



Undermining Educational Opportunity: Pennsylvania's Unequal Restoration of School Funding

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Gov. Tom Corbett and the General Assembly reduced classroom funding for Pennsylvania's schools by nearly \$860 million in 2011-12. Today, \$570 million of the original classroom cuts – or two-thirds – remain in place. The average cut per student is \$330.

This policy brief examines the distribution of the remaining cuts per student by school district and finds large inequities. Specifically, we find the school districts that have had the smallest share of 2011-12 funding cuts restored are low income, high poverty, and have higher non-proficiency rates on PSSA exams. This pattern follows the initial distribution of the 2011-12 funding cuts, which were three times larger in high-poverty school districts than in low-poverty ones.¹

In other words, the school districts that have had the least amount of their funding restored since the deep 2011-12 funding cuts are the ones that face the greatest challenges in boosting student achievement. To maximize student achievement, Pennsylvania should focus its reinvestment in education on these school districts that have the deepest cuts remaining.

Box 1. Methodology

As in previous analysis, [“Pa. House Budget Locks in Most School Funding Cuts,”](#) “classroom funding” as defined here includes the basic education subsidy for each school district plus formula enhancements, charter reimbursements, Accountability Block Grants, and American Recovery and Reinvestment Act (ARRA) funding. For each school district for each year, we computed classroom funding per pupil, calculated the cut in funding per pupil in 2011-12, then calculated how much of the funding cut in 2011-12 had been restored by 2014-15. Based on the size of the cut in funding per pupil that remains, we divided Pennsylvania's 500 districts into four groups of 125 districts each. We refer to the 125 districts with the largest cuts remaining as the “first quartile” and the 125 districts with the smallest cuts remaining as the “fourth quartile.”

Pennsylvania's Unequal Restoration of School Funding

Figure 1 sorts Pennsylvania's 500 school districts into four groups of 125 districts each, or quartiles, based on how large the remaining spending cut per student is (see the end of Box 1). Those with the largest cuts remaining are in the first quartile, with classroom funding still \$832 per student below the 2010-11 level. The districts with the smallest cuts remaining (i.e., those in the fourth quartile) are only \$19 per student below the 2010-11 level. There is a 44-fold difference between the remaining spending cut per student in these two quartiles.

¹ Pennsylvania State Education Association Research Division. 2014. “Budget cuts, student poverty, and test scores: Examining the evidence” <https://goo.gl/WgxF5P>

