

How Delayed Implementation of Pennsylvania's Fair Funding Formula Perpetuates Racial Inequality

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Executive Summary

In June 2016, Governor Tom Wolf signed House Bill 1552 and created a new formula for the distribution of Basic Education Funding (BEF) in Pennsylvania. The formula was designed to provide an equitable method for distributing state education funds. However, this formula only applies to new funds appropriated by the state. In 2017-18, the state's formula for fairly distributing funds only applied to 7.6% of the money appropriated for Basic Education Funding. This policy brief summarizes a current working paper on the impact delayed implementation of Pennsylvania's Fair Funding Formula has had on local districts.

According to our analysis, Black children and Students of Color are disproportionately disadvantaged by the state's decision to delay implementation of its new formula.

Through policy simulations and analyses using multivariate regression techniques, we found that an increase in the percentage of Black students or the percentage of all Students of Color within a district is associated with a statistically significant increase in the gap between the amount a district receives in Basic Education Funding and the amount that same district would receive if the new funding formula was fully implemented.

Similarly, we found that an increase in the percentage of Black students or all Students of Color within a district is associated with a statistically significant decrease in the amount of current Basic Education Funding and overall State Funding provided to a district. These trends cannot be explained by other factors we would expect to impact state funding like district wealth or student poverty. Our results are consistent across twenty specifications.

Black children and Students of Color are disproportionately and systematically disadvantaged by the state's current funding policies.

Pennsylvania's New Funding Formula

Pennsylvania's new funding formula is designed to fairly distribute Basic Education Funding to local districts. The formula considers a number of student and district factors that increase educational costs and cannot be controlled by district officials.

Specifically, the new formula accounts for the fact that research tells us it costs more to educate students from low-income families (Alexander & Wall, 2006; Baker, 2005; Baker & Farrie, 2018; Verstegen, 2015) and students with an English language learner designation (Baker, 2005; Verstegen & Driscoll, 2009).


The new formula also includes adjustments for districts that are small and rural, have high charter school enrollments, or have residents with low median incomes. All of these factors, too, are associated by researchers with districts encountering higher costs and having a lower ability to generate revenue to cover costs (Baker, 2005; Baker & Farrie, 2018; Brimley, Verstegen, & Garfield, 2016; Odden & Picus, 2014; Verstegen & Driscoll, 2009). The formula also includes an adjustment based on a district's local taxing effort and capacity through an index that ensures wealthier districts deciding to spend large amounts on education are not treated the same as poorer districts taxing at a high rate but generating little revenue.


In the legislation creating the new funding formula, lawmakers in Pennsylvania stipulated that only new money appropriated for BEF would be distributed through the Fair Funding Formula. School finance researchers would consider this a "hold harmless" provision (Toutkoushian & Michael, 2008).

With delayed implementation, only a small portion of Basic Education Funding is distributed through the state's new formula. In the 2017-18 school year, about 92% of Basic Education Funding was not distributed through the new funding formula. If increases in Basic Education Funding over time follow the average pattern of increase we have seen since the formula was created in 2015 (2.535%), it will be several decades before the majority of Basic Education Funding is distributed according to the standards outlined in the new funding formula.

Percentage of Basic Education Funding distributed through the new funding formula, 2017-18



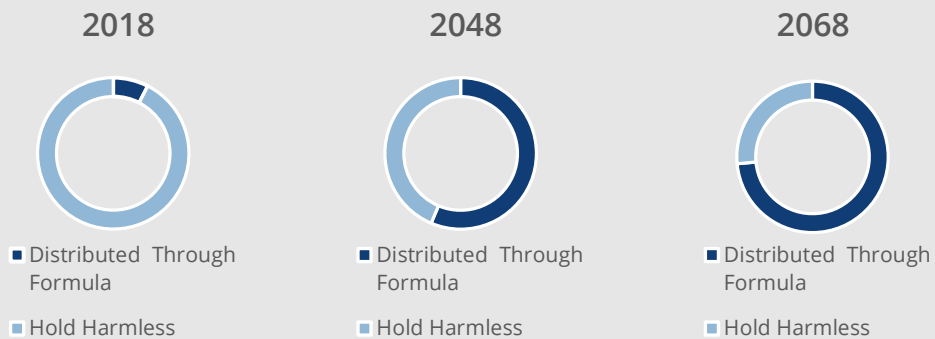
 = formula dollars

 = hold harmless dollars

Assuming BEF increases 2.535% per year, a student who started Kindergarten during the 2017-18 school year will never attend a public school in Pennsylvania where a majority of BEF is distributed through the new formula. In this student's senior year in high school, only 32% of Basic Education Funding would be distributed through the formula.

