Variation Is the Norm: A Landscape Analysis of Weighted Student Funding Implementation

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ABSTRACT

School districts increasingly rely on weighted student funding (WSF), yet there is little research on this allocation model. This study collects more than 70 measures on each of 19 districts using WSF in 2018 for a landscape analysis of formula features and implementation practices. While districts report common reasons for adopting WSF (equity, flexibility, and transparency), the study finds no standard WSF model. Homegrown formulas and non-formula features and exemptions reflecting local context are the norm, resulting in substantial differences. Nearly all districts continue to budget with average salaries (likely limiting equity) but grant principals flexibility on staffing, stipends, and contracts.

INTRODUCTION

Over the last two decades, some of the nation’s largest districts have shifted from deploying resources to schools based on staffing formulas to instead allocating funds to schools based on the mix of students in the building. This allocation strategy is known as Weighted Student Funding (WSF) or Student Based Allocation (SBA). Rather than apportion staff or other purchased inputs to schools, districts using WSF deploy a fixed dollar amount to schools for each student type with larger increments for student types identified as having greater needs. A student type can include English language learners (ELL), students with disabilities, or students in families living in poverty, for example. Today, roughly three dozen large, predominantly urban districts (including those in New York City, Boston, Denver, Houston, and Chicago) purport to use WSF or are cited in the literature as using WSF to distribute some portion of their total budget (Koteskey 2016). Yet even as WSF systems continue to expand, now serving
millions of K-12 students, research has focused on a single objective of WSF in one district or a small group of districts rather than comprehensively documenting the range of active WSF formulas and relevant implementation details across multiple districts and states in a given year.

This landscape analysis attempts to fill that void by documenting WSF formulas and implementation features across districts where evidence confirms usage of WSF in the 2017-18 school year. The analysis builds a newly created database of more than 70 data points. We identify the study districts’ reported rationales for implementing WSF and collect and analyze a wide range of formula details and nonformula features that impact allocations to schools.

Consistent with the literature, we find the most commonly cited reasons for implementing WSF are equity, transparency, and school-level spending flexibility. But while districts might have common reasons for using WSF, our analysis finds that there is no standard or “off-the-shelf” formula and districts are implementing WSF quite differently. While district formulas do tend to provide increments to higher-needs students (in categories typically defined by states and the federal government), no two formulas look the same. WSF district formulas differed in how they defined the base, the magnitude of the weights, whether student needs were defined by cost or student characteristics, as well as what districts include or exclude in their formulas. Such variation is perhaps unsurprising, given that districts appear to build “homegrown” approaches to WSF rooted in their own policy and fiscal contexts. And such variation may be desirable, enabling the WSF model to be customized to local district and community needs. Our exploration of implementation in this paper includes the nature of the allocation formulas and factors related to transparency and flexibility. Our subsequent research will investigate whether (or the extent to which) these allocations have the intended effect of improving equity and their effects (if any) on achievement gaps.
To our knowledge, the database for this landscape analysis represents the most comprehensive cross-district comparison to date on WSF formula designs, details, and implementation features. Interest in WSF is growing, as more state and federal policy proposals promote WSF, and as large districts increasingly adopt the strategy. Because this analysis gathers data from the landscape of all districts operating WSF systems as of the 2017-2018 school year, it adds timely analysis to the literature in that it advances understanding of WSF as it is currently practiced in 19 districts.

**BACKGROUND**

WSF describes a method by which schools receive resources and can be described as one of three general approaches to how schools are resourced, as shown in Figure 1. In a traditional centralized model, the host district deploys resources to schools in the form of staff, programs, and services. In the directly funded model, dollars are delivered directly to schools from the funding sources, an approach most commonly observed with charter schools. In this model, schools may still affiliate with a managing entity, such as a district or charter management organization, by directing a portion of their funding to that entity in exchange for receiving shared services, such as financial services and human resources, among others.

In the decentralized WSF model, the district receives the funding, but then directs a portion of those funds to schools—in the form of dollars, not staff—based on the number and type of students in each school. Rather than receive fixed staff positions, schools in a WSF model receive a dollar allocation for every student. Students with characteristics that are linked
to a need for greater resources are then “weighted” above the given base to generate additional dollars (Ladd 2008; Miles and Roza 2006; Petko 2005).

<FIGURE 1>

Generally, the WSF model has been defined as schools receiving a fixed-dollar amount for each student, for example $6,000 per pupil, with additional increments of, say, $1,000 if the student is ELL, and those dollars are distributed to schools based on the actual students they enroll. Typically, WSF models permit school leaders some flexibility to purchase staff and other resources; dollars are allocated to schools based on their counts of students and student types.

Some reports indicate that systems move to a WSF model to address equity (Ladd 2008; Miles and Roza 2006). Indeed, the literature suggests that traditional staffing-based models may not deploy funds equitably across schools for reasons such as school size factors, special program allocations, non-formulaic allocations, and uneven staff salaries (Rose and Weston 2013; Miles and Roza 2006; Roza and Hill 2004). Other reasons cited for the shift to WSF are to improve transparency in school funding and permit school-level flexibility in resource use (Levin et al. 2013; Miles and Roza 2006; Miles 2013).

Several concerns around the potential impacts of WSF have been raised in the literature. Some concerns center on schools’ or specialized programs’ possible loss of resources in a WSF reallocation (McCoy 2016; Mandell 2016). Other concerns center on the risk that principals granted spending flexibility will direct funds in ways that benefit some chosen few (Before It’s News 2016). To date, the lack of research on WSF implementation has made it difficult to evaluate the pervasiveness of the conditions and practices that underlie such concerns.

WSF is generally credited as originating in Edmonton, Canada, in 1976 (Brewer and Picus 2014). Implementation of WSF originated in the U.S. with Seattle Public Schools in 1997
(Cooper et al. 2006). As of 2018, a total of 27 U.S. districts use WSF (Levin et al. 2019) with three more now added to that list. WSF districts and those considering the model are some of our nation’s largest districts, serving approximately 10% of U.S. K-12 students. As the number of districts using WSF continues to grow, understanding how these districts are using this allocation mechanism is important to examining how systems can address pressing education challenges such as equity and improved outcomes.

Despite increasing attention to and more than two decades of growth in the WSF model, we know little about both the formula details and how many WSF districts are using this allocation mechanism (Birdsall 2017). Most research in this area has focused on a single objective of WSF in one district or a small group of districts. Equity studies by Miles and Roza (2006) and Chambers (2008) each studied two WSF districts, and Baker (2012) examined one WSF district and four non-WSF districts in Texas. Ouchi (2006) compared outcomes for six districts (only three used WSF), Baker and Elmer (2009) examined outcomes in two WSF districts, and Birdsall (2017) studied one WSF district (Houston ISD). Even research on school-level flexibilities focused on a small number of WSF districts. For instance, Vasudeva et al. (2009) studied Oakland USD; Levin (2013) studied one state, Hawaii, and considered one district; and Cooper et al. (2006) studied three WSF districts. While these previous studies have yielded important findings for the field, including evidence of improved equity (Miles and Roza 2006; Chambers et al. 2008) and promising evidence on outcomes (Birdsall 2017; Ouchi 2006), their size and scope limit conclusions—or even generalizations—about the model.