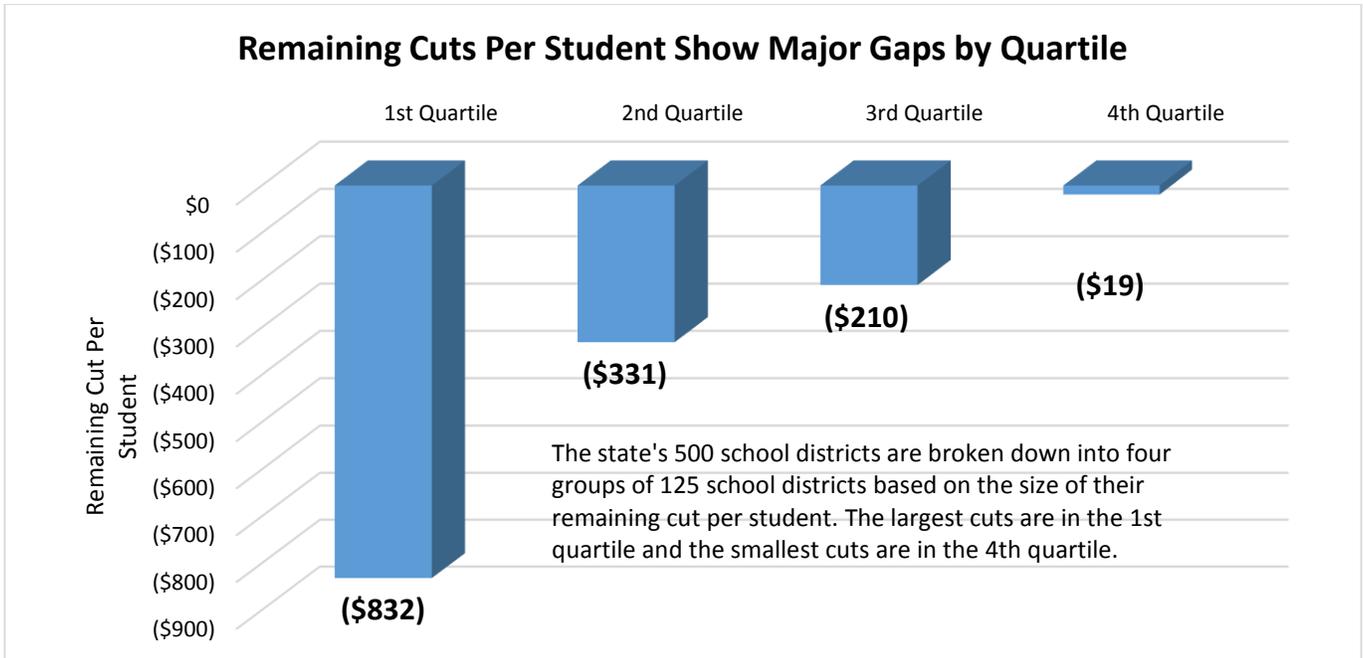


Figure 1: PBPC Analysis of [PDE State Revenue Data](#)

When we look at the portion of the original cuts remaining in percent, by group, in figure 2 we again see huge gaps, especially between the fourth quartile and the rest. The fourth quartile has only 10 percent of its cut remaining, meaning that, on average, 90 percent of its funding cut has been restored. Meanwhile, the remaining school districts (in the three other quartiles) had at least two-thirds (67 percent) of their 2010-11 cut still in place.

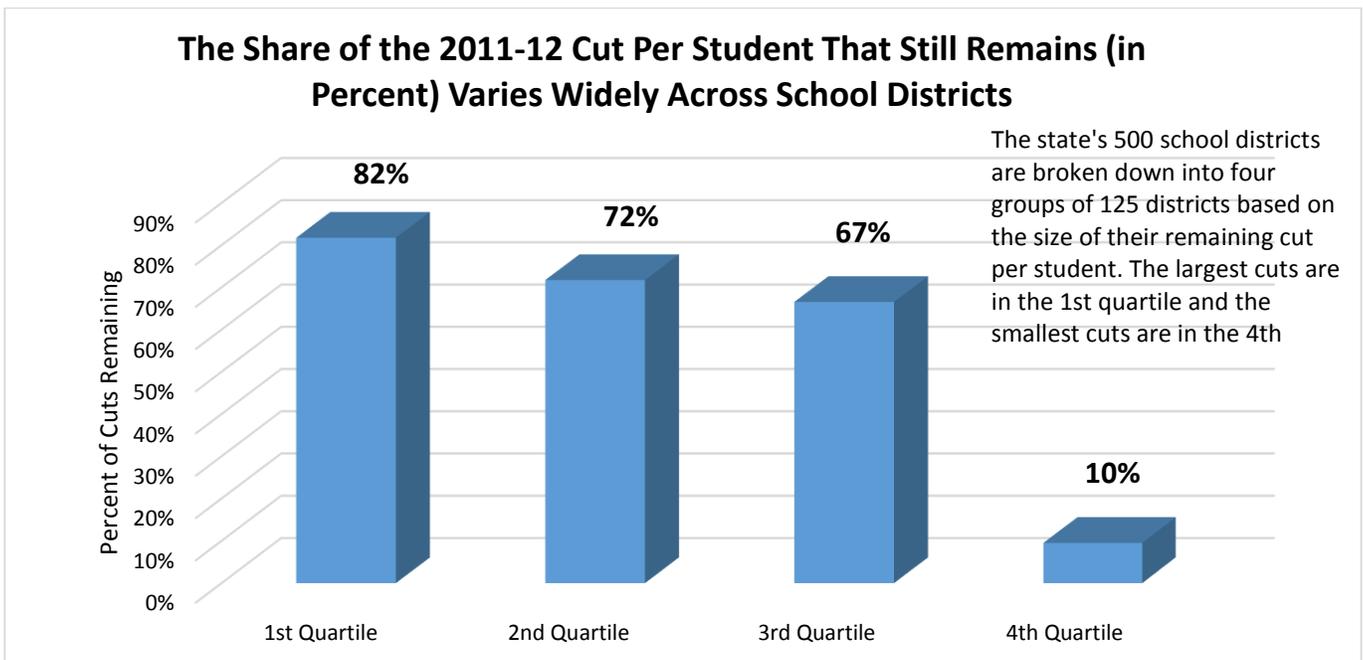


Figure 2: PBPC Analysis of [PDE State Revenue](#) and Budget Office Data

Districts With the Greatest Need Have Had the Least Funding Restored

In this section we examine how our four quartiles vary by household income, rate of children in low-income families, and share of students testing as “non-proficient” on PSSA exams.