Assuming this student started Kindergarten at age 5, they will be 38 years old when 60% of BEF flows through the new formula, 50 years old when 70% of BEF flows through the new formula, and 67 years old when 80% of BEF flows through the new formula.

Projected Implementation of Pennsylvania's New Funding Formula Over Time



If the average rate of growth in BEF each year is higher or lower than 2.535%, this would change these projections. However, even changes by a few percentage points will do nothing to change the fact that it will be decades before the new formula substantially determines how schools are funded.

With delayed implementation of the new funding formula, some school districts are receiving less BEF than they would if the state used the new formula to distribute resources. Other districts are receiving more BEF than they would if the state used its new formula to guide the distribution of funds.

We can identify how some districts are “winners” and some districts are “losers” by analyzing which districts currently receive more or less BEF than they would if the state distributed all BEF through the new formula.

However, it’s important to recognize that districts currently receiving more BEF than they would if the new formula was fully implemented are not necessarily overfunded. Across Pennsylvania, many school districts are struggling with growing costs and dwindling resources (PASBO & PASA, 2019). Instead, it makes more sense to think about the way many districts are underfunded, and districts receiving less in BEF than the new formula considers fair are the most underfunded.

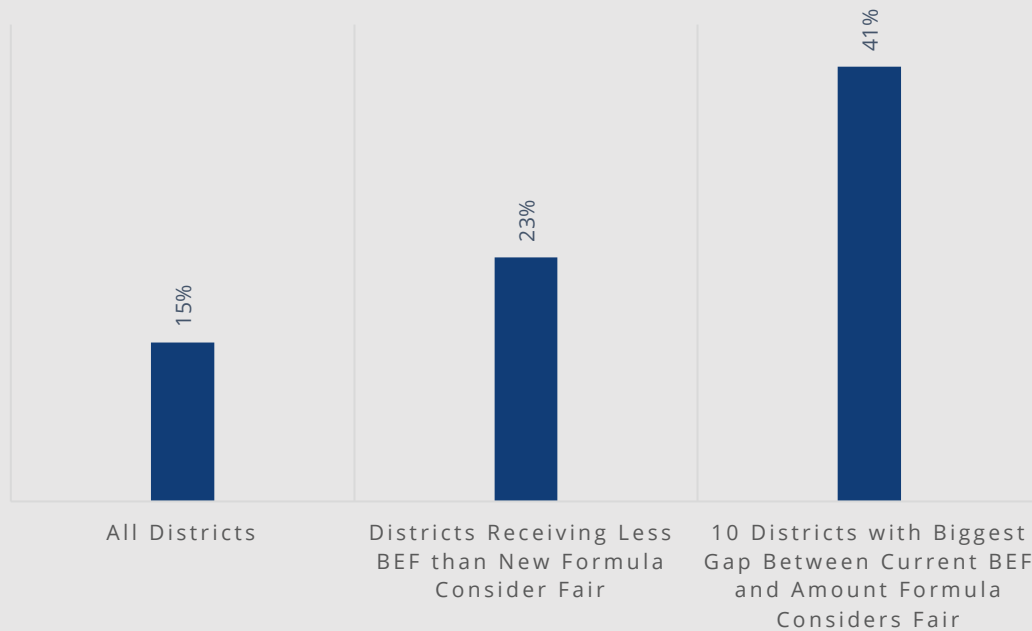
We investigated whether districts receiving less BEF than they would if the new formula was fully implemented are demographically similar.

Relying only on descriptive statistics, we found that, on average, 23% of the students attending districts currently receiving less BEF than they would if the new formula was fully implemented are Black. This figure is higher than enrollments across the state, where 15% of students are Black.

Among the 10 districts with the largest gap between the amount of BEF they currently receive and the amount they would receive if the new formula was fully implemented, on average 41% of students are Black.

Even districts currently receiving more BEF than they would if the new formula was fully implemented are not necessarily overfunded.