1. See list in Levin et al. plus districts in New Orleans, Puerto Rico and Clark County, Nevada.

2. As of this drafting, our Student-Based Allocation Network comprises 45 districts using or considering WSF.

3. In 1997 there was one WSF district serving 47,629 students; in 2000, three WSF districts serving 356,254 students; in 2010, thirteen districts serving 1.8 million students; and in 2020, over thirty districts serving 5.1 million students.
Leaders implementing WSF or operating WSF districts may be hindered by the limited research about what constitutes “typical” WSF implementation or what peer districts are doing and what has been tried elsewhere. In fact, the field has not yet developed a common vocabulary about WSF implementation or the categories of features that may be present among districts. This lack of a universal lexicon complicates practitioner efforts toward collective learning and collaboration, as well as research.

This landscape study is designed as a first step in a broader research agenda that will attempt to explore the scope and range of WSF implementation in U.S. school districts in a single year, 2017-18. To begin exploration of the potential benefits and drawbacks of WSF, this study documents and analyzes implementation variations across existing WSF sites, particularly as they relate to fundamental areas such as equity, transparency, and flexibility. Beyond building the research base on WSF, the study is designed to inform policymaker and practitioner understanding of WSF as practiced in U.S. school districts, particularly those currently engaged in, or considering, WSF.

RESEARCH DESIGN

To explore how WSF is implemented in districts, we investigate in this paper four research questions around implementation features and how they compare across systems:

1. What do districts publicly report as the rationales for implementing WSF?
2. What are the WSF formula details, including the share of district dollars driven through the WSF formula as well as the types, magnitudes, and dollar amounts of base allocations and student weights?
3. What are the non-formula features that affect allocation, including formula exemptions and special considerations, such as the use of actual versus average salaries?

4. To what extent does implementation align with two of the commonly cited rationales for adopting WSF: transparency (in district-to-school allocation) and flexibility (including school control of staffing, salaries, and other financial decisions)?

*Study Districts and Data Collection/Analysis*

This study is designed as a snapshot in time to capture all qualifying districts using WSF in the 2017-18 school year. Identifying the full landscape of districts using WSF was an enormous challenge, as no reliable tracking of district allocation models exists anywhere. We began with a review of literature and public documentation that surfaced an initial set of 38 school districts that self-identified or had been cited in literature or by peers as using WSF at any point in time (Koteskey 2016; Koteskey and Snell 2017). District materials used various terms to describe their allocation approaches, such as “Weighted Student Funding,” “Weighted Student Formula,” “Student Based Allocation,” “Student Based Budgeting,” “School Based Budgeting,” “Per Pupil Formula,” and “Fair Student Funding.” To be considered for inclusion in this study, districts had to have been using WSF in the 2017-2018 school year using a common definition of WSF. To establish a common definition, we drew on work from Miles and Roza (2006) and Ladd (2008) to identify two essential criteria for consideration as a WSF study district:

1. Some portion of district funds are allocated to schools on a per-pupil basis, and must include funds for staffing, and
2. The funding formula expends different per-student amounts based on weighted student-identified characteristics.

This is not a universally accepted definition of WSF. We have seen districts cited as WSF that do not meet these criteria, such as in the Brookings Institution’s 2016 Education Choice and Competition Index (which doesn’t offer a specific definition used). The lack of common definition around what constitutes WSF highlights the difficulty of comparing WSF systems.

After examination of district financial documents and follow-up phone calls, 19 districts, shown in Table 1 below, were determined to have met the study eligibility criteria.4

<TABLE 1>

Two unusual cases include the Springfield Empowerment Zone (representing an autonomous district running 11 schools that are a subset of the Springfield, Massachusetts, school system) and Hawaii (which is considered both an LEA and a state agency). Both met the criteria established here and are included in the study.5

Data collection began with exploration of all publicly available district materials, including district websites, expenditure reports, external district communications, press releases, school board meeting minutes and supporting materials, district officials’ media statements, state financial data files, and strategic plans. In addition, we initiated email or phone exchanges with study district finance officials, as needed, to fill any gaps in data and/or obtain qualitative information. Unless otherwise specified, all financial data are from fiscal year 2018. All figures

4. Districts excluded were those in Oakland, Hartford, Cincinnati, and Seattle (because they no longer used WSF as of 2017-18); New Haven, Los Angeles, Philadelphia, Rochester, and St. Paul (where leaders had considered or piloted WSF at one point but did not implement it); Atlanta and Shelby Co. (where WSF was adopted the year after 2017-18); Hamilton, Adams 12, Clark Co., Lawrence, and Stockton (where document review did not find evidence of use in 2017-18 or application to funds for staffing); Falcon 49 (where the formula is used to disseminate funds to regions of the district, but not to schools); and Poudre and Santa Fe (because leaders were nonresponsive to efforts to determine if WSF was used in 2017-18).

5. While study districts were not selected for demographic comparability, all are considered by NCES as “city: large” or “suburban: large.”
are rounded to the nearest hundredth. A comprehensive list of all data points collected, including all weights and tiers for each study district, can be provided by the author on request.

*Study Relies on Use of Existing Metrics or Standardized Figures and Descriptive Analysis*

In all, we collected more than 70 data points across the 19 WSF study districts. We used these data to develop descriptive summaries and to compute two key metrics to enable accurate comparison of WSF formula features and implementation across sites. The first metric, %SBA, captures the portion of total district funds included in the weighted student formula (Roza and Edmonds 2014).\(^6\) The second metric standardizes each site’s figures to a base of 1.0 (representing the lowest possible allocation per pupil in a given district), by taking the lowest dollar allocation possible across all grades and student types and making that the base. Weights are then standardized to that newly defined base allocation (1.0). This standardization involved subtracting the base from any defined student allocation and dividing that difference by the base to establish a standardized weight above that lowest possible base.

This standardization is needed because there are no universal definitions for myriad formula features across sites. For example, some districts report a single base for all students; others use a variety of _bases_ by grade level, which we convert in this analysis into a grade-level _weight_. Some establish a base, but then only fund portions of that base (say, 80 percent).

\(^6\) We only include expenditures for pre-K programs and charter schools in a district’s %SBA if those programs and schools received funds under the WSF formula. See Figure 2 for whether charters and pre-K programs are included in the WSF formula. As is commonly accepted practice for defining current district expenditures (and consistent with NCES practice), excluded from %SBA analysis are district expenditures on long-term projects not directly related to annual current operating expenses, including debt service, capital projects, transfers, community service funds, and adult education. We did not create a comparable %SBA metric or base amount as a percent of PPE for Springfield Empowerment Zone as it is a subset of district schools.
Additionally, some report weights as a coefficient or percentage of the base (e.g., 0.20 or 20 percent) while others report in dollar amounts (e.g., $325).

