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PA BASIC EDUCATION FUNDING COMMISSION FORMULA MEANS DISTRICTS NEED AT LEAST $3.2 BILLION MORE IN STATE FUNDING

Executive Summary

Early this year, Pennsylvania joined 47 other states in the nation when the legislature passed a formula for funding public education. It adopted the formula created in 2015 by the bi-partisan Basic Education Funding Commission. The Commission's formula was based upon a number of factors described below, to equitably distribute state education dollars.[1] Although the Commission provided a guide for how to distribute state funds, it did not provide an answer to another crucial question: *how much actual state funding do all Pennsylvania schools need to properly educate their students?* We call this the State Adequacy Cost.

This report uses the Commission's own formula to answer that question. It concludes that **in order for districts to have adequate funding to enable their students to meet state standards, the state must provide school districts with between $3.188 and $4.280 billion in additional funding.**

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This range was created using two scenarios. The lower estimate of $3.2 billion is based very conservatively on the median basic education cost among school districts in Pennsylvania. The higher estimate of $4.3 billion is based on basic education cost per student in the median district among the subset of school districts with average or better performances on all three of last year's PSSA exams.

Given the difficulty of students in a majority of the state's districts to score proficient with current funding, **it is apparent that the $3.2 billion increase should be the minimum target for state funding increases.** We have posted

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[1] The formula has now been included in the Fiscal Code, Act 25 of 2016, but only for the distribution of new state funding, not existing funds. This report is based on the most recently released PDE numbers for the factors in the BEF formula.

on our website how much each district would receive based on applying the Commission's formula to the $3.188 and $4.28 billion increases over eight years.

The Calculation

The process for converting the Basic Education Funding Commission's distribution formula into a dollar amount we call "state adequacy" involves four steps.

Step One: Counting Weighted Students

The first step starts with the Commission's formula. The Commission began by counting students. For each district, it calculated a three-year average number of students, then added up the averages for all districts in Pennsylvania. In 2014-15 this total was 1,720,196. With the understanding that some students will need more resources than others, the Commission then added a series of weights, representing an increased need for resources for: students living in poverty; English language learners; students in charters; and, school districts in sparse or rural areas with lower enrollment. Each of these weights is expressed in the Commission's formula as a percentage of a regular student's cost. For example, the Commission determined English Language Learners require an additional 0.6 share of resources for every 1 regular student's costs; therefore, the formula would count an English Language learner as 1.6 students. Based on these weights, the Commission's formula increases the "number" of students by 390.952, **for a total weighted number of students 2,111,148**.

This weighting process was identical conceptually to what was done in every other major study of education funding in recent years, including the 2007 Costing Out Study, commissioned by the legislature; the 2008 funding formula approved by the legislature, and the formula designed in 2015 by the Campaign for Fair Education Funding. Although identical conceptually, the specific weights in each formula varied.

Step Two: Determining a Base Cost

The next step is to calculate the cost of adequately educating a "regular" student, that is, a student for whom there are no additional costs. As noted, the Commission decided not to take the steps necessary to determine actual costs for educating students. The 2007 Costing Out Study, however, found that it took

$8,003 in classroom costs per regular student, or $9,152 today in inflation-adjusted dollars. That base cost was derived using several methods, including the examination of successful schools and panels surveying Pennsylvania educators about the inputs necessary to provide an adequate education.

An alternative approach, used by [the Campaign For Fair Education Funding](#) and used here, examines the current Actual Instructional Expense (AIE) of districts in 2013-14. AIE is an annual calculation by the Department of Education of district expenditures that reasonably approximates classroom costs for each district and the costs intended to be covered by the Basic Education Funding state appropriation. AIE does not include debt service costs, pre-K and post-secondary expenditures, or transportation costs. It also excludes special education and retirement costs to the extent reimbursed by the state. To be a more accurate measure of funds needed from state and local sources, AIE is next reduced by all federal reimbursements.

We then divided school districts' AIE amounts by the number of weighted students in each district and then found the median of all school districts' weighted costs. In 2013-14 the median weighted cost was $7,805 per student. This adjusted AIE, however, is a conservative amount that is more focused on equity than adequacy. That is, it assumes this present median amount is sufficient, despite the fact that in 2014 more than 30% of the state's student were not testing proficient, 70% of the districts had at least one school not meeting state goals in reading or math, and that in 2015—when the test reflected current state standards—the percentage of students not testing proficient increased to 60% in math alone.

