Student-Based Budgeting
Getting to Equitable Funding in Pittsburgh Public Schools

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EXECUTIVE SUMMARY

PA has one of the most inequitable funding systems in the Nation.

- $18,000 difference in spending between highest and lowest spending districts in the state.
- PA one of only 3 states in the nation with no state funding formula for schools.

Pennsylvania is poised to implement a student driven, long term, predictable education funding system that equitably distributes state funding. A+ Schools has been part of the Campaign for Fair Education Funding advocating for this change.

Current budgeting practices are not transparent or equitable.

Smaller schools spend more and schools with higher percentages of low income students are not necessarily allocated more dollars (school size and configuration are greatest predictors of how PPS spends money).

PPS Spends 86% of total budget directly on students

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<th>Percentage of 2014 PPS Budget Spent Directly on Students (in millions)</th>
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<td>Central Office, 215, 4%</td>
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<td>Directly to Students - Allocated from Central Administration, 231, 44%</td>
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<tr>
<td>Directly to Students - Allocated to School Budgets, 164, 32%</td>
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<tr>
<td>Directly to Students - Charter Schools, 54, 10%</td>
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</table>

Less than half of money spent on students is trackable down to the school building level.

Spending that is tracked by school:
- Average (not actual) teacher salaries, principal salaries, some supplies, small discretionary budget

Spending that is not tracked by school:
- Transportation, facilities and maintenance, school security, nurses, special education, other costs

Recommendation: Student-Based Budgeting

As the District drives dollars out to schools it should do so with an eye towards ensuring all children can reach and exceed our shared standard of success—graduating ready for college or career. To do this the District would need to:

1. Increase transparency
2. Establish a fair funding formula at the District level
   - Establish a base cost of educating students: Determine the cost to educate PPS students to the standards set for them.
   - Count students: Once base cost is established, dollars should go to schools based on school size.
   - Add adjustments for students with greater needs: A fair formula would then add weights for students with specific needs that require additional resources (e.g. students with exceptionalities, are economically disadvantaged, are homeless and English language learners).
3. Prioritize student outcomes
4. Provide greater autonomy to principals while holding them accountable for results
A+ Schools’ vision is a district where 100% of students graduate and at least 80% of students go on to complete some sort of college or career training. We want schools that work for all children, and for race to not be a factor in student achievement or access to opportunities.

In order to get to this vision, we need to provide students with an equitable education: one that provides each student with the individual support he or she needs to reach and exceed a shared standard of success. For us, that shared standard includes graduating from high school and completing post-secondary education or training.

To get to equity, we advocate for a strategic allocation of resources that provides:

- Great teachers in every classroom
- Resources distributed based on student need and that improve outcomes.
- Access to opportunities to boost student learning like arts, music, and world languages, out of school time learning opportunities, and more
- Differentiated supports (like counseling, individualized education plans, and more) that can help unlock the potential of each student.

In order to create a strategy that will meet the needs of each of Pittsburgh’s students, we need to know what resources we have to work with, how those resources are currently being allocated, and if resources are being spent in ways that are maximize student achievement.

Unfortunately, we and the Board of Education of Pittsburgh Public Schools (PPS) cannot answer many of these questions. That has to change.

We have a state school funding problem in Pennsylvania. The problem is two-fold: (1) school districts are more dependent on local tax bases, in many cases modest ones, to provide funding because Pennsylvania provides a significantly lower share of funding than most states; and (2) there is no transparent, predictable method for deciding how to invest in our students across the Commonwealth. In fact, Pennsylvania is one of only three states in the country that doesn’t have a basic education funding formula. Taken together, these problems serve to make it harder for poor students in poor communities to get a high quality education. The underinvestment in our schools, especially in our neediest schools, is a failure to meet the most important promise one generation makes to the next, the promise of a great public education.

