Weighted Student Formula Yearbook
Prince George's County
by Katie Furtick & Lisa Snell
Prince George’s County Public School District

Program Name: Student-Based Budgeting
Implementation: 2012–2013
Program Type: District-Wide
Legal Authorization: School Board

Overall Grade: C

Demographics

- Non-ELL/Non-Low-Income: 60%
- ELL/Low-Income: 40%
- 14% English Language Learners
- 86% Low-Income Students

Achievement Gap Closures:
- **Internal District**
- **Internal District vs. Internal State**
- **External Achievement Gaps**

School Empowerment Benchmarks

- School budgets based on students not staffing: Yes
- Charge schools actual versus average salaries: No
- School choice and open enrollment policies: No
- Principal autonomy over budgets: Yes
- Principal autonomy over hiring: No
- Principal training and school capacity building: Yes
- Published transparent school-level budgets: Yes
- Published transparent school-level outcomes: Yes
- Explicit accountability goals: Yes
- Collective bargaining relief, flat contracts, etc.: No

PGCPS Met 6 out of 10 School Empowerment Benchmarks

2013–2014 Principal Autonomy

- 24.7% Money Directly to Schools

Source: PGCPS Board of Education Approved FY2013 Operating Budget


** Overall grades and ranks may not equal the average of individual grades and ranks, since categories are weighted differently to reflect their importance.
1. Overview of Prince George’s County’s Weighted Student Formula Program

Maryland’s Prince George’s County Public Schools (PGCPS) has 123,741 students, with 67 percent African-American, 23 percent Hispanic, 5 percent White and 3 percent Asian. In PGCPS 60 percent of students qualify for free or reduced price lunch and 13.6 percent are English language learners.¹

Prior to the 2012–2013 school year, Prince George’s County, like many school systems, had traditionally given dollars to schools based on factors such as the number of students and staffing ratios. PGCPS administrators recognized that the formula did little to address students’ and schools’ diverse needs. PGCPS is now committed to making transparent budget decisions that work in the best interests of all children regardless of what school they attend. The district’s goal in this new paradigm is to increase equity in funding, empower school leaders, and support systemic priorities. The district’s essential components of a weighted student formula include:

- **Student-Focus** – The district will provide resources based on students, not on buildings, adults or programs.
- **Equity** – Funds will be equitably allocated to each student at each school based on his or her educational needs. The district will allocate similar funding levels to students with similar characteristics, regardless of which school they attend.
- **Flexibility** – School-based decision-making will be expanded so schools can be held accountable for results and strategic with their resources. Principals will be empowered to have more flexibility in their budgetary and operational decisions. Central office departments will operate in a supporting role to meet the demands and needs through timely and high quality service while providing clear parameters and guidelines to schools.
- **Transparency** – The district budgeting process will be easily understood by all stakeholders, and PGCPS will be held accountable for every dollar.

The roll-out of the weighted student formula in PGCPS has been a multi-year effort. In 2011, eight pilot schools were selected to lead the effort to inform how the funding formula and school-level flexibilities should be implemented. All schools began the 2012–13 fiscal year with their student-based budgets.²

2. How Does Prince George’s Student-Based Budgeting Process Work?

Under student-based budgeting (SBB), school budgets are built based on the unique mix of students being served in each school. Furthermore, students with the same characteristics should get the same level of
resources regardless of what school they attend. For example, a school with a high percentage of students whose family income is at or below the poverty level would receive more funding per child to support those students’ needs. Another example is a school with students with significant language challenges—those students would also receive more funding to meet their needs.

In PGCPS weights are designed to reflect fair and objective criteria that can be applied to all schools in an equitable and transparent way. A committee representing various schools and central offices developed the per pupil formula. The weights are reviewed on an annual basis to ensure that they adequately reflect the goals of the school system and SBB. Table 1, below, shows PGCPS’s FY 2013 student-based budget formula.

| Table 1: Prince George’s County FY 2013 Student-Based Budgeting Formula |
|-------------------------------------|-----------------|-----------------|-----------------|-----------------|
| **Base Allocation***               | Base            | K – 1st         | Elementary      | Middle          | 9th Grade       |
|                                    | $3,018          | $163            | $326            | $815            | $326            |
|                                    | 1.00            | 0.05            | 0.11            | 0.27            | 0.11            |
| **$**                               | Poverty         |                 |                 |                 |                 |
|                                    | $92             |                 |                 |                 |                 |
|                                    | 0.03            |                 |                 |                 |                 |
| **English Language Learners**      | Beginner**      | Beginner (2nd – 9th) | Intermediate     | Advanced        |
|                                    | $1,629          | $1,812          | $1,548          | $1,222          |
|                                    | 0.54            | 0.60            | 0.51            | 0.40            |
| **Performance**                    | Low Academic Performance | High Academic Performance | | |
|                                    | $130            |                 | $90             |                 |
|                                    | 0.04            |                 | 0.03            |                 |

* Elementary school also includes 6th grade. Middle school allotment applies for 6th–8th grade schools and K-8th grade schools.
**For grades K-1st and 10th–12th.

