



# School District Funding in Texas

## Computing the Effects of Changes to the Foundation School Program Funding Formula

*Stipica Mudrazija and Kristin Blagg*

*with Victoria Lee, Cary Lou, and Victoria Rosenboom*

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Texas's school funding formula is a power-equalization formula, with different tiers of funding that aim to provide similar levels of funding for similar tax effort. In Tier I, which accounts for most school districts' funding, this is achieved by determining each district's funding entitlement, the share of the entitlement the district will pay, and the resulting state funding to pay for any difference. If districts have property wealth exceeding a certain per student amount, any tax receipts generated from the excess wealth are recaptured by the state and redistributed to property-poor districts. In the 2017–18 school year, the state funding formula resulted in slightly progressive cost-adjusted funding across districts in terms of students' poverty status, while white students and rural students, on average, are enrolled in districts with higher per student funding in cost-adjusted dollars. Changes in funding parameters, with some exceptions, produce modest changes in relative funding for different students along the lines of students' poverty status, race or ethnicity, and urbanicity of their school.

## Background

Texas's current public education system traces its roots back to the mid-19th-century law that first provided resources to support free public schools.<sup>1</sup> Today, Texas has one of the largest and most complex K–12 public education systems, with more than 1,000 independent school districts (ISDs) and a fast-growing number of charter school districts (183 as of 2016) (Texas Charter Schools Association 2016). The state serves 5.3 million students, including a quarter million in charter schools (Legislative Budget Board 2016; Texas Charter Schools Association 2016), and the private school sector is small relative to most other states.<sup>2</sup>

Texas spent \$65 billion in fiscal year 2016 for primary and secondary public education (Texas Education Agency 2018). About half of this expenditure was funded with local resources, and the rest was primarily funded through the state government (federal funding accounts for less than 10 percent). Nominal spending on K–12 public education has substantially increased over the past decade (Texas Education Agency 2018).<sup>3</sup> But after accounting for inflation and increases in the student population, spending per pupil has remained virtually unchanged: roughly \$10,000 to \$11,000 per student in 2015 dollars (Villanueva 2016). As the economy recovered and real estate prices rose after the Great Recession, the local funding share has increased relative to the state funding share, owing primarily to the mechanics of the school funding formula, known as the Foundation School Program (FSP).

Changes to the way Texas funds school districts have largely occurred through litigation and legislative action in response to litigation. In 1949, the Texas legislature enacted major education reforms known as the Gilmer-Aikin Laws. Among other changes, the laws replaced the state’s per capita funding system with one based on each school district’s ability to raise revenue, established the Texas Education Agency, and introduced a Minimum Foundation Program to ensure a minimum standard of school services and the concept of average daily attendance (ADA) as a basis for determining financial benefits (Kuehlem 2004).

The current funding system can be traced back to 1968, when parents from property-poor public school districts, led by Demetrio Rodriguez, filed a federal lawsuit challenging the constitutionality of the state’s reliance on local property taxes as the primary source of school funding (Imazeki and Rechovsky 2004). The lawsuit’s failure shaped subsequent plaintiff arguments in Texas and around the country, as legal arguments moved from focusing on federal constitutionality to state constitutionality.

From the mid-1980s to the mid-2000s, a series of cases, commonly referred to as *Edgewood I* through *VI*, shaped the current structure of public school funding in Texas. In the first of these cases in 1984, the Mexican American Legal Defense and Education Fund filed a suit on behalf of Edgewood ISD<sup>4</sup> against commissioner of education William Kirby, arguing that even high property tax rates in property-poor districts were not sufficient to raise funds needed to meet the state’s education requirements (Imazeki and Reschovsky 2004).<sup>5</sup> The state school funding system was found unconstitutional, and the legislature responded by appropriating additional funding for public schools. Because the new legislation did not change the funding system’s basic structure, the plaintiffs again challenged its constitutionality (*Edgewood II*). The plaintiffs won again, prompting legislation to enact a major overhaul of the public school funding system. But the legislature’s plan, which would have consolidated tax bases by combining 1,058 ISDs into 188 county education districts with tax authority, was successfully challenged by property-wealthy districts (*Edgewood III*). In response, the legislature enacted Senate Bill 7, which established the basic structure of the current funding system and required districts with high property wealth to lower their per student tax wealth through such methods as district mergers, the acceptance of nonresident students, or the purchase of credit from the state. Generally, this funding system has withstood subsequent legal challenges (*Edgewood IV–VI*) (Imazeki and Reschovsky 2004; Kauffman 2008).

Senate Bill 7 includes three basic elements for the Foundation School Program: a guaranteed amount of funding per student for each district levying a minimum property tax rate (Tier I), a guaranteed amount of funding for districts that levy more than the minimum property tax rate (Tier II), and the “recapture” of property taxes raised above a given per student amount, which are then redirected to property-poor districts (Bingham, Jones, and Jackson 2007; Imazeki and Reschovsky 2004). Over time, more districts reached the legally allowed taxing limit, which led to additional legal challenges, known as *West Orange Cove I* and *II*. In the latter,<sup>6</sup> the Texas Supreme Court found that the existing school funding scheme was akin to a statewide property tax (prohibited under state law) because many districts had to levy the maximum legally allowed rate to meet the minimum required educational standards (Texas Public Policy Foundation 2016). Changes implemented in response to this decision led to the FSP’s most recent iteration. This version directs excess funds from a preexisting state franchise tax into a property tax relief fund to reduce local district effort and assure funding per student at a level no smaller than before the reform (a “hold harmless” mechanism that assures that funding will not decrease and will provide property tax relief).

Empirical studies provide mixed evidence regarding the efficacy of the Texas funding formula. Some find that it produces similar levels of funding per student across districts (Chingos and Blagg 2017), but others suggest that it generally fails to achieve fiscal neutrality and funding equity across and between districts.<sup>7</sup> The key predictor of combined state and local funding is assessed property tax per student, indicating a continued relationship between property wealth and funding, while equality-enhancing aspects of the FSP, such as entitlements based on student needs, are less important and not sufficient to neutralize the inequity in local property values (Rolle and Jimenez-Castellanos 2014; Rolle, Torres, and Eason 2010).

Researchers have identified the hold harmless mechanism as a key driver of interdistrict inequity (Baker and Corcoran 2012; Bingham, Jones, and Jackson 2007). On the other hand, the recapture system had been found to have a positive impact on redistribution from richer districts to poorer school districts (Pennington 2011). But recapture has been criticized for creating economic inefficiencies that led to a loss of property wealth that was larger than the reduction in spending differences between property-rich and property-poor districts (Hoxby and Kuziemko 2004), while not focusing on improving student performance (Pennington 2011). Overall, the complexity of FSP and its efficacy-related issues reflect the enormous challenge of being charged with achieving multiple—and often conflicting—goals through a single funding mechanism.

## The Current Funding Formula

Guided by the principle that districts taxing at the same rate should get the same return per student of similar characteristics, and shaped by a history of legal challenges to its constitutionality, Texas’s FSP has evolved. Today, the FSP is a power-equalization formula with different tiers of funding that aim to provide similar levels of funding for similar tax effort.