As a group, school districts in the first quartile, those with the largest cuts remaining, have a typical family income of just under \$40,000 a year. In contrast, those in the fourth quartile have a typical family income of over \$70,000 a year.

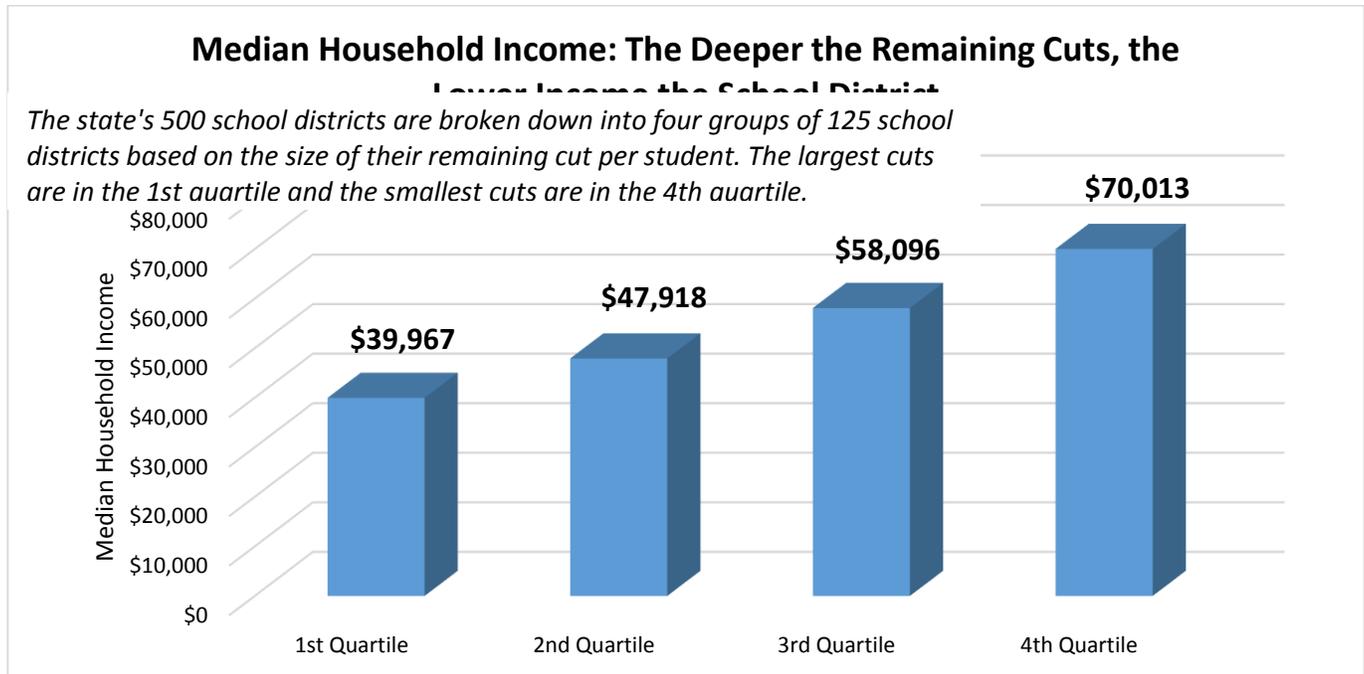


Figure 3: PBPC Analysis of [PDE State Revenue](#) and Budget Office Data

When looking at the share of students from low-income families, as indicated by the rate of students who qualify for free- or reduced-priced lunch, we see a familiar picture: the deeper the remaining cuts, the higher the share of students who are low income.² In school districts in the first quartile more than half of students (52 percent) receive free and reduced price lunch; in fourth quartile districts, only a quarter (25 percent) do.