Further, sites also use different vernacular to define their student types (e.g., “at risk” versus “low performing”). In each case, we categorize the weight according to the specific characteristic used to identify the students. For example, because both Boston and Baltimore define “at risk” in relation to low academic performance, we include that “at risk” category in our analysis of low academic performance rather than as a separate and unique student type. In Houston, we characterize as a poverty weight the district’s “poverty/at risk” category, which includes a complex set of qualifiers related to both poverty and other “at-risk” attributes, several of which are related to poverty. Once we categorize weights within each study district, we then summarize the types and ranges of student weights across study districts.

We use descriptive analysis to investigate other common non-formula features, such as the use of salary-averaging, where each school’s allocation is adjusted so it is not affected by the school’s actual salaries that deviate from the district average (Miles and Roza 2006). Another common non-formula feature documented in this analysis is study districts’ use of school-based weights (weights allocated not on the basis of student characteristics but rather on the basis of school characteristics).

We also use descriptive analysis to explore the extent to which site implementation reflects two commonly cited rationales for implementing WSF: transparency and flexibility. Here, we group districts by common features, such as the public online reporting of formulas and commonly identified school-level flexibilities. Districts were deemed “transparent” if they posted online documentation on (1) the base allocation; (2) which students were weighted; and (3) by how much students were weighted.
The literature does not cite “typical” school leader spending flexibilities in WSF. Therefore, we select a range of school leader spending flexibilities that align with common elements in school spending, such as those around labor. These flexibilities include leaders’ authority to hire positions flexibly; give bonuses/stipends; opt out of centralized functions; carry over funds across school years; and contract with outside providers.

FINDINGS

Most-Cited Rationales for Implementing WSF Are “Equity” and “Flexibility”

We find that “equity” (cited by 17 of 19 districts, or 89 percent) and “flexibility” (cited by 15 of 19 districts, or 79 percent) are study districts’ most frequently cited rationales for implementing WSF, confirming prior research (Chambers et al. 2008). “Transparency” was cited by 9 of 19 districts (47 percent). Other cited rationales include “community engagement” and “school empowerment.” No study district cited school “choice” as a rationale for implementation.

Districts Tend to Allocate Less Than Half of Their Total Dollars Through Their WSF Formulas

Although all 19 WSF study districts are defined as “weighted-student formula districts,” all but one allot 50 percent or fewer of their total district dollars via the weighted student formula, as shown in Figure 2. The range runs from a low of 21 percent in Prince George’s County (just one-fifth of total district resources), to a high of 89 percent in Orleans Parish. Most systems allot between 30 percent and 50 percent of their total district funds through the formula. This suggests
that many districts are utilizing a hybrid of the centralized and decentralized student-based approaches described in Figure 1, where a substantial portion of funds remain under district control and are not included in the weighted student formula.

Some districts include charter school students and related dollars in the WSF formula; others do not. The district in Orleans Parish, for its part, is an outlier system when it comes to charter schools. In 2005, in the wake of Hurricane Katrina, the primary mode of education in Orleans Parish became charter schools (O’Neil and Thukral 2010). Due to recent governance changes, Orleans Parish School Board now oversees many of the charter schools (which far outnumber traditional public schools) and allocates funds to the charter schools for which it serves as the LEA via the same formula employed with the traditional public schools.

<FIGURE 2>

Variation Is the Norm in Implementation and Formula Details Across WSF Districts

While we find some minimal consistency in what districts choose to weight, how much weight each characteristic is given varies widely across study districts. Additionally, while study districts may choose to weight the same student types, they vary in how they define those types. Figure 3 illustrates this variation in the types and number of weights used. Variation in formulas and implementation patterns, it seems, is the norm.

More than half of the 19 study districts include weights for grade level (89 percent), ELL and special education students (63 percent), and students in families living in poverty (57 percent). Six of the 19 districts (32 percent) weight students with low academic performance; only two (11 percent) weight for high academic performance. Additionally, five of the 19
districts (26 percent) weight students identified as gifted. Together with the high-performance weight, this suggests that seven of the 19 districts (37 percent) allocated additional increments to highly capable students.

Weights used less frequently include those for vocational students (weighted by four of the 19 districts, or 21 percent), students with interrupted formal education (weighted by three of the 19 districts, or 16 percent), and students who are homeless (weighted by one of the 19 districts, or 5 percent).

<FIGURE 3>

After norming all study districts’ formulas to a base allocation weight and dollar amount, we find formula base amounts vary by district from $3,300 to more than $7,000, as shown in Table 2. Base amounts are allocated for every student, regardless of student characteristics and/or related weights. At a minimum, every school receives the base amount for each student enrolled; additional dollars are added on top of the base according to the associated formula weight.

<TABLE 2>

Districts vary substantially in not only the dollar value of their base but in its share of total per-pupil expenditure (PPE). The lowest dollar-value base and lowest percentage share of total PPE is in the Prince George’s County district, where the base is 20 percent of total PPE. The highest dollar-value base and highest percentage share of total PPE is in the Orleans Parish district, where the base is 69 percent of total PPE.

Fundamentally, in attempting to allocate dollars based on student need, districts face a practical choice: Enrich their base or create an explicit weight. For example, Baltimore officials report that poverty is so widespread that the district has chosen to boost its base, driving increased allocations systemwide. Additionally, districts that do not weight a certain student
type, such as students who are ELL, may fund services for such students in other ways outside the formula altogether.

Interestingly, while all but two districts employ grade-level weights, districts are not consistent in their choices of which grades need boosting. As Table 3 shows, seven districts give their highest grade-level weight to elementary students, four give their highest weight to middle schoolers, and four give their highest weight to high schoolers, with the remaining districts using a uniform weight across some combination of grade bands. Boston is the only district with a weight for pre-K students. At .50, this pre-K weight is the highest weight given to any grade across all study districts. The differing choices about which school level to weight the highest seems to suggest that districts view student need by grade level quite differently.

<TABLE 3>

As shown in Figure 4, weighting ELL students (also referred to as English learners or EL students or English-as-a-second-language or ESL students) is also common, with 12 of 19 districts (63 percent) including ELL students in their formulas. Of the 12 study districts, seven (58 percent) employ a multi-level weight of two or more “tiers” to allocate higher increments to students considered to have more significant needs. The tiers are based on a student’s level of English proficiency; the lower the level, the higher the weight. Additionally, in districts such as those in Boston, Cleveland, and New York City, grade levels are factored into the tiers.

<FIGURE 4>

This tiered approach contributes to the wide range of ELL weights. The lowest tier weight is in Boston, where students with relatively high English proficiency levels are weighted at 0.02, or $98.40. The highest tier weight is in Prince George’s County at 0.72, or $2,376. This top-range weight represents 36 times the lowest weight.
Of the 12 of 19 districts (63 percent) that weight special education, nine use a multi-level weight of two or more “tiers” to allocate larger increments for students considered to have more significant needs. Districts base their tiers on a variety of factors. Some, like San Francisco, weight students on the severity of their disability, regardless of what disability they have. Others, such as Newark and Boston, attach weights to specific disability types (such as autism) in addition to disability severity. Both the Newark and Boston districts grant their highest weight to students with severe developmental delays.