The Tier I entitlement, which provides most funding for districts, is determined by the number and characteristics of students, district geographic size, and costs of providing education. Calculating the entitlement begins with the basic allotment amount, which represents the cost of a student’s regular education program: \$5,140 in districts with a compressed tax rate of \$1.00 as of fiscal year 2017.<sup>8</sup> The basic allotment is then adjusted for differences in the costs of educating students in different regions (using a Cost of Education Index, or CEI) and in districts with a small number of students in a district or large geographic size relative to its student population. Each district’s CEI ranges from 1.02 to 1.20 and is applied to 71 percent of the basic allotment that is assumed to be related with the uncontrolled factors affecting teachers’ salaries.<sup>9</sup> The resulting per student funding amount, or the *adjusted allotment*, is multiplied by the number of students in average daily attendance, which is roughly equal to the total number of students in attendance during the school year divided by the total number of instructional days. The resulting number is the regular program allotment, which accounts for almost three-quarters of the total Tier I funding (Texas Education Agency 2018).

Aside from the regular program allotment, the Tier I entitlement includes other allotments, including those for special education, state compensatory education, career and technical education, bilingual education, and gifted and talented education. Students funded through these allotments are assumed to require specialized services that raise the cost of their education beyond the regular allotment amount. Generally, the value of each allotment is determined by applying appropriate student weights to either the number of students in ADA or the number of full-time equivalent students.

The total cost of the Tier I entitlement is divided between districts and the state, with property-wealthy districts paying a larger share of the total entitlement than property-poor districts. If districts have property wealth exceeding a certain per student amount, the *equalized wealth level*, they must reduce the property wealth to the equalized wealth level, resulting in a remittance of any tax receipts generated from the excess wealth to the state.<sup>10</sup> Through this recapture mechanism, funds are redistributed to property-poor districts. Overall, Tier I accounts for about \$9 of every \$10 of the total current funding in the school finance system (Legislative Budget Board 2016).

Tier II, which provides most of the remainder of school funding, allows school districts to generate additional funding by taxing beyond the required minimum. For districts that do so, the state guarantees a certain dollar amount “yield” per student, providing districts incentives to increase local property taxes to maximize the state contribution. Tier II consists of two levels: level 1, which has a higher state-guaranteed yield and is not subject to recapture, and level 2, which has a lower state-guaranteed yield and is subject to recapture.<sup>11</sup>

Tier II level 1 provides additional funding for the first six cents (“pennies”) that districts tax above their compressed tax rate (typically \$1.00). Funds raised at this level have a guaranteed yield per penny per student in weighted average daily attendance<sup>12</sup> at the level of Austin ISD (\$77.53 in fiscal year 2017) for equal tax effort.<sup>13</sup> Because these additional tax “cents” guarantee a match from the state and are not subject to recapture, they are often referred to as “golden pennies.”

Beyond the six golden pennies, districts can raise additional enrichment funds (Tier II level 2) up to the total tax effort of \$1.17. Therefore, Tier II level 2 allows all districts with the compressed tax rate of \$1.00 to raise additional funding for 11 cents of tax above \$1.06. Guaranteed yield per penny per weighted average daily attendance is set in statute at \$31.95, and any excess funds property-wealthy districts raise are subject to recapture and are used to fund the guaranteed yields. Because of recapture, these additional tax effort cents are “copper pennies.”

For the past decade, this system was overlaid with the *target revenue system*, which guaranteed that no district would receive lower per student funding than before the property tax compression that was implemented to comply with the *West Orange Cove II* ruling (Texas Public Policy Foundation 2016). In the years following the property tax compression, most districts received funding from the Additional State Aid for Tax Reduction (ASATR) program. But because of rising property values and an increase in basic allotment, fewer districts were funded through this hold harmless funding mechanism (Texas Education Agency 2018; Texas Public Policy Foundation 2016). This funding system expired in 2017, but some transitional funding is available to districts that would still have benefited from the ASATR program.

## Equity Measures

Given its structure and goals, it is not immediately apparent whether, and how well, the FSP distributes school funding resources in Texas equitably. To better understand the distributive implications of the current school funding formula provisions for various students, we use data on state and local FSP funding for current expenditures for fiscal year 2017. We assess school funding progressivity by calculating estimates of average funding for children in the district from families below the federal poverty level relative to their nonpoor peers.<sup>14</sup> Following the same approach, we examine funding for students of color and Latino students relative to white students.<sup>15</sup> We also assess funding for students living in urban and rural areas in each district.

We use district-level data for the first two measures of equity because the state funding formula typically allocates dollars to districts, not to schools. We do not capture differences in spending across schools within districts (and students within schools). For example, poor students may benefit from programs or targeted revenue streams not available to nonpoor students. Conversely, nonpoor students may attend schools with more highly paid teachers or enroll in courses that are more expensive to provide than the schools poor students are enrolled in within the same district. We do not know how this might bias our results, but the impact may be nontrivial given that prior analysis of school spending in Texas shows that differences between schools within the same district are sometimes larger than differences between districts (Guin et al. 2007). For the final measure of equity, which focuses on funding for students in urban and rural areas, we use school-level data to derive relevant district-level information. Importantly, even predominantly urban districts, which are unlikely to qualify for geographic and size-related formula adjustments, have some rural students and predominantly rural districts have urban students. Therefore, our funding results are somewhat different from those that would be obtained if we classified districts, rather than students, as urban or rural.

To calculate the average distribution of funding for poor and nonpoor students, we use district-level poverty data from US Census Bureau’s Small Area Income and Poverty Estimates to estimate the share of children ages 5 to 17 who are from low-income families in each district.<sup>16</sup> We merge these data with school district state and local funding levels from the Texas Education Agency. We calculate a weighted average of each district’s per student funding using the number of poor children in each district as the weight.<sup>17</sup> Then, we calculate the same weighted average using the number of nonpoor children in each district. Results suggest that poor students are, on average, from districts with \$7,926 in per student funding compared with \$7,612 for nonpoor students. Therefore, the current formula is somewhat progressive, as poor students reside, on average, in districts that receive 4 percent more funding. Although this difference seems modest, Texas’s FSP does not explicitly target poor students. Therefore, the current level of progressivity may result from the divergent impacts of various formula elements. Features such as funding recapture likely increase progressivity, while ASATR may suppress it.<sup>18</sup>

## BOX 1

### Calculating Equity Measures

This simplified example best explains our equity measure calculation. In this example, the state has only two districts, A and B, each with 100 students.

District A	District B
\$10,000 per student	\$13,000 per student
10 poor, 90 nonpoor students	30 poor, 70 nonpoor students

District B is located in an area where there are higher wages because of increased living costs, so they will likely need to spend more on teacher and staff salaries (a key driver of cost in education). We use the Comparable Wage Index to adjust the per student amount down to account for this difference.

District A	District B
\$10,000 per student	\$13,000 per student
\$10,000 per student, cost-adjusted	\$12,000 per student, cost-adjusted
10 poor, 90 nonpoor students	30 poor, 70 nonpoor students

Next, we compute a weighted average funding level for poor and nonpoor students.