Out of the fifty states, Pennsylvania ranks 43rd in the amount of state funding provided to local schools with 34.5% of school funding being provided by Harrisburg. When state funding is insufficient, local communities pick up the slack. In the case of Pennsylvania, the relative wealth of a community determines what’s being spent on education more than what is needed to educate all students to the college and career ready standards set in state policy.

A recent study identified Pennsylvania as having the third widest funding gap between rich and poor districts of any state in the country. Our poorer districts (based on the number of students ages 5-17 living below the federal poverty level) spend a third less than our wealthier ones. Moreover, the share of education costs carried by local real estate taxes has steadily increased over time to 43% compared to a national average of 28%. The lack of an education funding formula contributes to our system’s failures to adequately educate all children, especially more vulnerable children.

The Pennsylvania legislature is poised to implement a new basic education funding formula that is student driven. The new formula would direct adequate funding to districts and students based on real costs, addressing student challenges like poverty, English proficiency, homelessness and foster care placement; and district factors like district size and sparsity, local tax effort and district wealth, and charter school enrollment. This formula would bring a level of transparency, predictability, and equity that Pennsylvania’s school districts desperately need.

Even with inequitable state funding system, Pittsburgh fares better than most districts with the share of state and local funding it receives.

At the local level, however, Pittsburgh fares better than most districts with the share of state funding it receives. Compared to the seven largest districts in Pennsylvania, Pittsburgh Public Schools (PPS):

- is the highest spending at $21,753 per pupil, spending more in almost every budget category, but especially instruction, support services and debt and
Since 2011 Pittsburgh Public Schools (PPS) has consistently taken steps to reduce its spending and has beaten its own projections for the past several years; however, it still spends more money per student than nearly every school district in Pennsylvania and projects a $58 million deficit that could deplete its savings account (also known as its “fund balance”) by 2019.

Ideally, the District’s budget would report the total investment made in each school and its investment schools would be based on a set of objective, measurable criteria. Unfortunately, PPS tracks only about 42% of funds spent directly on students on a school-by-school basis. The only trackable budgeted funds to schools (the “site-based budget”) are teacher and administrator salaries, benefits, and some supplies. The remaining 58% of funds spent on students gets distributed directly from central administration and is not tracked to the school level or reported on per pupil basis. It includes transportation, special education, facilities and maintenance, school security staff, nurses, and other costs.

Consequently, we cannot say which schools have lower transportation or facility costs, which have higher special education investments, or how nurses, security staff, and custodians are allocated. This is concerning because PPS can’t monitor or adjust policy so that those dollars get to the kids that need them most and in ways that improve their educational success without this understanding.
**PPS Spends 86% of total budget directly on students**

PPS 2015 General Fund budget was approximately $557 million, up from $529 million (of which PPS spent $523.2 million) in 2014. Pittsburgh Public Schools spends money directly on schools and students as well as on administrative overhead, financing costs, and other indirect costs. The vast majority of money is spent directly on students (86% in 2014) in three ways:

**School budgets** - schools receive an allocation of resources for most school staff based on average salaries, and they are provided some discretionary money (depending on the school’s population) that the principal can use to support learning. This analysis focuses on the distribution of per student spending on overall school budgets as well as on one specific component of the school budget set by federal guidelines, Title I funding.

**Resources and services provided directly by central administration** - these resources include special education teachers and paraprofessionals, pre-K teachers and paraprofessionals, transportation for students, custodial staff, facilities and maintenance costs (including utilities), school nurses, and PPS police and security staff among other things.

**Charter and other school disbursements:** Charter and non-public schools receive a per pupil allocation of money from PPS that follows the students. We did not analyze how these disbursements are spent in this report.

The rest of the District’s budget is spent on debt repayment, and on central office administration staff and central facility costs (see below).

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About eighty six percent of PPS’ budget is allocated directly to students and is split between school budgets and funds allocated directly from central administration.

**Current budgeting practices are not transparent or equitable.**

In our analysis of school budgets, we looked at the relationship between per student spending—which includes staffing, discretionary, Title I, and Career and Technical Education allocations—and percentage of students identified as economically disadvantaged (i.e., those who qualify for public assistance through the State’s Direct Certification process).