**Base Funding** – Base funding is attached to every PGCPS student attending an SBB-eligible school, regardless of need. The funding level was set to allow each school to support a baseline level of services (teachers, administrative staff and supplies).

**Grade Level** – Students in certain grade levels receive additional funding. Currently, Kindergarten and 1st grade are weighted, as well as 6th, 7th, 8th and 9th grades. These reflect the system’s priority on the early years and students in middle grades. In grades 6 to 8, sufficient funding supports the offering of electives.

**Poverty** – All students qualifying for Free and Reduced Meals (FARMS) receive funds to provide additional supports, learning opportunities, and supplies and materials. This is provided for both Title I and non-Title I schools.
English Language Learners (ELL) – The ELL weights were determined to support specific students based on a combination of their language proficiency level and grade level, as determined by the LAS Links English Proficiency Test administered through the English for Speakers of Other Languages (ESOL) Office. Higher weights were assigned to students testing at a basic level.

Academic Need (Low and High) – The percentage of students measured as low and high performing is based on the Maryland State Assessment (MSA) in elementary, combination and middle school students, and the High School Assessment (HSA) for high school students.

- **High Performance** – Students in grades 3 to 8 receiving the “High Academic Performance” weight have scored advanced in both Reading and Math tests, while students in high school receive the weight if they have passed all three HSA exams by the 10th grade.

- **Low Performance** – Students in grades 3 to 8 receiving the “Low Academic Performance” weight have scored basic in both Reading and Math tests, while students in high school receive the weight if they have failed all HSA exams.

3. How Much Autonomy Do Prince George’s County Public Schools Enjoy?

There are two ways to view school-level autonomy. First, autonomy at the school site can be evaluated by budget discretion—what proportion of funds is sent to the schools versus retained at the district level? Second, one can evaluate by planning discretion—how much control over staffing and programmatic offerings do principals have?

The letter grade given to school districts in the *Weighted Student Formula Yearbook* indicating the level of autonomy over school budgets is based on the percentage of yearly operating funds that are allocated to the school level. The higher the percentage of operating funds allocated to the school level, the greater budget autonomy the principal enjoys.³

Prince George’s County Public Schools uses only 24.9 percent of their operating budget for student-based allocations—meaning that school principals only have discretion over approximately 25 percent of the district operating budget. This is a small percentage of budget autonomy relative to other school districts highlighted in the *Weighted Student Formula Yearbook*, giving PGCPS an “F” in principal autonomy. The district’s principals also have little autonomy over staffing decisions. In PGCPS principal autonomy is constrained by the teacher contract. Hiring decisions and teacher placement are determined by seniority rather than by mutual consent between the principal and the employees.
4. How Does Prince George’s County Support Principals?

PGCPS is engaged in several initiatives to support principals and school-level management. PGCPS won a five-year, $12.5 million grant from the Wallace Foundation to build four key parts of a “Principal Pipeline” that can develop and ensure the success of a sufficient number of principals to meet district needs: rigorous job requirements, high-quality training, selective hiring, and on-the-job evaluation and support. The “Principal Pipeline” would have four interlocked parts:

- **Defining the job of the principal and assistant principal.** Districts create clear, rigorous job requirements detailing what principals and assistant principals must know and do. These research-based standards underpin training, hiring and on-the-job evaluation and support.

- **High-quality training for aspiring school leaders.** “Pre-service” principal training programs, run by universities, nonprofits or districts, recruit and select only the people with the potential and desire to become effective principals and provide them with high-quality training.

- **Selective hiring.** Districts hire only well-trained candidates to be school leaders.

- **Leader evaluation and on-the-job support.** Districts regularly evaluate principals and provide professional development, including mentoring, that aims to help novice principals overcome weaknesses pinpointed in evaluations.