**Poor:** 
$$\frac{(10 \text{ students from A} \times \$10,000) + (30 \text{ students from B} \times \$12,000)}{10 \text{ students from A} + 30 \text{ students from B}} = \$11,500 \text{ per student}$$

**Nonpoor:** 
$$\frac{(90 \text{ students from A} \times \$10,000) + (70 \text{ students from B} \times \$12,000)}{90 \text{ students from A} + 70 \text{ students from B}} = \$10,875 \text{ per student}$$

The difference between these two average per student amounts constitutes our measure of equity.

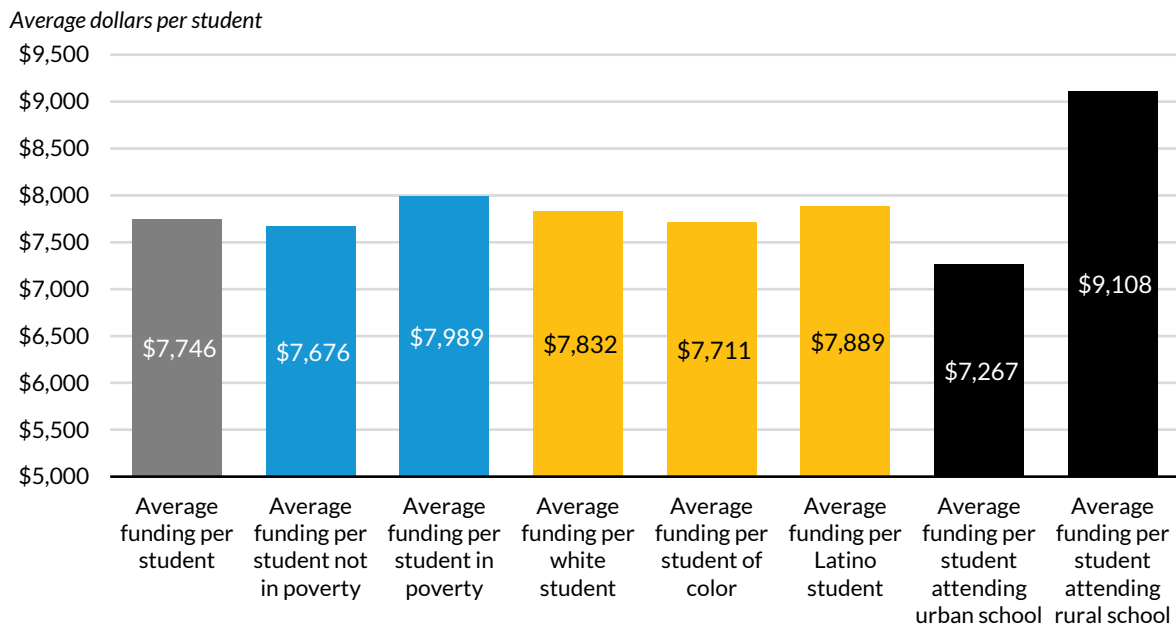
$$\$11,500 \text{ per poor student} - \$10,875 \text{ per nonpoor student} = \$625$$

Thus, in our simplified example, we estimate that the average poor student lives in a district that receives \$625 more per student than the average nonpoor student.

We follow the same approach to calculate an equity measure for students of color and white students. We first use district-level race and ethnicity data from the Common Core of Data to calculate the number of students of color and white students in each district and to calculate the weighted average funding for the two groups. Our calculations show that an average student of color in Texas attends a district that receives less in per student funding (\$7,711) than a district attended by an average white student (\$7,832), a 1.5 percent difference. But this gap for students of color seems to be mostly driven by lower funding for non-Latino students of color, given that Latino students, on average, are enrolled in districts with marginally higher per student funding (\$7,889) than their white peers.

Finally, we use school-level data from the Common Core of Data on student enrollment in schools in rural or urban areas to calculate the number of students living in urban and rural areas in each district.<sup>19</sup> Consistent with the calculation of other equity measures, we merge this information with Texas Education Agency financial data and calculate weighted averages of per student funding for students attending rural and urban schools, respectively. The results show a larger discrepancy in funding between students attending rural and urban schools than between poor and nonpoor students or white students and students of color. Average per student funding for students attending rural schools is \$9,108, about 25 percent more than the average for students attending urban schools (\$7,267). Given the importance of geographic and size adjustments in the FSP formula that favor rural districts, this is not surprising.

**FIGURE 1**  
**Measures of Equity in the Current Foundation School Program, 2017**



**Source:** Urban Institute analysis of Texas Education Agency school finance data, National Center for Education Statistics (NCES) Common Core of Data, and Census Bureau Small Area Income and Poverty Estimates.

**Note:** Cost adjustments made using NCES Comparable Wage Index.

# Formula Design Changes and Equity Measures

Our analysis of the current FSP suggests that Texas's funding formula is moderately progressive, as students in poverty receive more funding than their nonpoor peers. Because of the strong impact of geographic and size adjustment on the formula, students living in rural areas, on average, receive substantially higher per student funding than students living in urban areas. Funding differences by students' race or ethnicity, however, appear to be more complex. Because relatively more minorities than white students live in urban areas and, conversely, relatively fewer minorities live in rural areas (Housing Assistance Council 2012), average funding per white student is somewhat higher than average funding per nonwhite student. This difference seems to be driven primarily by African American, Asian, and other non-Latino nonwhite students who are more likely to live in urban areas. While Latino households in Texas also disproportionately live in urban areas compared with white households, this difference is more moderate (Housing Assistance Council 2012), likely contributing to marginally higher funding per Latino student than white student.

Although the current FSP produces progressive funding outcomes, many policymakers, advocates, and researchers have supported reform proposals aimed at further improving its progressivity, simplifying its structure, or updating outdated elements of the formula. With this in mind, we analyze how changes to different elements of the FSP affect overall school funding and distribution of funds between various student populations. The following analysis is not exhaustive but demonstrates how our state school funding simulator can analyze impacts of different formula changes.

## Simulator Design and Assumptions

Our analysis starts with the current FSP formula, which reproduces current levels of local and state funding for each school district in Texas.<sup>20</sup> We can then change different formula parameters (e.g., increase basic or various special allotments, subject gold pennies to recapture) and observe how this will affect funding overall and in each school district and distribution of funding across various students. Because of our focus on school districts' regular operations rather than capital improvements and our focus on formula-driven funding rather than discretionary funding, we exclude funding for facilities and funding or transfers from the federal government.

While accurately accounting for changes in funding driven by alterations to formula parameters, the simulator does not account for districts' possible behavioral changes in response to the policy changes we are examining. For example, some changes to the formula may provide some districts incentives to change their tax rates to maximize their state funding relative to the local contribution or even to try to identify and (re)classify some students under categories that qualify for special allotments (e.g., students at risk of dropping out, learning English as a second language, or needing special education). It is important to properly interpret the results of simulated formula changes as primarily a demonstration of how the Texas school funding formula functions and how much changes to its design can affect student funding, holding all other changes constant.