There is not a statistically significant relationship between spending and student income level, meaning that schools with higher percentages of low income students are not necessarily allocated more dollars (see below). This is particularly surprising because Title I resources are distributed based on student need. Our analysis suggests that other factors are negating the effects of Title I investments.

Additionally, we looked at spending by school vulnerability, an index that measures overall student need at schools based on four factors: % economically disadvantaged, % students with special education plans (IEPs), % black students, and student stability rate (i.e., % of students who started and completed the school year in the same school). Only a weak relationship exists between a school’s vulnerability level and the dollars allocated to that school, meaning that more vulnerable schools are not necessarily allocated more dollars.

We were curious about what other school factors might predict the amount of dollars allocated to school budgets. We analyzed multiple spending models that included the following school factors to try and answer this question:

- School enrollment
- Grade configuration
- Percent of students identified as economically disadvantaged
- Percent of students with non-gifted IEPs
- Percent of Distinguished teachers
- Percent of black students, and
- Percent of white students.

Of all the factors tested, only enrollment and grade configuration predicted per student spending in 2014-15. Eliminating all variables except enrollment and grade configuration results in a significant model with a strong multiple correlation value (0.63) and significant coefficients. Together, enrollment and grade configuration account for 37% of the total variability in spending. The other 63% of that difference is due to other factors influencing spending that we have not identified through this analysis.
There is not a statistically significant relationship between student need (economic disadvantage) and per student spending at schools (correlation value \( r = 0.41 \)). There is high variability in per student spending ($6,189 - $11,529) even among schools with >69% of students identified as economically disadvantaged (to the right of the red line).

As the figure to the right shows, spending tends to be higher in schools with fewer students enrolled, with the trend being more pronounced when comparing schools within the same grade configuration (see Appendix B: Per Student Spending by Enrollment for each Grade Configuration). Additionally, average spending is highest in the 6-8 and 6-12 schools.

Average per pupil spending by enrollment based on school site-based budgets.
The 11 schools that spend the most money per student have varying levels of student need and achievement. Seven of those schools are within the top two quartiles of vulnerability (based on our model), with greater student need. Four of those seven schools also have very high racial achievement gaps compared to the other schools in the district, falling within the top 5% of achievement gaps for reading and/or math standardized tests. The remaining four schools are within the bottom two quartiles of vulnerability and have fewer racial disparities in student achievement.

What all of these schools do have in common is that they are amongst the smallest schools in their grade configuration (see Appendix B: Per Student Spending by Enrollment for each Grade Configuration). Small schools cost more to operate on a per student basis because teachers’ and principals’ salaries are spread across fewer children. Smaller schools often have smaller class sizes and fewer offerings as a result.

Additionally, five of the 11 top-spending schools have significantly lower than average capture rates, meaning fewer students living within the schools’ feeder pattern chose to attend these schools. Capture rate represents the percentage of students assigned to a school that attend the school. Low capture rates indicate higher percentages of students living in the catchment area who attend private, parochial, charter, and other public schools in the district. Surprisingly, the district allocates over $1,000 more per student to schools with low capture rates than to schools with higher capture rates (see figure below).

When only looking at PPS site-based budgets, school size and configuration are the biggest predictors of school spending. PPS also allocates more dollars on average to schools where fewer students choose to attend. Student need does not play a significant role in school spending.
Takeaways from our research

- PPS has more resources than most districts and benefits from both a robust local support and state subsidy.
- Because of the opaque nature of the centrally managed expenditures, it’s unclear if the system is equitable.
- Distribution of site-based budgets is dependent on school size rather than student need.

PPS current budgeting system is not transparent, flexible, based on student need, or focused on improving student outcomes.

**Recommendation:**
**Student-Based Budgeting**

In order to provide each student with the support necessary to graduate from high school and pursue job training or college, PPS must make students the center of its budgeting process. District leaders must closely examine spending and monitor whether money spent directly on students—which comprises the vast majority of the budget (~86%)—is distributed in a fair manner that is linked to positive results for students, including higher achievement, more growth over time, and decreased racial achievement gaps.