Because of this tiered approach, as with the ELL tiers cited above, the range of special education weights is very large. Shown in Table 4, the lowest weight is in San Francisco, where every special education student is given a minimum weight of 0.01, or $36.63. The highest weight is in Newark, where students with severe developmental delays are given a weight of 9.64, or $44,353.64. This top-range weight represents 964 times the lowest weight.

The 11 of 19 districts (57 percent) that weight for students in families living in poverty rely on more consistent (and generally modest) weights when compared with those for special education and ELL. Only two of these 11 districts (18 percent) use a tier for their poverty weights.

As shown in Figure 5, weights vary from .02 to .54. The lowest poverty weight, in Denver, is just .02 or $81.02 per student in poverty. The highest poverty weight, in Springfield Empowerment Zone, is .54 or $3,992.22. This highest rate is 27 times the lowest rate.

Districts generally qualify students for the poverty weight as those participating in the federal free or reduced-price lunch (FRL) program, though this method of identification is
becoming less standardized as direct certification expands (Chingos 2016). Denver weights students in families living in poverty in two ways: students who qualify for FRL via direct certification (which carries a .02 weight), and all FRL students (which carries a .12-.13 weight, depending on grade level).

As mentioned earlier, while Baltimore is not among the 11 districts that weight for poverty, one Baltimore official reports that they chose to meet student needs related to widespread poverty by enriching their base rather than layering on funds with a poverty weight.

Some districts weight for academic performance. Six of 19 study districts (32 percent) include poor academic performance (based on prior-year assessment) as a student weight, with weights from .01 to .50. Two of the 19 districts (11 percent) weight for high academic performance (weight range between .15-.31), such that the weight operates more as a reward than as a mechanism to drive more resources to higher-needs students. District criteria for these weights vary and may include a student’s performance level on a test or other indicators of a student’s below-grade-level performance.7

Beyond the previously discussed weights for grade level, ELL, special education, poverty, and academic performance, less commonly used student weights likely reflect districts’ local context. Five of the 19 districts (26 percent) weight students identified as academically gifted (between .01-.27); four of the 19 (21 percent) weight career and technical education students (between .05-1.0); three of the 19 (16 percent) weight students with interrupted formal

7. For example, in Baltimore a student is weighted an additional 0.15 if he/she scores at a basic level on state assessments (low academic weight) or at an advanced level (high academic weight). A Baltimore student receives additional funding for scoring at a basic level on the state assessment (0.15 weight) and additional funding on top of that (0.10 weight) if that student is at risk of dropping out of high school. As noted in the methodology, while some districts use a weight for “at risk” students, those weights are disaggregated into the appropriate specific student characteristics. Boston, for example, lists in its published formula a weight for students who are at risk. In practice, Boston allocates additional funds to students who are two years below grade level in math or English language arts (providing a 0.17 weight to such 9th grade students and a 0.04 weight to such 10th grade students).
education (between .12-.94), with one district (Houston) weighting students who are homeless (.05) and students who are refugees (.05).

**Non-Formula Features Reflect Districts’ Past Spending History and Context**

Small school subsidies, magnet allocations, and foundation amounts are common examples of non-formula features used by several districts. While these allocations may create uneven per-pupil allocations across schools, 12 of the 19 districts in the study (63 percent) utilize some small school and/or foundational subsidy that is designed to cover the costs for a principal, clerk, or other per-school administrative costs. Some districts make additional allocations driven by school characteristics versus student characteristics. Some districts describe these allocations as “weights,” despite being connected to characteristics of schools or programs, not students.

For example, Denver grants additional per-pupil funding based on overall school performance, as calculated in the district’s ‘School Performance Framework’ reports (Denver Public Schools 2017). These reports draw on each school’s aggregated student performance on designated academic indicators, not by specific student type or characteristic. The total school-performance dollars allocated to a school are based on that school’s total enrollment, not its enrollment of specific student types.

All study districts exclude at least some schools from the WSF formula. Reasons vary, but excluded schools are most typically charter schools; schools that serve special populations of students (such as alternative education or schools for blind or deaf children); and early-childhood or pre-K centers.
In addition, most districts still rely on salary averaging, even after shifting to WSF. In this practice, schools are charged for their teaching staff based on average salaries, not the actual salaries of teachers in the building. In the year studied, 15 of 19 districts (79 percent) use a districtwide average salary for all schools for budgeting and recording school spending. One district, New York City, uses prior-year schoolwide average salaries.

The remaining three study districts use districtwide average salary for most, but not all, schools. Districts in Boston and Denver allow roughly one-third of their schools\(^8\) to budget and account for spending based on actual salaries. In both districts, if actual salaries are below the districtwide average, school leaders may retain and use any remaining funds at their discretion. Similarly, where salaries exceed the districtwide average, the school must make financial tradeoffs to cover those actual costs. The district in Orleans Parish budgets on actual salaries for roughly one-quarter of its schools.

*Exploring Transparency and Flexibility*

Despite transparency being a commonly cited reason for implementing WSF, few districts post their complete formula online. Only 37 percent of WSF study districts (seven of 19) publish their formula base and weights (or comparable documentation thereof) online.\(^9\) Some districts, such as

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8. This flexibility is only authorized for a subset of more autonomous schools. This includes “innovation schools” in Boston and Denver that can seek autonomies in areas including curriculum, instruction, and assessment; schedule and calendar; staffing; professional development; district and/or state policies and procedures (including governance, enrollment, or others); and budget, including use of actual salaries. In Boston, three other types of more autonomous schools are also allowed to budget on actual salaries: district-union partnership pilot schools, state-approved in-district charter schools (Horace Mann schools), and state-approved turnaround schools.

9. At publication this number had increased to 15 districts. It is possible that the sharing of early findings with study districts prompted greater transparency.
those in Indianapolis and Boston, go beyond to provide school-level budget and districtwide calculations that include the number of students for each weighted student type/characteristic.

Interestingly, district interviews suggest that some districts view the audience for transparency as internal (within the district) rather than external (e.g., the community). These districts see themselves as transparent because their principals had access to formula information and allocations. Indeed, for some, the push for transparency may have come from those inside the district who questioned past allocations and/or budget practices.

As to flexibility, we find that districts do report some school-level flexibilities in staffing and other financial decisions, but that flexibility has limits (particularly around compensation) in all 19 WSF study districts. As to staffing, many WSF districts are still subject to local or state-imposed staffing minimums, such as requiring each school to have a principal and/or that a set student/teacher ratio be met in each grade level or subject. But as Table 5 indicates, every study district affords school leaders some staffing flexibility once such minimums are met.