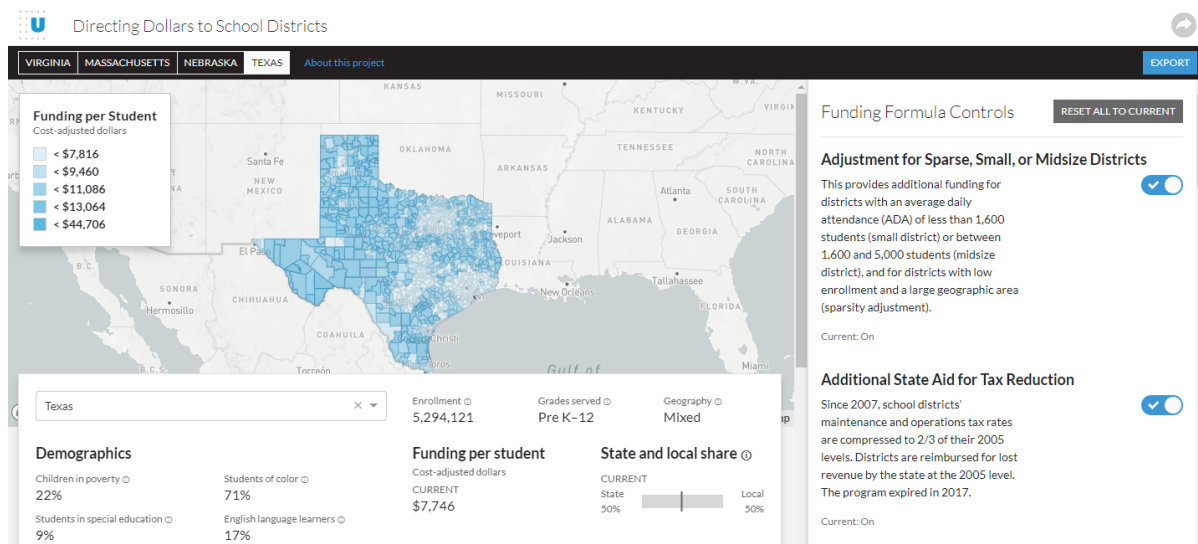


Moreover, we do not focus on the fiscal implications and feasibility of different changes, as these are inextricably linked with the political process and discretionary decisions about funding priorities. Rather, we emphasize how these changes affect relative positions of different students.

## BOX 2

### Changing the Formula

This brief highlights only some of the potential changes that could be introduced into the current funding formula. You can implement changes yourself by navigating to our interactive, “Directing Dollars to School Districts: Computing the Effects of Changes to State Funding Formulas.”<sup>a</sup>



This interactive allows you to implement multiple changes for Texas and see the resulting distribution of dollars. In addition to Texas, this interactive provides the opportunity to look at formula changes for Massachusetts, Nebraska, and Virginia.

<sup>a</sup> Kristin Blagg, Matthew Chingos, Victoria Lee, Cary Lou, Stipica Mudrazija, and Victoria Rosenboom, “Directing Dollars to School Districts: Computing the Effects of Changes to State Funding Formulas,” Urban Institute, October 30, 2018, <https://edfunding.urban.org/>.

## Formula Changes and Results

The FSP design includes elements that promote redistribution from richer districts to poorer districts (recapture) and that protect the position of at least some better-off districts (target revenue system). Coupled with other formula features, this results in a funding scheme where even sizeable changes to any single element have modest impacts on school district funding. On the margin, however, the impact of changing different parameters might have distinct funding implications, providing us scope to examine several such changes.

We focus on the following six formula changes:

1. Replacing the CEI adjustment with a Comparable Wage Index (CWI) adjustment<sup>21</sup>
2. Removing the geographic and size-related adjustment
3. Subjecting Tier II level 1 funding to recapture at the Tier I equalized wealth level
4. Changing the basic allotment
5. Changing the compensatory education weight
6. Changing the bilingual/ESL (English as a second language) weight

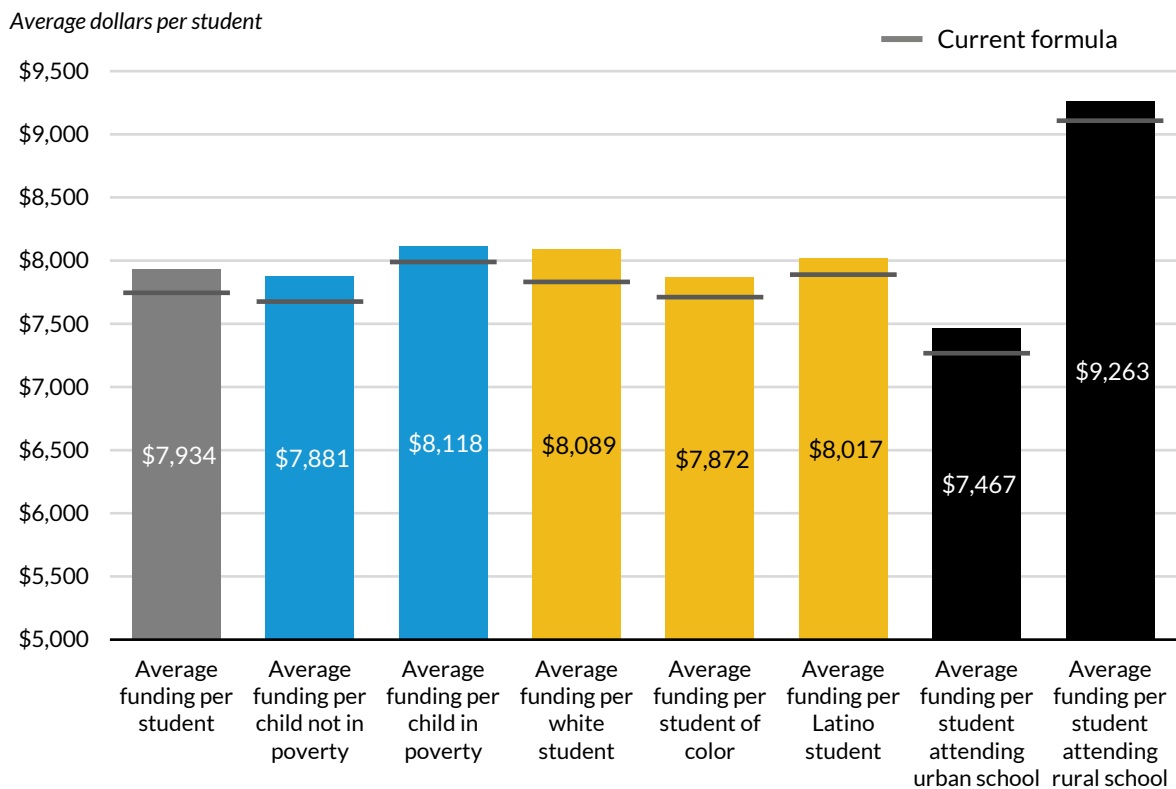
### REPLACING THE CEI ADJUSTMENT WITH A CWI ADJUSTMENT

To account for differences in resource costs because of varying economic conditions beyond school districts' control, the Texas funding formula adjusts the basic allotment by a state-assigned factor, the Cost of Education Index, which ranges from 1.02 to 1.20 and accounts for such elements as the district's size, teacher salaries in neighboring districts, and the share of low-income students. The CEI has not been updated since its adoption in 1991 and is considered outdated, as economic conditions and other school district characteristics have dramatically changed (Taylor 2015). But there is no broad agreement on the best way to update this adjustment, with options ranging from updating the existing CEI to replacing it with the CWI, a cost-of-living index, or a teacher cost index (Casey 2016; Legislative Budget Board 2017). Each option would lead to the redistribution of entitlement funding for districts and could have significant budget impacts, making such reform hard to implement (Legislative Budget Board 2017).