PGCPS also has a School Leaders Network that is designed to establish communities of practice for public school principals to work together, to solve real problems, and create change, school-by-school, so that all children in under-resourced communities graduate with college-ready skills. Their work focuses on three topics relevant to school leaders: the role of the principal as instructional leader, communicating the principal’s complex role to the community, and mentoring.

5. The Site-Based Management of Prince George’s County Public Schools

In PGCPS, school-based decision-making is integral to the school improvement process. This is to be accomplished at each school by a School-Based Management Team (SBMT). The SBMT should be representative of all components of the school staff, and include parent and community representation. The SBMT helps the principal with decision-making about budgets and school instructional goals and helps the principal develop a school improvement plan for each school that aligns instructional strategies and resources.
6. The School Choice Component of Prince George’s County’s Weighted Student Formula Program

PGCPS assigns students to schools based on residential assignment and requires students to show proof of residency. While there are a few specialty school options, the primary school assignment process is based on a child’s home address and parents must apply to specialty programs at individual schools. Students may request transfers into schools that have available capacity, and transfer requests must be submitted beginning the first Monday in February through the third Friday in April. Transfers submitted after the deadline are not accepted.

7. Initiatives to Increase School-Level Accountability in Prince George’s County

PGCPS’s accountability system is based on the state of Maryland’s accountability system that takes into account growth, gap reduction and college readiness—in addition to achievement—to give a more accurate picture of a school’s performance and progress. In the new system, these core values provide a School Progress Index that is used to identify schools that need support and deserve recognition.7

PGCPS also maintains a data warehouse called Performance Matters that compiles student test results from multiple state and national tests. Data can be viewed in various reports to assist schools in analyzing student data and to identify areas of progress as well as instructional needs. This data warehouse can be used by instructional leaders at the district, school and teacher level to improve data-driven decision-making.8

The district also holds principals accountable through the Principal Evaluation Tool used to assess principal performance. The tool uses objective measures of student and school achievement and other indicators of rigorous practice to generate effectiveness ratings for principals.9

8. Performance Outcomes in Prince George’s County

While compiling this Weighted Student Formula Yearbook, Reason Foundation conducted an analysis to determine how the school districts that have adopted a weighted student formula are performing relative to other districts in their state, and relative to each other.

Reason’s analysis grades 10 performance metrics. Scores are determined by comparing the school district in question—in this case Prince George’s County Public Schools—with other school districts in the same state (Maryland, in this instance), and sorting them into a decile ranking. Based on the school district’s decile
rank within its own state, the analysis then compares it with the other districts studied in this *Weighted Student Formula Yearbook*. Finally, it assigns the studied school districts a grade based on how they measure up against one another. This analysis also grades and ranks studied school districts on two other measures: the number of school empowerment benchmarks the district has reached, and the degree of autonomy principals have over school budgets. In determining the grades on these two measures, districts are compared only with the other districts covered in this *Yearbook*. A detailed explanation of the methodology used to determine performance metrics and grading can be found in the methodology section of the *Weighted Student Formula Yearbook*.

Student proficiency rates, as determined by standardized state tests and student enrollment data, were used to calculate the following:

- 2011 proficiency rates;
- Improvement (average change) in proficiency rates from 2008 to 2011;
- Expected versus actual proficiency rates;
- Improvement in expected proficiency from 2008 to 2011;
- Achievement gap, and
- Each of three achievement gap closure metrics.

Prince George’s County proficiency rate data were obtained from the Broad Prize for Urban Education 2012 District Data Reports. Elementary and middle school student proficiency rates in reading, mathematics and science derive from Maryland School Assessment (MSA) results. Prince George’s County high school students are tested for proficiency in English 2, algebra/data analysis and biology. For purposes of comparison, these specific subjects are categorized as reading, mathematics and science, respectively. High school students’ proficiency rates derive from High School Assessment (HSA) test results.

Student achievement including 2012 proficiency rates are also discussed, but 2012 data were not included in this analysis because in many school districts the data were not yet available at the time of analysis. Therefore, 2012 student achievement is mentioned, but not compared relative to other school districts in Maryland and in the *Weighted Student Formula Yearbook*.

Graduation rates were collected from Data.gov based on adjusted cohort graduation rates at the school level for school year 2010–11 (most recent data available). Four-year adjusted cohort graduation rates are calculated by state education agencies in accordance with U.S. Department of Education regulations on ESEA, Title I, published in 2008. Adjusted cohort graduation rates are reported for each school as a whole and for key sub-groups of students.
The grade given for school empowerment benchmarks is based on 10 benchmarks determined to be best practices within existing weighted student formula programs, and recommendations of other studies on student-based budgeting.