Enrollment of Black students

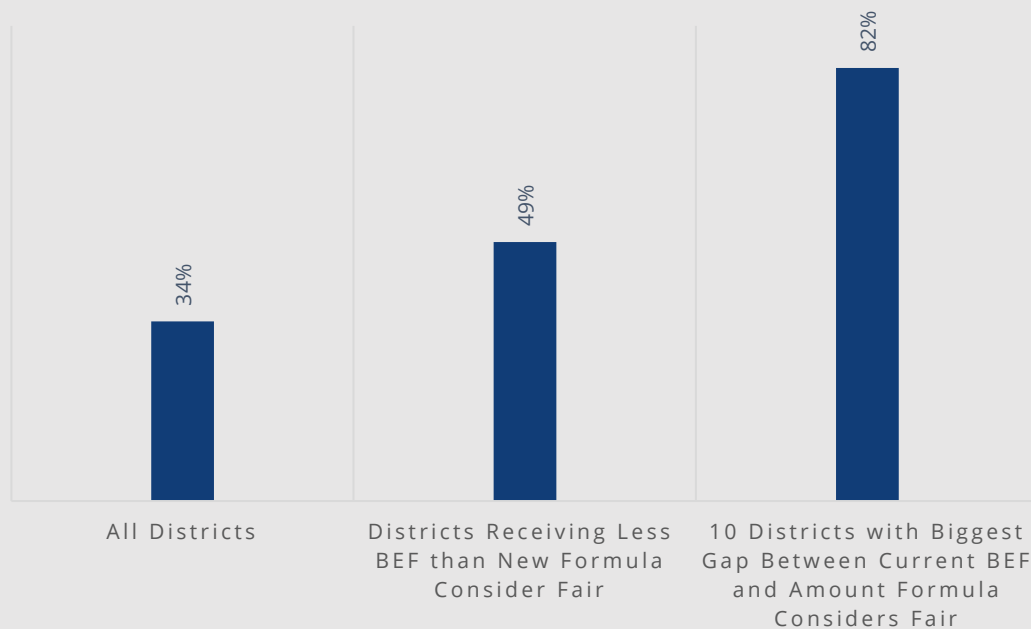


Relying again on descriptive statistics, we found that, on average, 49% of the students attending districts currently receiving less BEF than they would if the new formula was fully implemented are Students of Color. This figure is higher than enrollments across the state, where 34% of students are Students of Color.

Among the 10 districts with the largest gap between the amount of BEF they currently receive and the amount they would receive if the new formula was fully implemented, a high percentage of students are Students of Color.

While these demographic differences are suggestive, a number of factors could potentially explain these differences. For example, since districts with higher enrollments of students in poverty will receive more money under the terms of the new formula, we would expect high poverty districts to have a large gap between what they currently receive in BEF and what they would receive if the formula was fully implemented.

Enrollment of Students of Color



To account for this possibility, our paper used simple multivariate regression analysis—controlling for every factor the state considers when distributing funding—to investigate the extent to which the percentage of Black students or Students of Color in a district explains:

- Variation in receiving more or less BEF than the new formula considers fair
- Variation in the overall distribution of BEF
- Variation in the overall distribution of State Aid

Even after controlling for every factor lawmakers explicitly consider when distributing BEF and state aid more broadly, we found that an increase in the percentage of Black students or the percentage of all Students of Color within a district is associated with a statistically significant increase in the gap between the amount of money that a district receives in BEF and the amount the new formula would consider a fair allocation of BEF.

Our results were similar when we examined the distribution of actual BEF and the distribution of all state aid to districts. An overview of our results are described on the next page. Full details on our methodology (including data sources, specifications, and robustness checks) are available in the working paper.

Summary of Results

We consider our results evidence of racial inequities in the distribution of BEF and total state aid by lawmakers in Pennsylvania.

- 1) We found that partial implementation of the new formula has a disparate and negative impact on districts with high enrollments of Black students and all Students of Color, as assessed by the gap between how much BEF a district receives and how much BEF they would receive if the new formula was fully implemented. None of these disparities could be explained by factors lawmakers have deemed legitimate for differential allocations of BEF.
- 2) We found that overall BEF is distributed in racially disparate ways that cannot be explained by factors considered appropriate for the differential allocation of BEF, as assessed by the current distribution of BEF.
- 3) We found that all state aid is distributed in racially disparate ways. An increase in the number of Black students or all Students of Color in a district is associated with a statistically significant decrease in state aid from Pennsylvania lawmakers, even after again controlling for other explanatory factors.
- 4) Our results were consistent across a number of alternative estimation techniques.

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