<TABLE 5>

Also indicated in Table 5, base pay and benefits are regulated in all but one district, including those in right-to-work states.10 (Five of the 19 study districts are in right-to-work states.) That said, principals in 16 of the 19 districts (84 percent) have the flexibility to use their WSF funds to award stipends to staff who take on additional work. Principals in six of the 19 study districts (32 percent) can use WSF funds to award non-workload-related bonuses.

Interestingly, most districts allow school leaders to award contracts (14 of the 19 WSF study districts or 74 percent). Typically, school leaders in these 14 districts are permitted to contract with outside providers if a contract falls under a dollar maximum (such as the $25,000

10. Orleans Parish School Board does not require that charter schools follow the district salary schedule.
limit in Douglas County and Hawaii) and if prescribed steps have been followed, such as using a competitive bid process. In Indianapolis, for example, principals are permitted to purchase instructional supplements from outside providers provided these items were listed in the school’s approved budget.

Eight of the 19 study districts (42 percent) permit the carry-over of funds from one school year to the next, but seven of the eight that allow the carry-over still impose some restrictions. For example, districts in Houston, Hawaii, New York City, and Denver cap the carry-over amount principals may retain. Douglas County and Indianapolis schools may not carry over funds earmarked for personnel.

Nine of the 19 districts (47 percent) allow at least some schools to opt out of centralized services. Boston and Denver allow more autonomous schools to opt out of some services and, in turn, receive funds back from the district for those services.

DISCUSSION

Lack of a Common Lexicon May Complicate Research and Spread of Practice Around WSF

Undoubtedly, the data show enormous variation in implementation details. Which student types are weighted and by how much; how those student types are defined and how students are counted for allocation purposes; what share of total district funds are allocated through the WSF formula; whether (and the degree to which) schools are excluded from the formula; the degree to which districts are transparent about their formulas; and the types and degrees of flexibilities
school leaders have in a WSF system all vary. In other words, we find that variability in WSF components and implementation is the norm among study districts.

Further, the lack of a common language to describe WSF components makes it more difficult to draw comparisons across districts. What constitutes even fundamental WSF elements like a “base” allocation or a “student weight” versus a “school weight” is, at present, subject to local definition and practice. Common definitions for the broad goals that provide many districts a rationale for implementing WSF, such as flexibility and transparency, are also elusive. Ultimately, this absence of standard definitions complicates both research and practice around WSF, making it more difficult for researchers to connect the dots accurately across systems and inhibiting districts’ efforts to learn from one another. It also complicates training, making it difficult to develop common, shareable curricula for district and school leaders on these topics.

That said, this lack of a common lexicon is not surprising. Standard accounting and budgeting terminology, norms, and tools in education (e.g., chart of accounts, related software, and traditional federal reporting requirements) all have revolved around defining district spending by object and function. They are not designed around framing spending by student and school, as is the basis in WSF. The traditional finance apparatus that virtually all districts and their staff have used for years does not map neatly onto a newer WSF frame. As WSF grows, so will the need for a new set of budgeting and accounting norms and common terminology.

*Hybrid, Homegrown Approaches: A Practical Transition from Old to New Allocation Strategies*

Given that most districts have been steeped in traditional allocation approaches far longer than they have been in WSF, perhaps it is also unsurprising that most study districts are allocating...
more than half of their resources the way they always have. Most allot only one-third to one-half of their total district funds through their WSF formulas. Rather than a full WSF implementation, this pattern suggests these districts are essentially following a hybrid approach, whereby the district deploys a portion of funds to schools with flexibility while holding back a sizeable amount of funds for traditional, centralized district control.

In other words, most systems are cobbling together old and new allocation approaches. This could be interpreted as a practical transitional phase of sorts, bridging the move from old to new allocation strategies. As implemented, WSF appears to be a significant step, but still a half-step, toward driving spending decisions to the school level.

Our interviews with study districts suggest that these formulas are largely homegrown, rooted in and shaped by local context, observed in the district-by-district variability in everything from the language used to express formula features to the way the formulas themselves work. Formula details reflect local leaders’ choices and tradeoffs, replete with caveats and adjustments attuned to a locale’s policy framework, politics, and historical allocation practices. This homegrown approach seems to include variable decisions around which student types are weighted, among other formula implementation details, and what offsets are needed to protect prior allocations in some schools. We can hypothesize that weights may differ due to the prevalence (or lack of prevalence) of certain student types in one study district versus another. For example, a district with proportionally few ELL students may choose to weight those students more, or less, than a district with high levels of ELL student enrollment.

Often, it appears formulas are more a reflection of historic allocations than any deliberate strategy for student learning, student performance, or other student-related priorities. Take, for instance, weights for grade bands including elementary, middle, and high school. We might
expect to see some consistency across locales in judgements about which grade band requires more funding or has higher student need. Yet, interestingly, study districts are roughly evenly divided among allocating their highest grade-level weight to elementary, middle, and high school grades. In other words, the homegrown nature of districts’ WSF formulas is reflected even in something as basic as prioritizing grade levels for extra funding.

As with the variability in WSF definitions, this homegrown approach seems unsurprising when we consider the mismatch between WSF and districts’ historical ways of accounting and conceptualizing spending. An approach informed by local context is especially unsurprising given an initial finding from our forthcoming research: Many of the very people charged with implementing WSF in districts report that they have not received any training in WSF.

Given that for the time period studied the pool of districts using WSF included only 19 sites, it was difficult to confirm trends that corresponded to contextual differences across the set. That said, an “eye-ball” approach offers some places to look for patterns going forward. For instance, districts with higher per-pupil revenues appeared to have more (or more nuanced) weights, possibly suggesting that the additional funding allowed for more allocation differentiation. And, again while not definitive in any way, those districts where leaders emphasized “equity” as the primary driver of WSF appeared to put a higher portion of their funds into their formula. Finally, we observe some regional influences that might play out going forward. For instance, while 75 percent of WSF districts outside Colorado used weights for students with disabilities, none of the three Colorado districts did. Hopefully, future research will better understand the relationship between contextual factors and the nuance of different implementation models.
Taken as a whole, this evolutionary, incremental approach reflects both the rootedness of
the system that predated WSF implementation and the existing barriers that can inhibit a more
wholesale shift in district allocation practices, such as provisions in collectively bargained labor
contracts or historic program and/or school allocations protected by stakeholders in those
programs or schools.

WSF Districts Pursuing Equity, Flexibility, and Transparency (Versus Choice)

As prior research suggests, school districts implement WSF for several reasons, the most
prominent of which are equity, site-level flexibility in exchange for accountability, and
transparency (Chambers et al. 2008). Notably, while WSF recently has been connected to school
choice by some policymakers and in the media, we find no evidence of a study district citing
school choice as a rationale for implementing WSF (Klein 2018).