Thus, to give a more accurate estimate of need, we found the median AIE for districts that were more successful at preparing students. We defined success as districts which were in the top half of the state in PSSA proficiency in all three subjects tested (English Language, math and science).[2] The median AIE for these 189 better performing districts is $8,826.

In sum, we used two measurements of the base cost to educate children: a median AIE for all districts, yielding **$7,805** and a median AIE for "successful" districts yielding **$8,826**.

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[2] Districts were in the top half of the state if they had more than 42 percent of their students proficient and above in Math, 62 percent in English Languages, and 72 percent in Science.

Step Three: Determining Adequacy Cost

The next step is to calculate an Adequacy Cost by multiplying the base cost by the total weighted number of students in a district. Adequacy Costs for each of Pennsylvania's 500 school districts are added together to reach the Total Adequacy Cost. (Note that this total is the total of both state and local funds necessary to reach adequacy.)

Utilizing the lower figure of $7,805 calculated above—the median for all districts' AIE, adjusted for the number of weighted students—we then multiply that cost by the number of weighted students in every district. That product produces an Adequacy Cost for each district which, when added, together produces **a statewide Adequacy Cost of $16.5 billion**. Again, this is a conservative estimate that assumes the district with median costs in the Commonwealth spends enough on its schools. **If the median AIE from the 189 better performing districts is used, increasing the per student amount from $7,805 to $8,826, the total Adequacy Cost increases to $18.6 billion**.

Step Four: Determining State Share

The fourth step is to determine what part of the total Adequacy Cost should be paid by the state and what part raised locally. Historically, the state has not made this calculation.[3] The only calculation it has made is how to apportion whatever funds it appropriates among school districts, i.e., the relative distribution. This apportionment has been made on the basis of a Market Value/Personal Income Aid Ratio. This is a ratio that is supposed to measure the relative value of the taxable property of the district compared to the state total and of the personal income (excluding social security income) of a district in comparison to the state total.[4] The Commission likewise did not determine the appropriate split between state and local funding of the Adequacy Cost because it too was focused only on how to allocate whatever newly-appropriated state funding was being apportioned among the districts. As in the past, the Commission failed to consider how much actually should be appropriated.

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[3] The one exception was from 2008 through 2011 when the state calculated an Adequacy Gap and used the Market Value/Personal Income Aid Ratio to determine the state target for each district. See, 24 P.S. § 25-2502.48(c)(1) (2012)

[4] The Market Value factor is weighted at 60% and the Personal Income factor at 40%.

However, it did provide the methodology to determine the relative allocations of state funding among districts.

The Commission started with its weighted student total (now 2,111,148), then applied additional weights for factors which it considered important in determining relative funding needs of districts, one of which was a Local Capacity Index. The Commission measured the amount a district could raise per student, assuming the district taxed at the median rate among all districts, and then created the Index which compared the district's capacity to generate revenue to the state median capacity to generate revenue.[5]

That Local Capacity Index, ranking districts by their ability to support local school funding, can mathematically be converted into a ratio in the same manner the state has always calculated the distribution of state appropriations among districts. As described above, this calculation compares a particular district's capacity with the sum of all districts' capacity, thus similarly comparing a district's wealth per student to the total of all districts' wealth per all students. The Law Center calls this figure the Local Capacity Ratio. A floor of 15% was set for the Local Capacity Ratio to ensure that every district would receive some part of its Adequacy Cost from the state. This adjustment mirrors that in the current aid ratio which sets a 15% minimum.[6]

The final step for this calculation is to apply the Commission's Local Capacity Ratio for each district (with a .15 minimum) to the Adequacy Cost for that district and to calculate the sum of the resulting figures for every district for a total state share. This calculation applied to the lower of the two Adequacy Costs

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[5] The Commission formula also applied two additional weights to determine the relative state and local shares: a median household income index and tax effort. We could also have used these separate weights but have not done so because the Local Capacity Index already calculates the relative income as well as wealth of districts. Thus, it is unnecessary to separately use the median household income index. And, although the third factor—tax effort—is important in determining school funding fairness, both the Governor and Legislature have separate proposals that directly address reducing local property taxes and the factors that should be taken into account in doing so. The technical definitions of these indexes can be found here at 66.