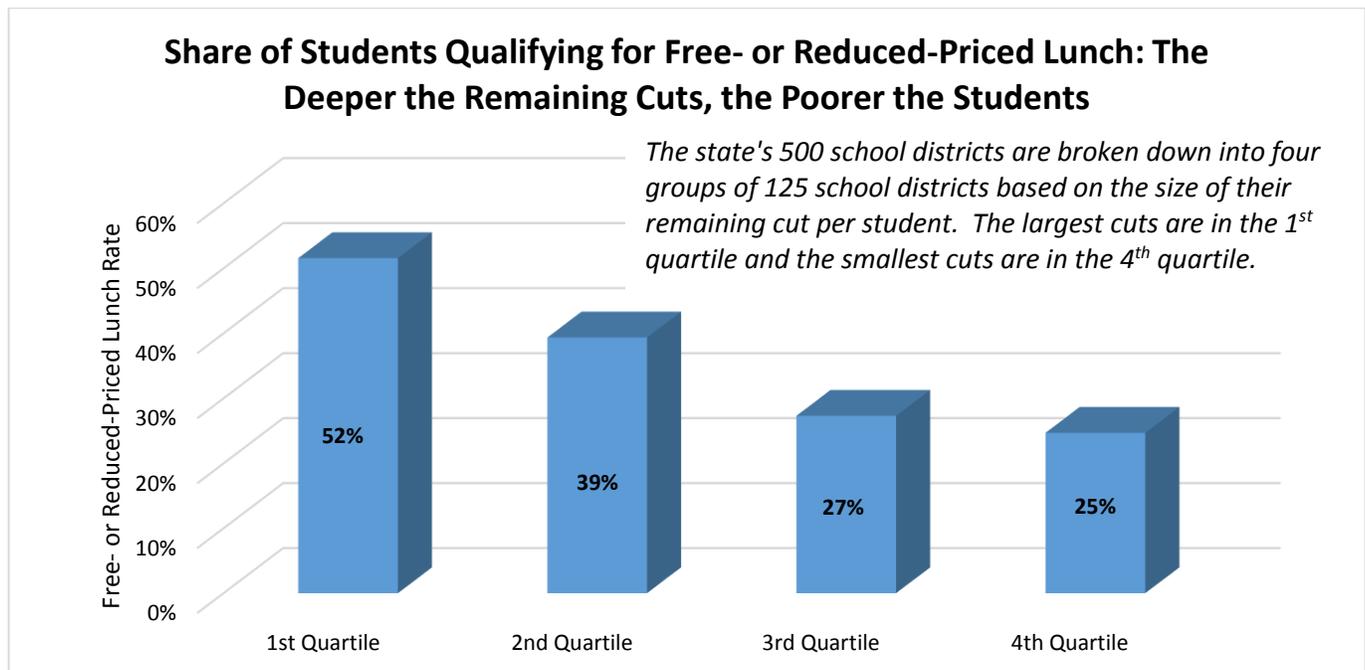


Figure 4: PBPC Analysis of [PDE State Revenue](#) and Budget Office Data

Research shows that family-income levels are strongly linked to standardized test scores. We see that same link in our four quartiles.³ School districts in the first quartile, those who have the lowest family incomes and the largest cuts remaining, also have the highest share of students testing as not proficient on PSSA scores. In the first quartile, 37 percent of students scored not proficient on their PSSA exam, while only 18 percent of students in the fourth quartile earned such low marks.

² Under federal guidelines for 2015-16, children are eligible for free lunch up to 130% of the federal poverty line and reduced price meals up to 185% of the federal poverty line. See U.S. Department of Agriculture, Food and Nutrition Service, "Child Nutrition Program, Income Eligibility Guidelines," Federal Register Vol. 80, No. 61, Tuesday, March 31, 2015, online at <http://www.gpo.gov/fdsys/pkg/FR-2015-03-31/pdf/2015-07358.pdf>.

³ Goldfarb, Zachary. 2014. "These four charts show how the SAT favors rich, educated families." The Washington Post. <http://wapo.st/1WRTqrH>