The following sections expand upon each graded category by highlighting areas in which PCGPS performed exceptionally well relative to other districts in Maryland, and to other districts in the *Weighted Student Formula Yearbook*. This analysis also discusses areas in which PGCPS has fallen behind or could use improvement.

**Student Achievement**

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<tr>
<td>Expected Proficiency Improvement</td>
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<td>Graduation Rates</td>
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Prince George’s County Public School District is annually improving student achievement. PGCPS had low 2011 proficiency rates in nearly every category relative to other Maryland school districts. However, each year a larger share of PGCPS students reach proficiency across the board. In particular, the district has rapidly increased reading proficiency rates overall and among each student group of elementary school students from 2008 to 2011, shown in Figure 1. The district is among the top 10 percent of Maryland school districts for fastest increasing reading proficiency among elementary school students. Also, PGCPS is among the top 20 percent of Maryland districts for fastest increase in reading proficiency among middle school students.

Disaggregated by student group, PGCPS is among the top 10 percent of Maryland school districts for fastest increase in reading proficiency among low-income elementary school students. Among African-American and Hispanic elementary school students, PGCPS is among the top 30 percent of Maryland school districts for fastest increase in reading proficiency. PGCPS is also among the top 30 to 50 percent of Maryland school districts for quickly increasing science proficiency rates among African-American students, shown in Figure 2, and low-income students at every grade level.
Predicted or expected proficiency rates are calculated relative to all other school districts in Maryland, controlling for the percentage of low-income students at each grade level. Generally, a large, low-income student body is an indicator of low performance. By controlling for, or taking into account, the percentage of low-income students in each grade level across school districts this analysis can determine how well a given school district should be performing relative to others in its state.

If the predicted proficiency rate is higher than the actual proficiency rate, then a school district is under-performing. In other words, the school district is not reaching its potential achievement level. If a school district’s actual proficiency is above its predicted proficiency, the district is over-performing what is expected given the low-income student population.

Prince George’s County Public Schools 2011 proficiency rates were below predicted proficiency rates at each grade level, and for each school subject. More importantly, though, the district is quickly increasing actual proficiency to meet the predicted proficiency. This is especially true for elementary and high school students in every subject. If PGCPS continues to improve proficiency at this rate it will quickly meet its potential relative to other Maryland school districts, given the percentage of low-income elementary and high school students, shown in Figure 3.

Prince George’s County Public Schools 2011 four-year cohort graduation rates are low overall, falling into the bottom 10 percent of Maryland school districts. Among sub-groups of students PGCPS performs slightly better, but graduation rates are still among the bottom half of the state’s school districts.
The following three achievement gaps are measured across all grade levels (elementary, middle and high school) and school subjects (reading, mathematics and science):

- African-American versus White student proficiency;
- Hispanic versus White student proficiency, and
- Low-income versus non-low-income student proficiency.

Internal district achievement gaps (IDG) are measured as proficiency gaps between disadvantaged and non-disadvantaged student groups within a given district. Because this analysis assesses internal district achievement gaps for each district in the state, it can rank relative size of achievement gaps across districts in the state, and how quickly those achievement gaps are closing from 2008 to 2011.

An achievement gap is considered to be closing if the disadvantaged student group proficiency rate is increasing faster than the advantaged student group proficiency rate.

Prince George’s County Public School District is among the top 20 percent of Maryland school districts for smallest achievement gaps between low-income and non-low-income elementary school students’ 2011 proficiency rates. The percentage of both low-income and non-low-income elementary school students proficient in science has increased each year from 2008 to 2011. Because both have increased at
approximately the same rate, this achievement gap hasn’t begun to close, but it is already relatively small to begin with compared to other Maryland school districts.

PGCPS is among the top 10 percent of Maryland school districts for fastest closing achievement gap between low-income and non-low-income elementary school students’ reading proficiency. The district is also closing the achievement gap between these two groups of students in mathematics proficiency. Achievement gap closure means that low-income elementary school students are increasingly improving their proficiency rates each year and faster than non-low-income students, shown in Figure 4.

![Figure 4: Achievement Gap Closure](source.png)

In addition to internal district achievement gaps (IDG) discussed above, this analysis also measures internal district versus internal state (ID vs. IS) achievement gaps and external district achievement gaps (EDG).