Currently PPS budgeting appears to be centered on keeping schools open, rather than ensuring that all students have equitable access to educational opportunities. This is the result of well-intended effort to make sure all schools have art, music, library and counselors, but has resulted in subsidizing small schools with additional dollars while still not being able to provide students in those schools with equitable access to other courses or social and emotional supports.

PPS should take the following steps toward a student based budgeting approach that links what it is spending more closely to student needs and desired student outcomes:

1. **Increase transparency**

   PPS cannot currently tell the public how it spends nearly 60% of the funds that it invests in students in schools. Not knowing the real costs of educating students makes it nearly impossible to understand if we are equitably spending those resources. The Board of Directors should make knowing those costs a priority and make policy to direct the administration to track costs accordingly.

2. **Establish a fair funding formula at the District level**

   As the District drives dollars out to schools, it should be done with the needs of the students in mind and with an eye towards ensuring that all children can reach or exceed a shared standard of success. To do this the District would need to:

   **Establish a base cost of educating students:** There should be a robust discussion benchmarking against other districts and using state models that determine what it would cost to educate Pittsburgh’s students to the standards set for them.

   **Count students:** Once that base cost is established, dollars should flow to schools based on their populations, which starts with the number of students in the building.

   **Add adjustments for students with greater needs:** Once a base cost is established, fair funding formulae then take into account the specific characteristics of students and allocate additional dollars to students with greater needs such as those who have exceptionalities, are economically disadvantaged, are homeless, and are English language learners. These dollars should follow students to schools to ensure that funds are fairly distributed to meet student needs.

3. **Prioritize student outcomes**

   Further, PPS should prioritize improved student outcomes over school type or size to ensure that its financial investments are making the biggest difference for Pittsburgh’s students. If more money is to be spent at some schools, it should be part of a deliberate strategy to increase access to
Recommendation: Student-Based Budgeting

4. Provide greater autonomy to principals while holding them accountable for results

Once a dollar amount is determined, building leaders need to have the tools to then decide (within the limitations of federal, state and local policy) how to best to spend those resources to meet student needs and improve student achievement and outcomes. The Board should create an accountability framework based on a robust discussion of what measures (increased enrollment, student achievement data, graduation rate, college going rates, etc.) to should be looked at to judge principal and administrator performance. Giving building leaders and their staff greater freedom would empower the education professionals in our district, unlocking their potential, and providing greater innovation and care of children.

Better transparency and stewardship of public resources will increase trust and confidence in our schools. If we truly want a great public school system, we need to start focusing the resources we do have on each student.

Stand with us!

Let the school board know that you want Pittsburgh to be a place where students are the center of the budgeting process.

- Contact the Board at boardoffice@pghboe.net or 412-529-3770.
- Join our mailing list by going to www.aplusschools.org to stay informed on this and other important advocacy campaigns.
- Call us to get involved. 412.697.1298.
What is Student-Based Budgeting?
Student-based budgeting (also called fair student funding or weighted student funding) is an approach that provides resources based on students rather than buildings, adults, or programs.

School district leaders have the challenging job of allocating resources to serve the diverse needs of their student populations among the shifting landscape of federal and state support. Given this context, a growing number of district leaders seek effective budgeting systems that (1) give every school flexibility to organize resources based on student need and (2) ensure that students with the same needs receive similar resources regardless of the school they attend.

Equity: Traditional approaches distribute resources based on staff and a set of prescribed resources, often resulting in schools with the highest-need students receiving fewer resources than schools with the lowest-need students. By contrast, the student-based approach distributes funds based directly on numbers of students, using a weighted formula that allocates more dollars to students with specific needs on top of a base amount of funding to each school.

Flexibility: School leaders rarely have a formal say in the number of teachers or non-instructional staff they receive, controlling as little as 1-5% of their school’s budget. Through student-based budgeting, principals are empowered to make decisions about how to use resources to drive student achievement, given the specific needs of their students and school.