Shift from Average to Actual Salaries Proves Especially Challenging

While it is beyond the scope of this study to examine whether equity was achieved in study
district formulas and implementation, it appears that certain aspects of the WSF formulas, as
implemented, ultimately could challenge equitable allocation. (Our forthcoming research will
explore equity in allocations across schools more comprehensively.) Our finding in this paper
around the predominant use of average versus actual salaries to drive allocation of funds for staff
is enough to state that equity gains will be constrained should this pattern continue. Average
salaries tend to not accurately reflect the actual cost of labor inside a school building. Prior
research has shown that the most senior, experienced, and highest-paid teachers tend to be clustered in more affluent schools with the smallest portion of poor or minority students (Lankford, Loeb, and Wyckoff 2002). The least experienced, lowest-paid teachers tend to be assigned to struggling, generally poorer, schools (Clotfelter, Ladd, and Vigdor 2005). Thus, using average salaries can inhibit attempts to remedy spending inequities among poorer and wealthier schools.

Boston, one of our 19 WSF study districts, offers an example of how this can unfold in practice. More autonomous Boston schools have the choice to use average or actual salaries. A Boston district official described to us that school leaders understand if and how they can benefit from using actual versus average salaries. In other words, those who stand to collect more funds by switching to actual salaries tend to do so. Schools with higher-salary teachers (where the school’s average salary is higher than the district’s) choose to continue operating their budgets on average salaries because the district effectively subsidizes their more-costly teaching force. Schools with lower-salary teachers (where the school’s average salary is lower than the district’s) tend to switch to actual salaries. By budgeting on actual salaries, the school can keep the “savings” it earns by employing lower-paid teachers than the district average.

*Are Entrenched Practices Slowing the Shift to WSF?*

Study districts seem to overlay their weighted formula on top of ingrained, historic allocations—such as subsidies for small schools, foundational subsidies, and the like. This suggests the magnitude of the challenge involved in significantly shifting dollars among schools. Districts
appear to struggle with shifting dollars from one school to another, and thus create formula
workarounds to protect some allocations.

Additionally, our findings suggest that while districts are granting schools new
flexibilities in resource use, they are also bumping up against longstanding arrangements for
things like base compensation, even in right-to-work states where such issues (at least
theoretically) would be expected to be less fixed than in places where collectively bargained
labor contracts are the norm. Further, district arrangements for centrally managed services limit
the portion of dollars given over to schools. Ultimately, these conditions impact the total level of
flexibility school leaders gain when switching to use a WSF formula.

To be clear, we find that WSF implementation does signal a fundamental shift in that
WSF study districts are allocating dollars in terms of students—regardless of what percentage of
their systems’ total dollars are allocated as such. Weighted student formulas are still relatively
new. Despite billions of dollars flowing through these formulas, we observe that there is no
standard blueprint for implementing this new allocation model.

**CONCLUSION AND NEXT STEPS**

*Opportunities for Future Research and Practical Use of Information*

We find significant variation in WSF formula design and implementation features and patterns
across the 19 WSF study districts, making it difficult to analyze WSF as a single “model.” This
points to the need for more universal definitions across myriad implementation features (from
what constitutes “actual” salaries to what constitutes “base” allocations) to support both research
and practice. Having a common lexicon, materials, and training for WSF features and practices
could enable understanding across school system leaders, many of whom make decisions each year around revising their formulas and implementation. This common lexicon would enable district leaders to draw on collective learning and comparisons from peer districts rather than leaving each system to iterate in isolation.

This landscape analysis begins to fill a research gap in understanding WSF implementation and provides a solid foundation for future research. But many questions outside the scope of this study are important for future research to investigate. While we can see that context is affecting how WSF is implemented, understanding how context works and what patterns it produces are areas warranting additional study. Further research should also include a deeper analysis of the extent to which WSF is helping systems meet commonly cited core goals of equity, flexibility, and transparency. Our ongoing research will examine whether WSF districts are indeed making progress on their goal of more equitable allocations across schools.

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REFERENCES

Baker, Bruce and Douglas R. Elmer. 2009. “The Politics of Off-the-Shelf School Finance Reform.” Educational Policy 23 (1): 66-105.

Baker, Bruce. 2012. “Re-arranging deck chairs in Dallas: Contextual constraints on within district resource allocation in large urban Texas school districts.” Journal of Education Finance 37 (3): 287-315.

Before It’s News. 2016. “Indianapolis Looks to Student-Based Budgeting to Fix School Funding Gaps.” Before Its News, May 23. Accessed November 16. https://beforeitsnews.com/v3/libertarian/2016/2643421.html

Birdsall, Chris. 2017. “The Synthetic Control Method for Comparative Case Studies: An Application Estimating the Effect of Managerial Discretion Under Performance Management.” International Public Management Journal 20 (1): 49-77.

Brewer, Dominic J. and Lawrence O. Picus. 2014. Encyclopedia of Education Economics and Finance. SAGE Publications, Inc.

Brookings Institution. 2016. The Education Choice and Competition Index. Accessed at https://www.brookings.edu/interactives/the-2016-education-choice-and-competition-index/

Chambers, Jay, Larisa Shambaugh, Jesse Levin, Mari Muraki, and Lindsay Poland. 2008. “A Tale of Two Districts: A Comparative Study of Student-Based Funding and School-Based Decision Making in San Francisco and Oakland Unified School Districts.” Washington, DC: American Institutes for Research.

Chingos, Matthew M. 2016. “No More Free Lunch for Education Policymakers and Researchers.” Evidence Speaks 1 (20), June 30. Accessed November 16. https://www.brookings.edu/wp-content/uploads/2016/06/free-and-reduced-lunch3.pdf

Clotfelter, Charles T., Helen F. Ladd, and Jacob Vigdor. 2005. “Who Teaches Whom? Race and the Distribution of Novice Teachers.” Economics of Education Review 24 (4): 377-92.

Cooper, Bruce S., Timothy R. DeRoche, William G. Ouchi, Lydia G. Segal, and Carolyn Brown. 2006. “Weighted Student Formula: Putting Funds Where They Count in Education Reform.” Education Working Paper Archive. Department of Education Reform, University of Arkansas, June 5. https://www.researchgate.net/publication/234604844_Weighted_Student_Formula_Putting_Funds_Where_They_Count_in_Education_Reform

Denver Public Schools Financial Services. 2017. Denver Public Schools Budget Guidance Manual. Denver, CO: Denver Public Schools.

Hawaii State Data Center Research and Economic Analysis Division Department of Business, Economic Development & Tourism, State of Hawaii. September 2013. “Urban and Rural Areas in the State of Hawaii, by County.” Accessed August 7. http://files.hawaii.gov/dbedt/census/Census_2010/Other/2010urban_rural_report.pdf

Klein, Alyson. 2018. “Just One District Seeks ESSA’s Weighted Student Funding Pilot for 2019-20.” Education Week, August 8. Accessed November 17. http://blogs.edweek.org/edweek/campaign-k-12/2018/08/weighted_student_funding_pilot_essa_arizona.html

Koteskey, Tyler. 2016. “Weighted Student Formula Brings School Funding Into 21st Century.” Reason Foundation, April 1. Accessed November 18. http://reason.org/news/show/weighted-student-formula-brings-sch
Koteskey, Tyler and Lisa Snell. 2017. “Trends in Student-Based Budgeting 2017.” Presented at the Allovue Future of Education Finance Summit, Baltimore, MD, July.