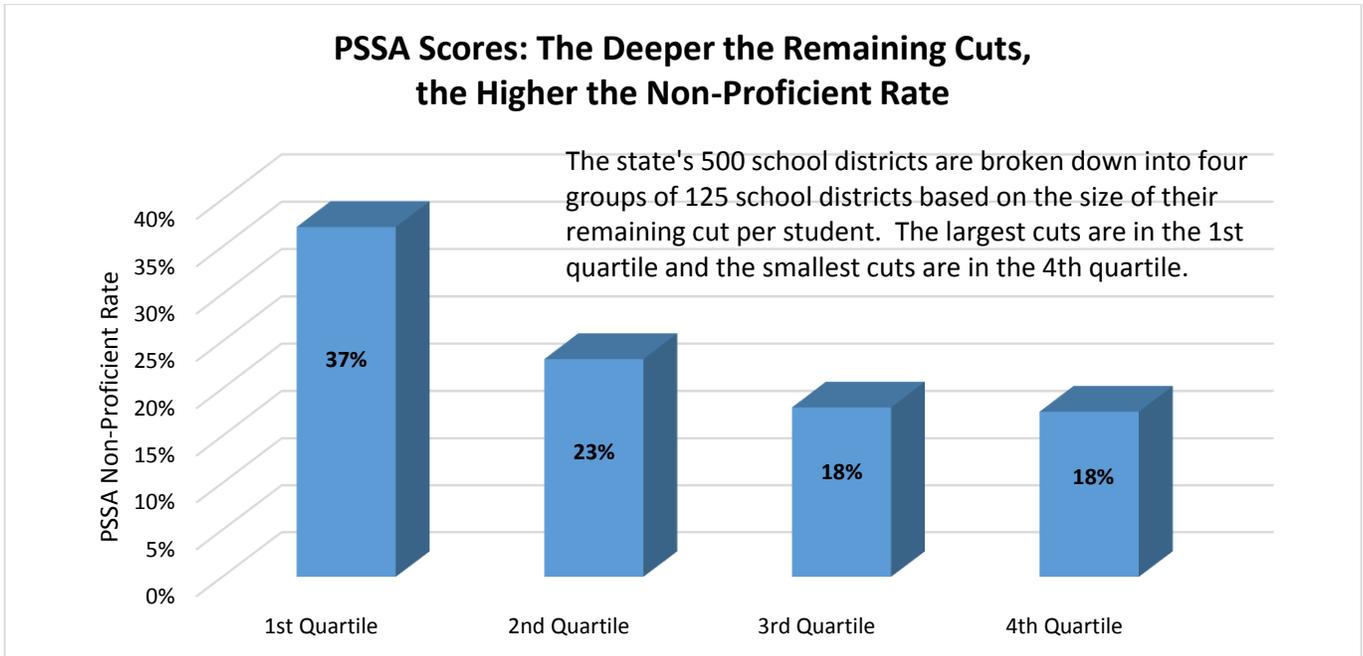


Figure 5: PBPC Analysis of [PDE State Revenue](#) and Budget Office Data

PSSA Scores Rise and Fall with Funding

Recent PSSA scores show that school funding matters. PSSA scores have fallen for three straight years following the 2011-12 cuts. In each of the four years prior to the 2011-12 cuts, school funding increased, and so did PSSA scores for four straight years.

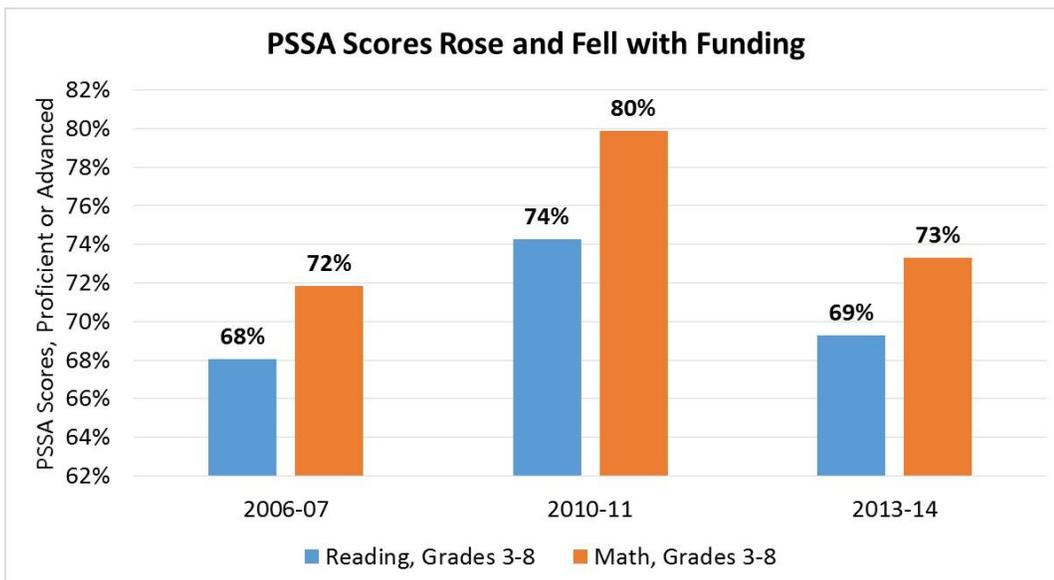


Figure 6: [Pittsburgh Post-Gazette](#) and PBPC Analysis of [PDE Data](#)