We test what would happen to equity if the outdated CEI were replaced with a more up-to-date CWI. To lessen the fiscal implications of changing the adjustment factor and make it more comparable with the CEI, we scale down the CWI by about two-thirds so the minimum new adjustment would be equal to the current minimum adjustment. The new adjustment factor ranges from 1.02 to 1.23, with an average value of 1.11 (compared with 1.08 for the CEI). Other elements of the formula related to the CEI, such as its application to only 71 percent of the basic allotment and subtraction of half the adjustment in calculating the weighted average daily attendance, remain unchanged.

Our analysis suggests this change would increase total funding by almost \$1.1 billion, while recapture would decline by \$88 million. Although all students would experience an increase in funding, the increase in per student funding would be larger for nonpoor, white, and urban students than for their respective peers (figure 2). The relative advantage in per student funding would decline for poor and rural students by more than 1 percent, and the relative disadvantage for students of color would increase almost 1.2 percent. Latino students' increase in funding would not preserve their relative advantage to white students, and they would end up with 0.9 percent less in per student funding than white students, compared with a 0.7 percent advantage using the current CEI.

**FIGURE 2**  
**Measures of Equity with a Comparable Wage Index Adjustment, 2017**



**Source:** Urban Institute analysis of Texas Education Agency school finance data, National Center for Education Statistics (NCES) Common Core of Data, and Census Bureau Small Area Income and Poverty Estimates.

**Note:** Cost adjustments made using NCES Comparable Wage Index.

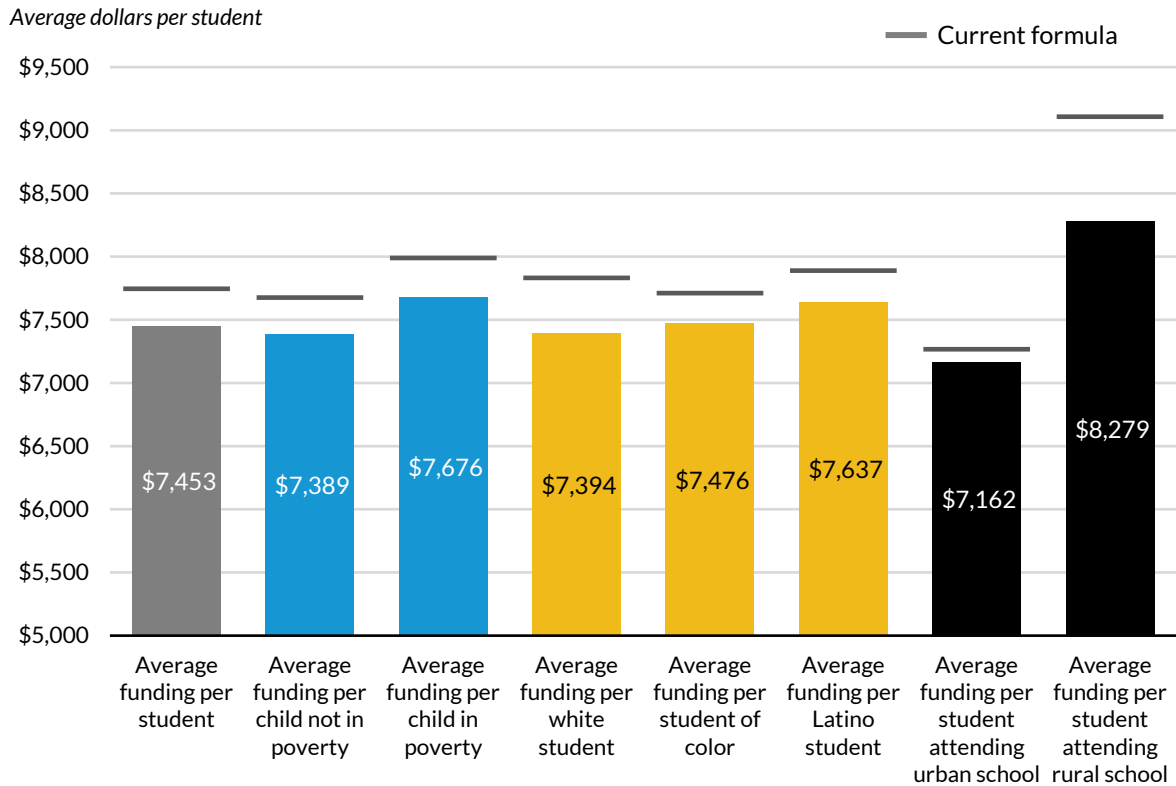
### NO GEOGRAPHIC AND SIZE-RELATED ADJUSTMENT

The current FSP adjusts basic allotment for districts with student populations below certain ADA thresholds: 1,600 students in ADA for small district adjustment and 5,000 students in ADA for midsize district adjustment. An additional adjustment is provided to sparsely populated school districts. These adjustments, implemented to account for diseconomies of scale that presumably increase the cost of educating students in smaller districts, have an important impact on the distribution of school funding in Texas. Although the idea that small (rural) schools suffer considerable diseconomies of scale is generally accepted (Baker and Duncombe 2004), some advocates have differing opinions on fairness and usefulness of geographic and size-related adjustments (Smith 2017). To understand the impact of these provisions, we look at funding for students living in urban and rural areas if geographic and size-related adjustments for school districts were removed from the FSP.

The overall impact on school funding would be a \$1.4 billion decline, with recapture increasing by about \$128 million. Average per student funding would decline by 3.8 percent, or close to \$300. The difference between funding for urban and rural students would narrow substantially (by more than

\$700), but rural students would still receive, on average, 16 percent more in funding, in significant part because of funding streams other than the regular allotment.<sup>22</sup> While all students would experience some decline in funding, the relative position of nonwhite students relative to white students would marginally improve, but there would be no change in the position of poor students relative to nonpoor students.

**FIGURE 3**  
**Measures of Equity without a Geographic and Size-Related Adjustment, 2017**



**Source:** Urban Institute analysis of Texas Education Agency school finance data, National Center for Education Statistics (NCES) Common Core of Data, and Census Bureau Small Area Income and Poverty Estimates.