Ladd, Helen F. 2008. “Reflections on Equity, Adequacy, and Weighted Student Funding.” Education Finance and Policy 3 (4): 402-423.

Lankford, Hamilton, Susanna Loeb, and James Wyckoff. 2002. “Teacher Sorting and the Plight of Urban Schools: A Descriptive Analysis.” Educational Evaluation and Policy Analysis. 24 (1): 37-62.

Levin, Jesse, Karen Manship, Steve Hurlburt, Drew Atchison, Ryoko Yamaguchi, Adam Hall, and Stephanie Stullich. 2019. “Districts' Use of Weighted Student Funding Systems to Increase School Autonomy and Equity: Findings from a National Study.” Office of Planning, Evaluation and Policy Development, US Department of Education.

Levin, Jesse, Jay Chambers, Diana Epstein, Nick Mills, Mahala Archer, Antonia Wang, and Kevin Lane. 2013. “Evaluation of Hawaii’s Weighted Student Formula.” American Institutes for Research, 144.

Mandell, Joshua. 2016. “Budgeting for Conflict: Politics and Education Spending in New Haven.” Unpublished. Used as case study in Edunomics Lab District SBA Meeting, July 26. Accessed November 17. https://edunomicslab.org/sba-district-meeting/

McCoy, Dylan Peers. 2016. “Which Schools Get the Most Money?” Chalkbeat, May 15. Accessed November 18. https://www.chalkbeat.org/posts/in/2016/05/18/which-schools-get-the-most-money-indianapolis-public-schools-analysis-reveals-how-schools-compare/#.V4QVfK79FnQ

Miles, Karen Hawley. 2013. “Budgeting for Equity.” Education Resource Strategies Video Lessons. Accessed November 17. https://www.erstrategies.org/tap/video_lesson_budgeting_for_equity

Miles, Karen Hawley and Marguerite Roza. 2006. “Understanding Student-Weighted Allocation as a Means to Greater School Resource Equity.” Peabody Journal of Education 81 (3): 39-62.

O’Neil, Paul T. and Renita K. Thukral. 2010. “The Unique System of Charter Schools in New Orleans after Hurricane Katrina: Distinctive Structure, Familiar Challenges.” Loyola Journal of Public Interest Law 11 (2): 319-342.

Ouchi, William G. 2006. "Power to the Principals: Decentralization in Three Large School Districts." Organization Science 17 (2): 298-307.

Petko, Mike. 2005. “Weighted Student Formula (WSF): What Is It and How Does It Impact Educational Programs in Large Urban Districts?” Washington, DC: National Education Association. Accessed November 15. http://www.nea.org/assets/docs/HE/formula.pdf

Rose, Heather and Margaret Weston. 2013. “California School District Revenue and Student Poverty: Moving Toward a Weighted Pupil Funding Formula.” San Francisco, CA: Public Policy Institute of California.

Roza, Marguerite and Paul T. Hill. 2004. “How Within-District Spending Inequities Help Some Schools to Fail.” Brookings Papers on Education Policy 7: 201-227.

Roza, Marguerite and Cory Edmonds. 2014. “What portion of district funds follow students?” Washington, DC: Edunomics Lab at Georgetown University.

Vasudeva, Ash, Linda Darling-Hammond, Stephen Newton, and Kenneth Montgomery. 2009. Oakland Unified School District New Small Schools Initiative Evaluation. Stanford, CA: School Redesign Network at Stanford University.
FIGURE 1
How Schools Receive Resources: Three Allocation Approaches

Traditional Centralized Model:

- Federal $
- State $
- Local $
- District $

District $ • District allocates staff, programs, etc

Weighted Student Funding Model:

- Federal $
- State $
- Local $
- District $

District $ • District allocates dollars to...

Directly Funded Model:

- Federal $
- State $
- Local $
- District $
- School $

Fixed share of each school's dollars goes to...
| Study Site                                      | Year of Initial Implementation | District Size FY2018 |
|------------------------------------------------|-------------------------------|---------------------|
| Baltimore City Public Schools (Baltimore, MD)  | 2008                          | 80,592              |
| Boston Public Schools (Boston, MA)             | 2012                          | 55,594              |
| Chicago Public Schools (Chicago, IL)           | 2014                          | 361,314             |
| Cleveland Metropolitan School District (Cleveland, OH) | 2014                        | 39,111              |
| Denver Public Schools (Denver, CO)             | 2008                          | 92,331              |
| Douglas County School District (Castle Rock, CO) | 2009                        | 64,513              |
| Hawaii                                         | 2006                          | 169,537             |
| Houston Independent School District (Houston, TX) | 2000                        | 214,175             |
| Indianapolis Public Schools (Indianapolis, IN)  | 2017                          | 25,608              |
| Jefferson County Public Schools (Golden, CO)   | 2015                          | 81,180              |
| Metro Nashville Public Schools (Nashville, TN)  | 2014                          | 85,598              |
| Milwaukee Public Schools (Milwaukee WI)        | 2001                          | 77,746              |
| New York City Department of Education (New York City, NY) | 2007            | 1,135,334           |
| Newark Public Schools (Newark, NJ)             | 2011                          | 52,160              |
| Norwalk Public Schools (Norwalk, CT)           | 2016                          | 11,467              |
| Orleans Parish (New Orleans, LA)               | 2017                          | 26,800              |
| Prince George’s County Public Schools (Upper Marlboro, MD) | 2013       | 132,322             |
| San Francisco Unified School District (San Francisco, CA) | 2002       | 54,340              |
| Springfield Empowerment Zone (Springfield, MA) | 2016                          | 5,300               |

**FIGURE 2**

Just One District Allocates More Than 50 Percent of Total District Funds Via WSF

*Percent of district funds in WSF*  

| District                         | Percent of district funds in WSF |
|---------------------------------|----------------------------------|
| Baltimore                       | 31.6                             |
| Boston                          | 39.4                             |
| Cleveland                       | 43.6                             |
| Denver                          | 40.4                             |
| Douglas Co.                     | 45.0                             |
| Hawaii                          | 44.7                             |
| Houston                         | 39.9                             |
| Indianapolis                    | 42.7                             |
| Jefferson Co.                   | 40.4                             |
| Milwaukee Co.                   | 50.0                             |
| Nashville                       | 46.4                             |
| New York City                   | 24.8                             |
| Newark                         | 32.9                             |
| Norwalk                         | 39.7                             |
| Orleans Parish                  | 45.0                             |
| Prince George’s Co.             | 21.1                             |
| San Francisco                   | 36.2                             |