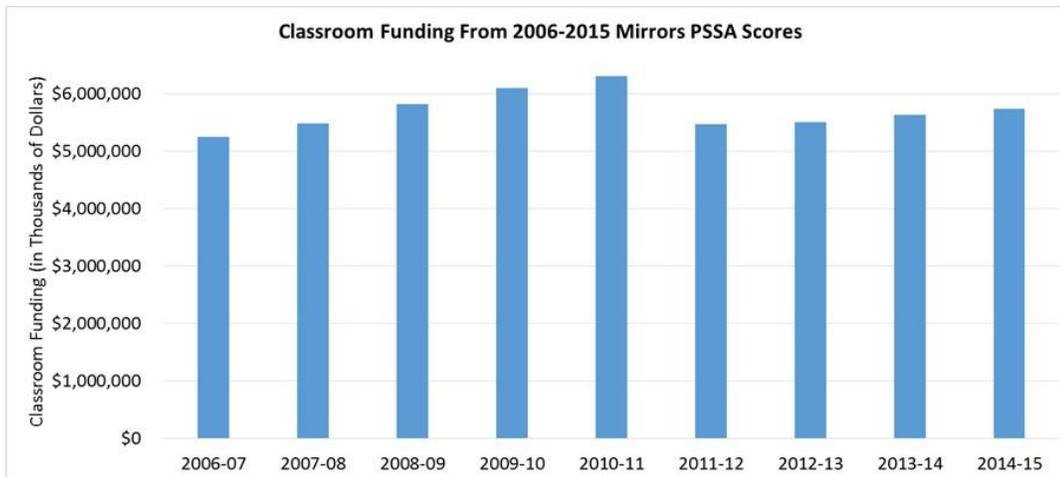


Figure 7: PBPC Analysis of [Budget Office Data](#)

While PSSA scores dropped across all school districts, the steepest declines occurred in the poorest school districts that suffered the largest cuts.⁴ For example, the percentage point drop in the share of students scoring advanced or proficient on PSSA math grades three to six was nearly three times as high in the districts with the highest child-poverty rate as in the districts with the lowest child-poverty rate (see Figure 8).

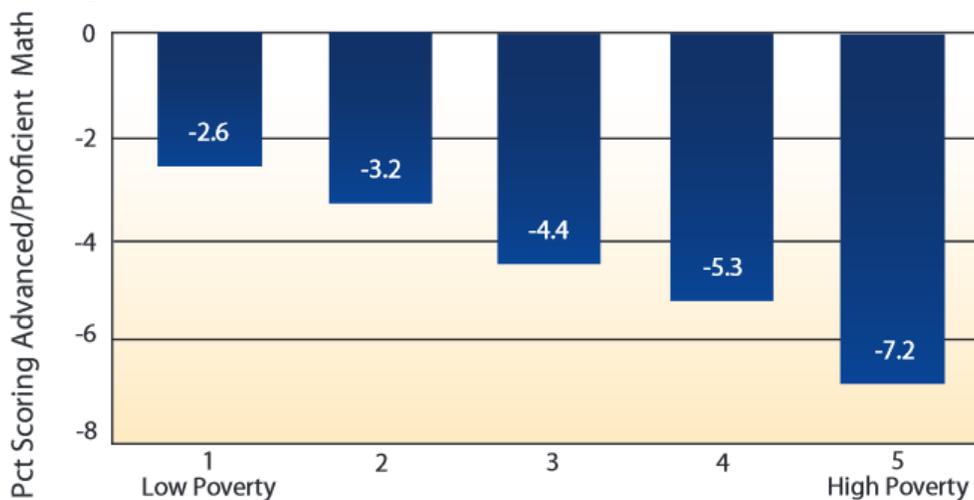


Figure 8: [PSEA Analysis](#)

Moving Forward: Restoring the Cuts

Compared to wealthier school districts, poorer districts find it difficult to raise local revenue to make up for lost state funding; so they are harder hit by the higher remaining cuts. The wealthiest 20 percent of school districts now spend about \$18,500 per student compared to the state average of \$15,600 – that’s nearly \$3,000 more per student. The poorest 20 percent of school districts spend less than \$14,500 per student, or \$4,000 less per student than the wealthiest districts.⁵

⁴ Pennsylvania State Education Association Research Division. 2014. “Budget cuts, student poverty, and test scores.” Pennsylvania State Education Association. <http://bit.ly/1LDUcH8>

⁵ Levy, Marc. 2015. “Gap between rich, poor Pennsylvania schools doubled in 4 years.” Associated Press. <http://bit.ly/1huFoMM>

Funding inequality between the wealthiest and poorest school districts more than doubled between 2010 and 2014. Pennsylvania is the worst state in the country for funding inequality between its wealthiest and poorest school districts, with the spending gap per student between these two groups more than double the national average.⁶