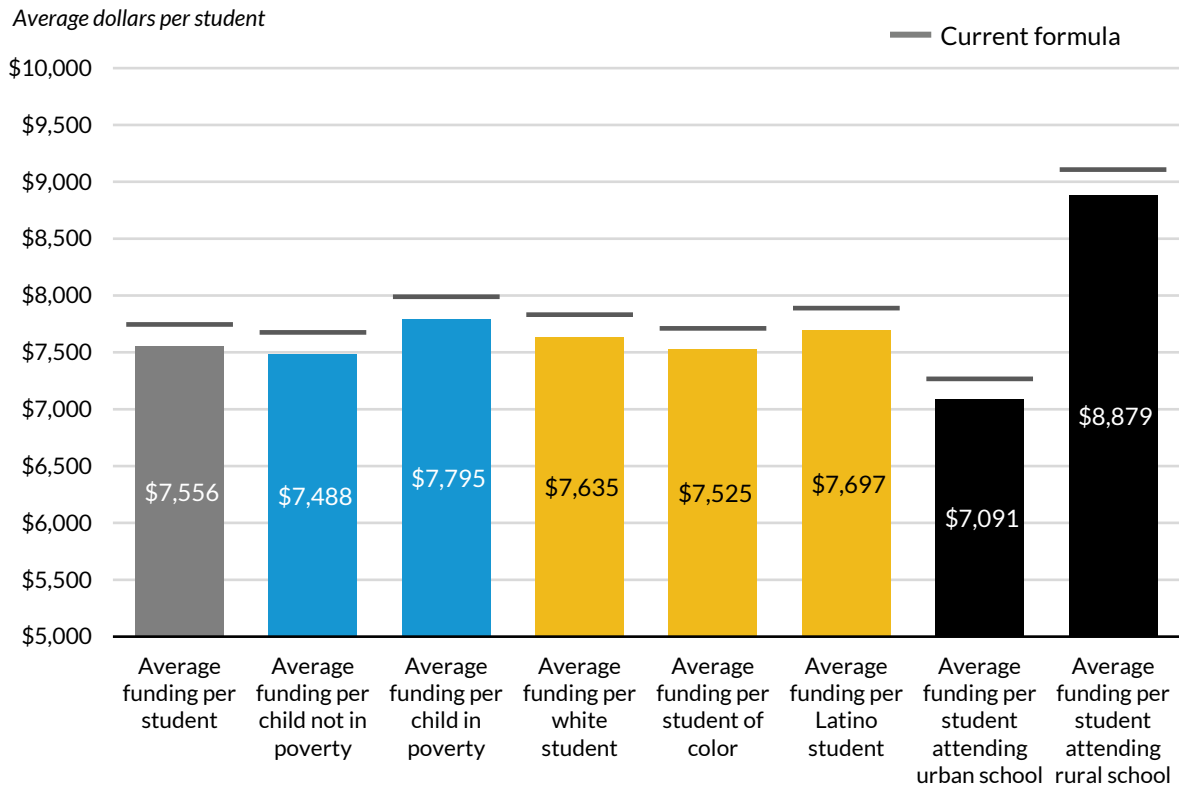
**Note:** Cost adjustments made using NCES Comparable Wage Index.

### TIER II LEVEL 1 RECAPTURE AT FIRST EQUALIZED WEALTH LEVEL

Golden pennies provide an opportunity for districts, especially richer ones, to raise additional funds without being subject to recapture (and with a guaranteed yield per penny at a level of the comparatively wealthy Austin ISD). But compared with Tier I, Tier II provides only a fraction of school districts' total funding. We test how subjecting golden pennies to recapture at a level equal to first equalized wealth level—that is, with a guaranteed yield per penny of \$51.40 (about one-third less than the current yield)—would affect funding and equity outcomes. In absolute terms, some large urban districts would lose the most (e.g., \$23 million for Dallas ISD, which has total maintenance and

operations funding of \$1.2 billion), but in relative terms, some smaller districts would lose more (e.g., Highland Park ISD would lose more than 12 percent of its \$49 million).

**FIGURE 4**  
**Measures of Equity with Tier II Level 1 Recapture, 2017**



**Source:** Urban Institute analysis of Texas Education Agency school finance data, National Center for Education Statistics (NCES) Common Core of Data, and Census Bureau Small Area Income and Poverty Estimates.

**Note:** Cost adjustments made using NCES Comparable Wage Index.

The results suggest that the total funding would decline by less than \$1 billion, and recapture would increase by \$89 million. The equity impact on various students would be effectively neutral—while all groups receive less per student funding, disparities in these funding levels are essentially unchanged.

#### CHANGING THE BASIC ALLOTMENT

Given the basic allotment’s key role in the FSP, it is important to understand how changing the allotment affects equity measures. We focus on outcomes over the range of values from \$4,140 (\$1,000 less than the current amount) to \$9,140 (\$4,000 more than the current amount).

Across all students, even large changes in the basic allotment have modest effects on average funding disparities. For example, adding \$4,000 to the current basic allotment increases the difference between average funding for a poor student relative to a nonpoor student by \$231. But the relationship

of this difference to the basic allotment differs for different students. The difference in per student funding as the basic allotment increases is uniformly positive for poor students compared with nonpoor students. For students of color relative to white students, the difference is strongly positive at basic allotment levels below \$5,740 and almost flat thereafter. Despite changes in the basic allotment, minority students consistently receive less funding. For Latino students compared with white students, the relationship is positive but at a decreasing rate as the allotment increases. The relationship is J-shaped for the difference in per student funding for students in rural versus urban districts, with the minimum observed difference at the current basic allotment.