+includes preK #includes charters *FY2017
FIGURE 3

WSF Formulas Vary Across Districts in Both the Types and Number of Weights Used

| Grade level | English language learner | Special education | Poverty | Low academic performance | Gifted | Vocational | Interrupted formal education | High academic performance | Homeless | Refugee |
|-------------|--------------------------|-------------------|---------|--------------------------|--------|------------|--------------------------------|----------------------------|-----------|---------|
| Baltimore   | ●                        | ●                 | ●       | ●                        |        |            | ●                              |                            |           |         |
| Boston      | ● ● ●                    | ● ● ●             | ●       | ●                        | ● ●    |            |                                |                            |           |         |
| Chicago     | ●                        |                    | ●       | ●                        |        |            | ●                              |                            |           |         |
| Cleveland   | ● ● ●                    | ●                 |         | ●                        | ● ●    |            |                                |                            |           |         |
| Denver      |                          | ● ●               | ●       | ●                        |        |            | ●                              |                            |           |         |
| Douglas Co. | ●                        | ● ●               | ●       | ●                        | ● ●    |            |                                |                            |           |         |
| Hawaii      | ● ● ●                    | ●                 | ●       | ●                        |        |            | ●                              |                            |           |         |
| Houston     | ● ● ●                    | ● ●               | ●       | ●                        |        |            | ●                              |                            | ● ●       |         |
| Indianapolis| ●                        |                   | ●       | ●                        |        |            |                                |                            |           |         |
| Jefferson Co.| ●                       |                   | ●       | ●                        |        |            |                                |                            |           |         |
| Milwaukee   | ●                        |                   |         | ●                        |        |            |                                |                            |           |         |
| Nashville   | ● ● ●                    | ● ●               | ●       | ●                        |        |            | ●                              |                            |           |         |
| New York City| ● ● ●                   | ● ●               | ●       | ●                        |        |            | ●                              |                            | ● ●       |         |
| Newark      | ● ● ●                    |                   |         | ●                        |        |            |                                |                            |           |         |
| Norwalk     | ●                        |                   |         | ●                        |        |            |                                |                            |           |         |
| Orleans Parish| ● ● ●                  | ● ●               | ●       | ●                        |        |            |                                |                            |           |         |
| Prince George’s Co.| ● ●   |                   |         | ●                        |        |            |                                |                            |           |         |
| San Francisco| ● ● ●                  |                   |         | ●                        |        |            |                                |                            |           |         |
| Springfield Emp. Zn.| ● ● ●   |                   |         | ●                        |        |            |                                |                            |           |         |
| **Total Number of Districts Using** | 17 | 12 | 12 | 11 | 6 | 5 | 4 | 3 | 2 | 1 | 1 |
| **Percent of Districts Using** | 89 | 63 | 63 | 57 | 32 | 26 | 21 | 16 | 11 | 5 | 5 |
TABLE 2

Base Dollar Amounts Range From $3,300 Per Pupil to as High as $7,495 Per Pupil

| District                                      | Base Dollar Amount | Percent of total per pupil expenditure |
|-----------------------------------------------|--------------------|----------------------------------------|
| Baltimore City Public Schools                 | 5,416              | 28                                     |
| Boston Public Schools                         | 4,920              | 24                                     |
| Chicago Public Schools                        | 4,290              | 30                                     |
| Cleveland Metropolitan School District        | 4,860              | 26                                     |
| Denver Public Schools                         | 4,051              | 40                                     |
| Douglas County School District                | 3,700              | 42                                     |
| Hawaii                                        | 4,130              | 35                                     |
| Houston Independent School District           | 3,522              | 41                                     |
| Indianapolis Public Schools                   | 3,758              | 36                                     |
| Jefferson County Public Schools              | 4,515              | 44                                     |
| Milwaukee Public Schools                      | 3,312              | 23                                     |
| Metro Nashville Public Schools                | 4,425              | 37                                     |
| New York City Department of Education         | 4,084              | 23                                     |
| Newark Public Schools                         | 4,601              | 30                                     |
| Norwalk Public Schools                        | 6,218              | 40                                     |
| Orleans Parish                                | 7,495              | 69                                     |
| Prince George’s County Public Schools         | 3,300              | 20                                     |
| San Francisco Unified School District         | 3,663              | 26                                     |
| Springfield Empowerment Zone                  | -                  | -                                      |
| **Average:**                                  | **4,459**          | **34**                                 |

TABLE 3

Districts Do Not Agree on Which Grades Need the Most Boosting

| Highest grade-level weights for students grades pre-K-5 | Highest grade-level weights for students grades 6-8 | Highest grade-level weights for students grades 9-12 |
|--------------------------------------------------------|----------------------------------------------------|---------------------------------------------------|
| Boston                                                 | Douglas Co.                                        | Chicago                                           |
| Cleveland                                              | Jefferson Co.                                      | Houston                                           |
| Hawaii                                                 | New York City                                      | Orleans Parish                                    |
| Nashville                                              | Norwalk                                             | Springfield Emp. Zn.                              |
| Newark                                                 |                                                    |                                                   |
| Prince George’s Co.                                    |                                                    |                                                   |
| San Francisco                                          |                                                    |                                                   |
FIGURE 4

ELL Weights Range from .02 to .72: Highest Tier Is 36 Times the Lowest Tier

Table 4

Special Education Weights Range from .01 to 9.64: Highest Tier Is 964 Times the Lowest Tier

| District                  | Weight Range  | Number of Tiers |
|---------------------------|---------------|-----------------|
| Baltimore                 | .12           | 1               |
| Boston                    | .83 - 5.58    | 15              |
| Chicago                   | .40 - .87     | 4               |
| Cleveland                 | .15 - 1.63    | 5               |
| Houston                   | .15           | 1               |
| Indianapolis              | .23           | 1               |
| Nashville                 | .50 - 7.24    | 8               |
| New York City             | .12 - 2.09    | 5               |
| Newark                    | .73 - 9.64    | 16              |
| Orleans Parish            | .20 - 3.00    | 5               |
| San Francisco             | .01 - .03     | 2               |
| Springfield Emp. Zn.      | 2.56 - 2.71   | 2               |
FIGURE 5

Poverty Weights Range From .02 to .54: Highest Tier Is 27 Times the Lowest Tier

TABLE 5

School-Level Flexibility in WSF Districts

| School Leader Flexibility                                      | Number of Districts | Percent of Districts |
|----------------------------------------------------------------|---------------------|----------------------|
| **Staffing-related flexibility:**                               |                     |                      |
| Have some flexibility on number of staff to hire                | 19                  | 100                  |
| Have some flexibility on type of staff to hire                  | 19                  | 100                  |
| Can shift funds between those for staff and other items/areas  | 19                  | 100                  |
| **Compensation-related flexibility:**                           |                     |                      |
| Can choose base pay for hired teachers                          | 1                   | 5                    |
| Can choose benefits for hired teachers                          | 1                   | 5                    |
| Can pay stipends for additional workloads                       | 16                  | 84                   |
| Can provide non-workload-based bonuses                         | 6                   | 32                   |
| **Other financial flexibility:**                                |                     |                      |
| Can award contracts                                            | 14                  | 74                   |
| Can carry over funds from one year to next                      | 8                   | 42                   |
| Can opt out of centralized services (at least for some schools) | 9                   | 47                   |