[6] This minimum, although not economically required, represents a belief that in a state educational system with state mandates and state education standards, all constituents should receive some state financial assistance and have some direct benefits from participating in the system which they are called upon to help pay for. The cost for state minimum support is $181 million out of the total State Adequacy share of $8.78 billion or $73 million of the $3.2 billion in minimum new appropriations needed.

calculated above—$16.5 billion—yields a state share of $8.785 billion.[7] To stay consistent with current practices, we used a "hold harmless" provision that ensures no district gets less than it did in 2014-15.[8] This practice increases the state share by $123 million to a total of $8.908 billion.

This is a $3.188 billion increase in state spending from 2014-2015, even under this very conservative estimate of what it costs to properly educate a child. Alternatively, if one uses the higher Adequacy Cost ($18.6 billion), based on the AIE of better performing districts, the state share becomes $9.923 billion. With a hold harmless provision that state share increases by $77 million to $10.0 billion, totaling **$4.280 billion more than last year**.

Conclusion

In sum, using relevant features of the Commission's recommended formula, and depending on whether the base cost for a student is set on the median Actual Instructional Expense for all districts or on the median of the districts scoring in the top half of the state in PSSA scores, the new state funding necessary for all students to be given an equal opportunity to become proficient on state mandated exams ranges from $3.2 billion to $4.3 billion. **The $3.2 billion increase should be the minimum target for state funding increases** given the difficulty of students in a majority of the state's districts to score proficient with current funding. Even this would require funding increases of at

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[7] By comparison, if the traditional Aid Ratio calculation were to be applied to the $16.5 billion total Adequacy Cost amount rather than the Commission's Local Capacity Ratio, used here, the state share would be $9.130 billion or $222 million higher. There would be a mix of winners and losers among the districts. This fact that this calculation yields a $222 million reduction in state share is a measure of the conservative nature of using the Commission's Local Capacity Index

[8] Ultimately, we would be guided by the legislature's judgment on whether a "hold harmless" provision is needed. On the one hand, the Commission recommended that its formula apply only to funding over and above that presently distributed to school districts. However, it also recommended "that any new funding driven out through the formula approved in this report should not be subject to hold harmless." This appears to suggest its belief that districts should *not* receive new funding that would give them more state funding than would be called for by the formula if applied to old and new funding together. If the legislature did not want to eliminate the hold harmless feature immediately, it could, in the future, consider reducing partially or in whole, any new distributions which would be in excess of the state's portion of a district's pro rata share of the total distribution for that year. This would save in excess of $120 million which could be redirected to those districts which have been underfunded. In other words, at that point the legislature might deem it frugal and appropriate to consider whether the state should continue to give more funds to a district than the Commission said was necessary. Such a phase-in would allow districts time to prepare and to align their programs to such a funding change. And, because it would stop the state from giving more to those who are already ahead, it would help shorten the period of time it takes for underfunded districts to catch up.

least $400 million for eight years. **If the state instead were to increase education funding by only $200 million each year, a toddler today would graduate high school in many districts without ever having attended an adequately funded school.**

As the Commission recognized, predictable and fair funding is critical to Pennsylvania's ability to prepare its students to succeed. The perils of unpredictable funding were demonstrated in the 2015-16 budget struggle, when schools did not know what services they could afford to provide. Predictability alone, however, is not sufficient. Nor is a formula if it distributes inadequate appropriations. Thus, calculating the actual cost of educating students in each district provides the public and the General Assembly a goal for total funding needed to effectively and fairly educate students. And a calculation of the Commonwealth's share of that amount, based on the Commission's own formula, provides the information necessary to make state funding not only predictable, but fair, to all districts and all children.

By many calculations, Pennsylvania has the most unfair system of education funding in the country. **The Basic Education Funding Commission has provided a road map to providing schools and students the resources to succeed.[9] That cannot happen without the legislature understanding the actual costs of meeting the educational standards it has created and its commitment to fund a fair share of that cost. That is its constitutional obligation.[10]** This report is designed to help the legislature and public know that based on information currently available, the range of additional state funding needed is $3.2 to $4.3 billion.

That is its constitutional obligation.

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[9] To end its current unfairness the General Assembly would also have to provide some measure of modest but effective local property tax relief, as well as the additional education funding described in this report.

[10] "The General Assembly shall provide for the maintenance and support of a thorough and efficient system of public education to serve the needs of the Commonwealth." Pa. Constitution, Art. III, Section 14.