**FIGURE 5**  
**Difference in Average Per Student Funding at Different Levels of Basic Allotment, 2017**



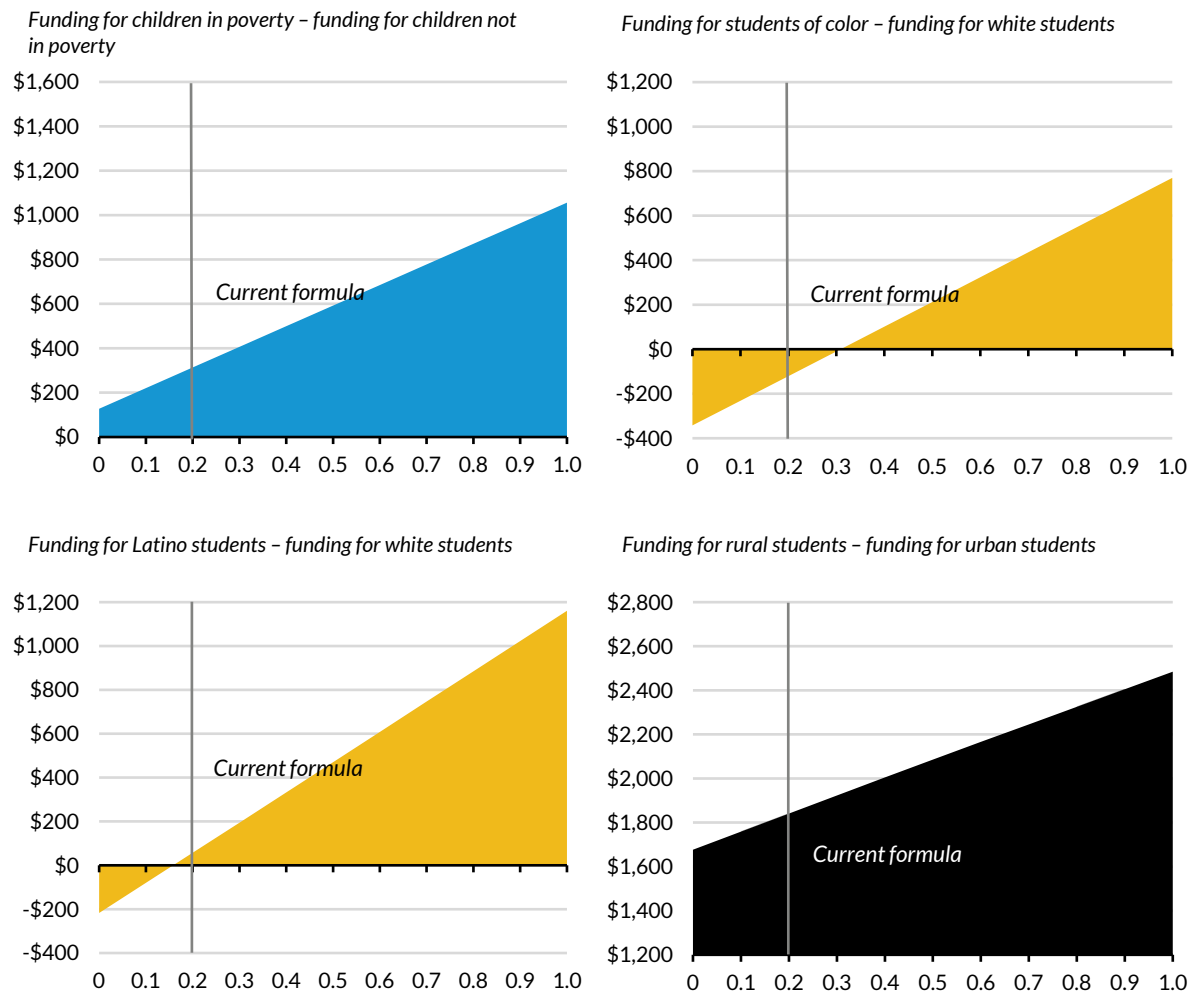
**Source:** Urban Institute analysis of Texas Education Agency school finance data, National Center for Education Statistics (NCES) Common Core of Data, and Census Bureau Small Area Income and Poverty Estimates.

**Note:** Cost adjustments made using NCES Comparable Wage Index.

## CHANGING THE COMPENSATORY EDUCATION WEIGHT

The state’s compensatory education (SCE) weight is the second-largest segment of Tier I funding after regular program allotment and is directed at educationally disadvantaged students at risk of dropping out of school. Because these dollars are targeted to at-risk students, we consider how changing the SCE weight affects equity for different students. Currently, this weight is 0.2, resulting in additional funding of 20 percent of adjusted allotment for each qualifying student. We consider the impact of changing the weight in a 0–1 (0–100 percent) range.

**FIGURE 6**  
**Difference in Average Per Student Funding at Different Levels of the State Compensatory Education Weight, 2017**



**Source:** Urban Institute analysis of Texas Education Agency school finance data, National Center for Education Statistics (NCES) Common Core of Data, and Census Bureau Small Area Income and Poverty Estimates.

**Note:** Cost adjustments made using NCES Comparable Wage Index.

The results show a positive association of increasing the SCE weight on the difference in per student funding for poor, minority, and rural students compared with their nonpoor, white, and urban peers, respectively. Increasing the weight from its current level would particularly benefit minority students, who would receive higher average per student funding relative to their white peers at SCE weight levels above 0.3. Reaching the parity in per student funding between minority and white students by increasing the SCE weight would cost about \$2.3 billion.

#### CHANGING BILINGUAL/ESL WEIGHT

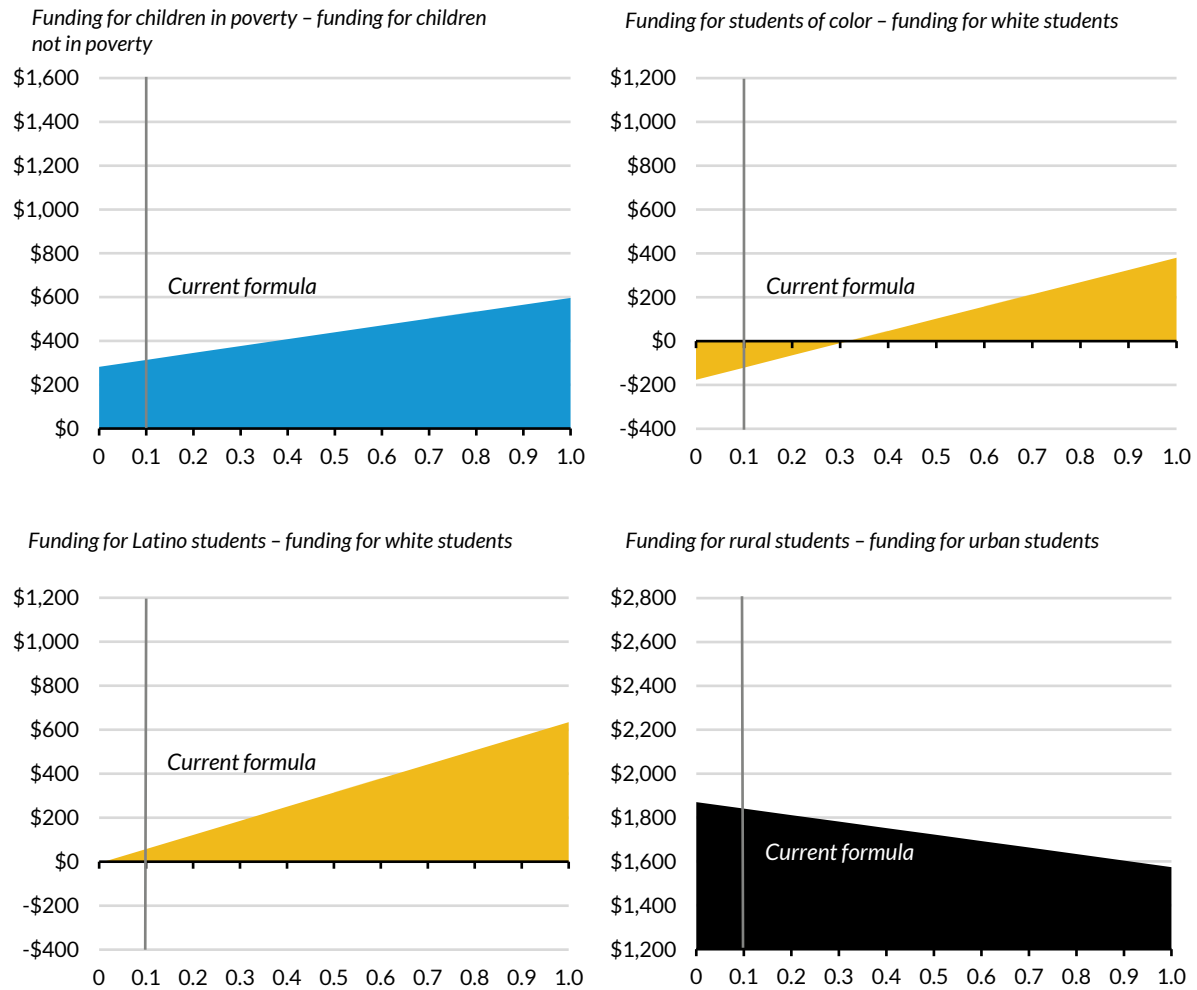
The bilingual/ESL allotment accounts for only a fraction of Tier I funding, but it is particularly important in Texas, which has a large and growing student population whose primary language is not English. Because of this weight's target population, it is important to analyze the equity implications of changing the weight for this allotment. With the current weight level of 0.1, school districts receive an additional 10 percent of adjusted allotment for each student who needs bilingual education or special language programs to improve her knowledge of English. Similar to the analysis of the SCE weight, we analyze the impact of changing the bilingual/ESL weight in a 0–1 range on student equity.