Although Pennsylvania does well, overall, on national exams, it has one of the country's largest achievement gaps among demographic groups, including those based on family income and parental education. According to a recent Rand study, the state economy has lost at least \$12 billion dollars in the past decade due to the achievement gap. Because our better-off students are already performing well, the greatest room for improvement is in the performance of students at the bottom. If socioeconomic gaps were eliminated, Pennsylvania's national exam scores would be the best in the nation and among the best internationally.⁷

One of the key socioeconomic groups that needs help is students who are low income, as indicated by those who qualify for free- or reduced-priced lunch. Half of all school districts have 40 percent or more of their students receiving free- or reduced-price lunch.⁸ Research shows that investment in low-income children pays off for society. A comprehensive long-term study of low-income children whose schools received a 20 percent increase in funding per student, from kindergarten through twelfth grade, showed the additional funding had a tremendous impact on their adult lives compared to those students who did not receive additional funding. Compared to similar students who did not receive this additional support, these students, on average:

- Gained an additional year of education;
- Earned about 25 percent more as adults;
- Had an adult family income more than 50 percent higher; and
- Had a 20 percent lower adult poverty rate.

This increase in funding eliminated two-thirds or more of the gaps in adult outcomes between children living in poor families and those who did not.⁹

We can do the same in Pennsylvania, and a good step towards that goal is Gov. Wolf's 2015-16 budget proposal. In comparing the governor's plan to a proposed funding formula, his proposal would greatly lower remaining cuts across all school districts, but would especially target help towards those at the bottom. The proposed funding formula would not help the bottom as much because the formula doesn't account for the lopsided cuts of 2011-12, which disproportionately targeted poor school districts.

⁶ Brown, Emma. 2015. "In 23 states, richer school districts get more local funding than poorer districts." The Washington Post. <http://wapo.st/18fFt2F>

⁷ Karoly, Lynn. 2015. "The Economic Impact of Achievement Gaps in Pennsylvania's Public Schools." RAND. <http://bit.ly/1L2Ycj8>

⁸ Miranda, Waslala. 2014. "Public School Poverty: The New Normal." Pennsylvania Budget & Policy Center. <http://bit.ly/1P3YPdU>

⁹ National Bureau of Economic Research. 2014. "The Effect of School Finance Reforms on the Distribution of Spending, Academic Achievement, and Adult Outcomes." <http://www.nber.org/papers/w20118.pdf>. Pages 2, 44.