Internal district achievement gaps (IDG) are measured between student groups within the district. Internal district versus internal state (ID vs. IS) achievement gaps are measured as the district’s achievement gap versus the average achievement gap of every other district in Maryland (excluding Prince George’s County Public Schools). If a given PGCPS achievement gap is closing faster than that of the rest of the state, the gap is considered to be closing. Finally, external achievement gaps (EDG) are measured by the difference between the district’s disadvantaged student group proficiency rate and the advantaged student group average proficiency rate of all other districts in the state. External achievement gaps are considered to be closing if the district disadvantaged group proficiency rate is increasing faster than the state advantaged group. Table 2 below shows which achievement gaps PGCPS is closing, and which achievement gaps are not closing, given the available data.
Prince Georges’s County Public School District is closing reading achievement gaps between low-income and non-low-income students best, though struggling to close most achievement gaps. Because the district is closing only one internal district versus internal state achievement gap, we know that other Maryland school districts are closing achievement gaps at a better rate than PGCPS.

PGCPS is closing the most gaps under external achievement gaps. This means that PGCPS disadvantaged students are increasing proficiency at a faster rate than the average proficiency rates of advantaged students in the rest of the state.
Areas for Improvement

Prince George’s County Public School District falls in the bottom 10 percent of Maryland school districts for 2011 proficiency rates. PGCPS has very low proficiency rates relative to other Maryland school districts, but more importantly, most proficiency rates are improving over time. PGCPS needs to focus on where proficiency rates are low and where improvement in these proficiency rates has been more slowly improving over time, for example high school reading proficiency and mathematics proficiency at every school level. On the other hand, low-income students had low 2011 proficiency rates relative to the rest of Maryland, but are quickly increasing proficiency rates over time, and actively closing achievement gaps.

PGCPS District’s expected proficiency rates have been higher than actual student proficiency rates each year from 2008 to 2011. Controlling for the percentage of low-income students in each Maryland school district, PGCPS has much lower proficiency rates than the district is capable of. Although the district is not achieving these expected proficiency rates, the gap between expected and actual has decreased each year, with the largest closure in science proficiency among elementary and high school students, mathematics proficiency among high school students, and reading proficiency among elementary school students.

Figure 5 shows standardized residuals, which indicate the difference in actual proficiency rates from predicted proficiency rates. Negative residuals indicate that a given school district performed worse than predicted. Reading and science proficiency rates among elementary school students are lower than those predicted (taking into account the percentage of low-income elementary school students), but are increasing.

PGCPS has low graduation rates, which have fallen from 2008 to 2011. Already low average graduation rates fell each year from 2008 to 2011 among PGCPS graduates, shown in Figure 6.
Graduation rates in 2011 overall and for each sub-group of students (African-American, Hispanic, and low-income students) are low relative to the rest of Maryland school districts. Overall, the average graduation rate for the class of 2011 fell among the lowest 10 percent of Maryland school districts.

Prince George’s County Public School District is failing to close achievement gaps among middle and high school students. The district is among the top 20 percent of Maryland school districts for smallest achievement gap among low-income and non-low-income high school students in both reading and mathematics proficiency. This small achievement gap is misleading, though, because it is the result of falling proficiency rates among non-low-income students rather than rising proficiency rates among the disadvantaged low-income students.

**School Empowerment Benchmarks**

Prince George’s County only met six of the 10 school empowerment benchmarks. The benchmarks that the district has failed to implement are:

- Charging schools actual versus average teachers’ salaries;
- School choice or an open enrollment policy;
- Principal autonomy in hiring, and
- Some collective bargaining relief.

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If more benchmarks were reached, an even higher level of accountability would push school principals and their employees to ensure that they are serving their students to the best of their ability.
9. Lessons Learned in Prince George’s County

1. PGCPS offers the model of a “school leadership network” as an important component of principal support and professional development. An opportunity for principals to meet and share best practices and lessons learned can be as valuable as more structured professional development.

2. PGCPS also shows the value of having a well-developed and transparent Principal Evaluation Tool that spells out objective measures of student and school achievement tied to principal effectiveness.

3. PGCPS also provides an example of the importance of a “data warehouse” or a one-stop portal for data about school and student performance that can be used by school leaders, teachers and administrators to strategically target performance improvement efforts.

Resources


Contact Information

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Endnotes


3 The methodology used for determining principal autonomy is explained in detail in section 2 of the methodology section of this Weighted Student Formula Yearbook.


5 For more information visit PGCPS Office of Talent Development, http://www1.pgcps.org/talentdevelopment/.


7 For more information and to review individual school data, visit the Maryland State Department of Education’s report card website at www.mdreportcard.org.


10 http://www.broadprize.org/resources/reports2012.html