Transparency: Traditional resource allocation often happens at the district level, resulting in principals not knowing their overall allocation or how it was calculated. A student-based budgeting system sets up clear rules so that principals, families, taxpayers, and others can understand how, where, and why money is distributed.

School communities no longer want to be told what to do; instead they want support and services to help them implement their vision, direction, and priorities in a consistent manner.

- Jason Willis and Matt Hill, describing Oakland Unified School District’s shift to student-based budgeting

What makes student-based budgeting successful?
Over the past decade, a number of urban districts have shifted to a student-based budgeting approach, including Baltimore, Cleveland, Denver, Hartford, Houston, New York, Oakland, and San Francisco. Some lessons learned include:

Make student-based budgeting part of a broader approach: Because student-based budgeting represents a significant shift in how things are done, it is most successful when considered carefully as part of a broader approach to better utilizing resources: improving school design, giving more autonomy to principals, and increasing leadership at all levels.

Vision and leadership: Central office leadership must rethink its role in supporting schools and show strong desire to support principals to become leaders in decision-making around resource use at their schools.
Planning: Designing the system and funding formula requires careful deliberation and iteration. In a student-based budgeting district, school academic planning happens first, where goals are set that guide staffing and budgeting based on the resources schools have chosen.

Success Story: Baltimore City Public Schools

In 2008 Baltimore City Public Schools adopted student-based budgeting as part of a comprehensive set of policy changes that allowed central office to better support and guide schools while giving principals more autonomy to allocate resources within their schools.

The district took a number of steps, including reducing full-time employees in the central office by 33% and reorganizing it into school networks that provided each school with hands-on support in academics, operations such as finance and facilities, and special education and student supports. Baltimore also closed failing and under-enrolled schools, moving 11% of students into schools that had higher achievement than both the closed schools and the district average.

Principals are becoming far more adept at recruiting kids because they know that under the weighted formula, individual kids matter to schools.
- Matthew Hornbeck, principal, Baltimore City Public Schools

After four years, Baltimore had not only increased enrollment by 3% after several years of decline, but it also saw significant improvement of 12% in graduation rates and higher federal scores on the National Assessment of Education Progress. High school students saw great benefits, as dropout rates decreased by 56%, truancy decreased by 30%, and suspensions decreased by 34%.

Now, the work can be about rigor. Before, those conversations were hard to have when you were constantly unaware of how much money you had, where it was going to be located, or [when technology] systems couldn't talk to each other. I think it has been part of an overall effort to provide schools with the power and control and autonomy to make decisions that are good for teaching and learning.
- Matthew Hornbeck

Is Student-Based Budgeting Right for Pittsburgh?

When implementing student-based budgeting, school districts must decide what process is most appropriate given their current funding realities, state and local policies, and contract agreements. This includes determining the size and types of resources eligible for student-based distribution, choosing weight values of student factors, making any relevant policy decisions, and testing different scenarios. While many districts roll out student-based budgeting in one step, others opt to phase it in over time by limiting things like the number of schools or resources.

Education Resource Strategies offers a guide for school districts seeking to incorporate student-based budgeting into their overall strategy. Additionally, many examples of best practices can be gleaned from school districts that have taken this important step toward a student-based budgeting system that ensures resources are transparent, equitably distributed, and follows students.


### Regression Statistics on Per Student Spending – 7 variables

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### B. Regression Statistics on Per Student Spending: enrollment and grade configuration only

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APPENDIX B

Per Student Spending by Enrollment for each Grade Configuration

Per Student Spending by Enrollment (K-5 Schools, 2014-15)

Per Student Spending by Enrollment (K-8 Schools, 2014-15)
STUDENT-BASED BUDGETING

GETTING TO EQUITABLE FUNDING IN PITTSBURGH PUBLIC SCHOOLS

An Analysis of Pittsburgh Public Schools Budgeting Practices

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