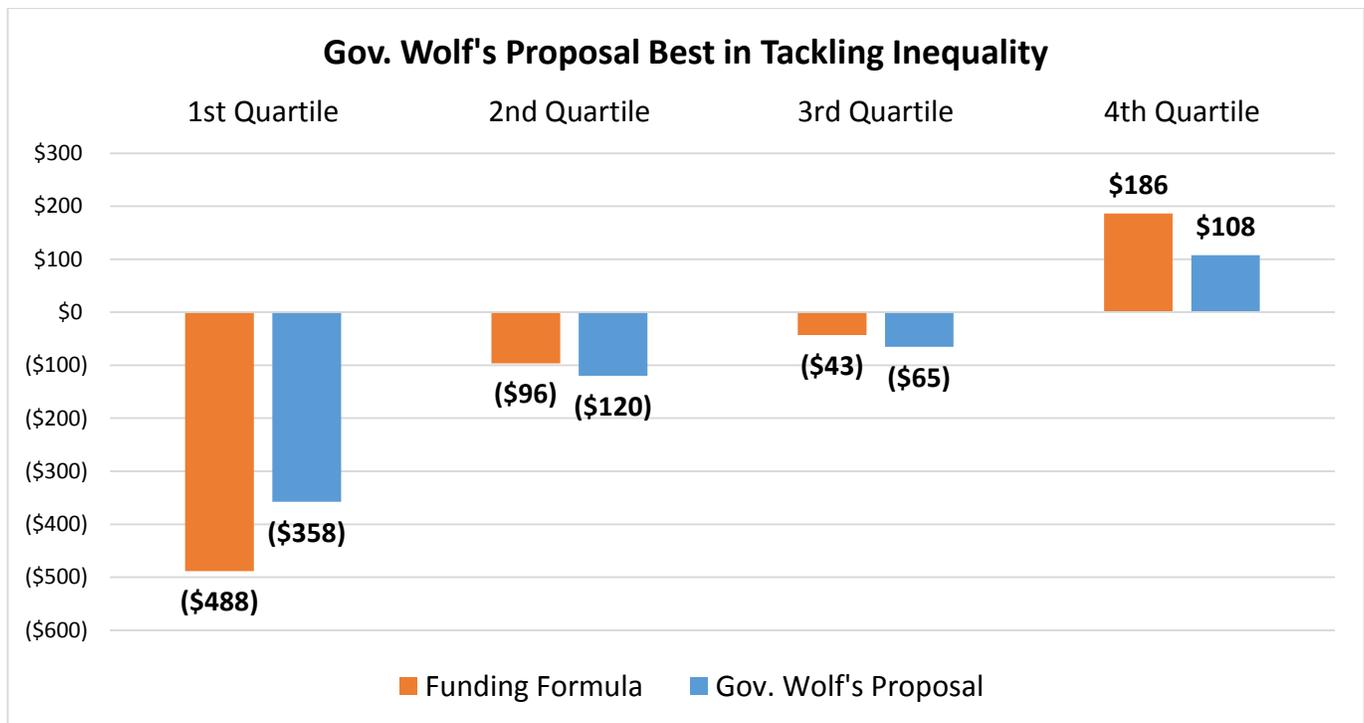


Figure 9: PBPC Analysis of [PDE State Revenue](#) and Budget Office Data

Our success as a state depends on everyone having a fair chance at a quality education. However, some of our children have less of a chance than others. We’re not only failing these children but also failing ourselves by not adequately investing in their future — our future. When we invest in the children of poor families, everyone wins.

Methodology and Data Sources

This brief analyzes funding trends in Pennsylvania’s 500 school districts, divided into four equal groups, or quartiles, of 125 districts. The districts were grouped based on the remaining funding cut from 2011-12 per student in 2014-15. The remaining funding cut per student was calculated by summing the initial cut per school district in 2011-12 with the subsequent funding increases over the following years to result in a net cut in 2014-15 per school district. We used a three-year average student count, averaging the adjusted Average Daily Membership (ADM) for the years 2011-2014. We labeled the group of 125 districts with the largest remaining cuts the “first quartile,” the 125 districts with the next-largest remaining cuts the “second quartile,” etc.

The weighted average of each group was done by using the following calculations: each measure of a school district characteristic, whether median household income or student poverty rate, was multiplied by its share of the respective population to get a result that was then summed across the quartile. In the case of median household income, it was its share of total households. In the cases of the share of students who are eligible for free- or reduced-priced lunch and non-proficiency rates on PSSA exams, it was its share of students.

The following data sources were used:

- The basic education funding (BEF) subsidy for each school district plus formula enhancements, charter reimbursements, Accountability Block Grants —all state sources— and the American

Recovery and Reinvestment Act (ARRA), a federal source used by the [Corbett administration as a substitute for the BEF](#), can be found here:

http://www.portal.state.pa.us/portal/server.pt/community/summaries_of_annual_financial_report_data/7673/afr_other_financial_information/509049

- The share of students eligible for free- or reduced-priced lunch was found using Excel spreadsheets produced by the Pennsylvania Department of Education’s Food and Nutrition Division, titled, “Building Data Report (Lunch),” for each relevant year.
- The statewide average PSSA scores in each year were found here:
 - <http://www.post-gazette.com/news/education/2014/11/21/State-student-scores-declined-with-reduced-funding-test-results-show/stories/201411240030>
 - http://www.portal.state.pa.us/portal/server.pt/community/school_assessments/7442/2006-2007_pssa_and_ayp_results/507511 (2006-07 State Level Math and Reading PSSA Results)
- Classroom funding levels used in Figure 7 can be found here:
<http://www.budget.pa.gov/PublicationsAndReports/CommonwealthBudget/Pages/PastBudgets2014-15To2006-07.aspx#.Vij79ysbitY>
 - The following items were included in “classroom funding:”
 - Basic Education Funding
 - ARRA - Fiscal Stabilization (Ed Jobs Money)
 - Basic Education Formula Enhancements
 - Accountability Block Grants
 - Charter School Reimbursement
 - Education Assistance Program (in 2010-11, the only year in which this was non-zero)
 - School Improvement Grants Program (in 2010-11, the only year in which this was non-zero)
 - One other item which only existed in 2014-15, Ready to Learn Block Grants, is included in Figure 7 without the analysis of individual school districts Because this program was only about \$10 million statewide, it amounts to less than a 0.2% difference in state classroom funding. This minor inconsistency is not material.
- All other data elements were obtained from a Budget Office Excel spreadsheet on the proposed funding formula (sheet: “Simulation Control Panel”) released on June 19, 2015.