Mayor Thomas Menino had concerns that we may have been taking on too much in too short a period of time. His key question was: “What do I tell the woman in South Boston, with curlers in her hair, chatting on the front stoop of

As painful as it was for me to acknowledge that we couldn’t fund everything, it gave us a chance to explain the process of trade-offs to many stakeholders and have them share in our important strategic decision-making.

her home, who is concerned about how this might affect her child?” I suggested that he, as well as the Superintendent and all others responsible for the stewardship of our public schools, could respond to the woman from South Boston and to every parent of a child in BPS that their child would receive exactly the same level of resources, based on his/her need, as any other child in the City of Boston, regardless of what neighborhood they came from, or what school they attended.

“We no longer fund adults, we no longer fund programs, we no longer fund individual schools. We fund students, and that funding is based on their needs.” This was our mantra. We said it in every discussion, every public hearing, every conversation, everywhere we had an opportunity to engage people in this work. It represents the compelling moral imperative that leveraged financial process to achieve tight alignment and

powerful support to position the district to succeed in meeting its important strategic goals.

One Year Later ...

One year later, we are very proud of what has been accomplished in BPS. This is some of the most rewarding work that I’ve done here. We are funding students, and we are funding them according to their needs. The funding structure is transparent, predictable, and rules-based. Resources are distributed equitably to students across the district. The district has been able to accomplish much of its equity and access agenda in such a short time by directly tying resources to its strategic initiatives. I am proud of what we have accomplished. We are far from done, however. Our WSF system is not perfect—we are still struggling with issues relating to the “soft-landing” schools, as well as how to provide more professional development for our principals, who are now being asked to be budgetary authorities rather than solely instructional leaders. We are thinking about how we might add additional weights to dual-language programs or alternative education and what the role of these programs should be in our schools. We certainly have more work to do, but I am excited at how quickly our district has changed to serve our students better.



JOHN MCDONOUGH HAS BEEN THE CHIEF FINANCIAL OFFICER OF THE BOSTON PUBLIC SCHOOLS SINCE 1996, AND HAS SERVED OVER 35 YEARS IN THE DISTRICT. HE WAS

AWARDED THE BILL WISE AWARD FROM THE COUNCIL OF GREAT CITY SCHOOLS IN 2005 FOR HIS DEDICATION TO PUBLIC EDUCATION, AND RECEIVED THE HENRY L. SHATTUCK AWARD IN 2000 FROM THE BOSTON MUNICIPAL RESEARCH BUREAU IN HONOR OF HIS PUBLIC SERVICE. MR. MCDONOUGH RECEIVED BOTH HIS B.A. IN POLITICAL SCIENCE AND HIS M.B.A. FROM BOSTON COLLEGE.