Minority students in Texas, most of whom are Latino, would be the largest beneficiary of increasing the bilingual/ESL weight above its current level. Because many students who need support learning English come from families of low socioeconomic status, increasing the weight would also extend the funding advantage for an average poor student compared with an average nonpoor student. Conversely, the advantage rural students enjoy would moderately narrow, consistent with more immigrants and communities where English is not a first language in urban areas. Increasing the bilingual/ESL weight to 0.3, the level at which per student funding for minority students almost reaches parity with per student funding for white students, would cost about \$1.1 billion.



FIGURE 7

Difference in Average Per Student Funding at Different Levels of the Bilingual/ESL Weight, 2017



Source: Urban Institute analysis of Texas Education Agency school finance data, National Center for Education Statistics (NCES) Common Core of Data, and Census Bureau Small Area Income and Poverty Estimates.

Notes: ESL = English as a second language. Cost adjustments made using NCES Comparable Wage Index.

## Conclusion

Our results show that average per student funding is substantially larger in rural districts than in urban districts. On the other hand, poor students enjoy only a minor advantage in funding compared with nonpoor students, while funding for students of color is even marginally lower than for their white peers.

Changes to the funding formula would result in different funding changes for different students. Increasing the FSP’s basic allotment amount would benefit poor, minority, and rural students more than other students, but this improvement would likely be modest compared with the large increase in the

basic allotment required to achieve it. This is particularly true for students of color, where increases in the basic allotment beyond several hundred dollars yield little additional improvement of their position relative to white students. Poor, minority, and rural students would experience an increase in funding compared with nonpoor, white, and urban students, respectively, with higher values of the SCE weight. Increasing the bilingual/ESL weight would have the most positive impact on funding for minority students and a moderate positive impact on poor students, while rural students would experience a modest decline in funding compared with urban students. Replacing the current CEI with a CWI-based adjustment to the basic allotment would benefit nonpoor, white, and urban students more than others because of a larger increase in resource costs over the past several decades in areas where more of such students live. Subjecting golden pennies to recapture would not have a major impact on equity.

Current FSP funding is similar for different students in Texas. Without information on students' underlying funding needs, though, it is not possible to say whether equality in funding translates to its adequacy for different groups. Future research should develop funding adequacy benchmarks that would allow us to more precisely establish whether and how much various changes to the FSP formula parameters enhance equity.

Our results further suggest that even large changes in the formula parameters often do not translate to substantial changes in student funding, both with respect to the level of funding and the relative position of various groups. Given the complexity of school funding formulas, it is hard to assess the implications of changing any single parameter without taking into consideration the implication of such change on the rest of the formula. Our simulator allows us to produce accurate calculations of the short-run funding implications of changing various elements. Its major limitation is that it cannot account for districts changing their behavior in response to changes in funding parameters, such as decisions to adjust tax rates or reallocate funding for different students. This limitation notwithstanding, we believe the current simulator can contribute to an informed discussion about the implications of various proposed changes to school funding formulas and, more broadly, the complexities of undertaking school funding reforms in Texas and beyond.

## Notes

- <sup>1</sup> "History of Public Education in Texas," Texas School Public Relations Association, accessed October 30, 2018, <http://www.tspra.org/about-ctps-2015/history-2015/history-of-public-education-in-tx>.
- <sup>2</sup> Unlike many southern states, Texas does not have programs that support private school enrollment, such as private school vouchers, tax-credit scholarships, or education savings accounts.
- <sup>3</sup> The state implemented a \$4 billion funding cut in 2011 as recession-related federal stimulus aid declined (Knight 2017).
- <sup>4</sup> Over time, other school districts, parents, and students joined Edgewood ISD.
- <sup>5</sup> The lawsuit, *Edgewood ISD et al. v. Kirby et al.*, later became known as *Edgewood I*.
- <sup>6</sup> *Neeley et al. v. West Orange-Cove Consolidated Independent School District et al.*

- <sup>7</sup> Dustin Scott Barton, “An Assessment of Texas School Finance Reform: The Health of School Funding since 2006,” (PhD diss., Texas Tech University, 2013), <https://ttu-ir.tdl.org/handle/2346/50716>.
- <sup>8</sup> If the compressed tax rate is less than \$1.00, the basic allotment amount is proportionately decreased.
- <sup>9</sup> Although intended to be similar to a cost of living adjustment, it has not been updated since its adoption in 1991 and has long been considered outdated (Taylor 2004).
- <sup>10</sup> Tier I equalized wealth level and basic allotment have been synchronized since 2010. For example, in fiscal year 2017, the basic allotment was \$5,140, and the corresponding Tier I equalized wealth level was \$514,000.
- <sup>11</sup> The funding system also includes Tier 3, which provides funding for facilities (i.e., instructional facilities and existing debt allotments). But our focus is on maintenance and operations funding.
- <sup>12</sup> Calculated as the difference of each district’s Tier I entitlement and its transportation allotment, new instructional facilities allotment, high school allotment, and half of the CEI adjustment, divided by the district’s basic allotment.
- <sup>13</sup> Set to increase to \$99.41 in fiscal year 2018 and \$106.28 in fiscal year 2019.
- <sup>14</sup> This measure of equity was developed by Urban Institute researchers (Chingos and Blagg 2017).
- <sup>15</sup> For brevity, we refer to non-Latino white students as white students.
- <sup>16</sup> We do not have poverty information for South Texas ISD, an all-magnet-school district in the Rio Grande Valley that overlaps with 28 other school districts. Because charter school districts do not have poverty rate information available in the Small Area Income and Poverty Estimates, we assign them poverty rates for ISDs located in the same geographic area using the Stanford Education Data Archive crosswalk.
- <sup>17</sup> Before calculating the weighted averages, we adjust each district’s funding to reflect differences in costs. To make this adjustment, we use a measure of the salaries of college graduates who are not teachers in the district’s labor market (Comparable Wage Index, or CWI, data). Similar to poverty data, for charter school districts with CWI information missing, we use the Stanford Education Data Archive crosswalk to assign them CWIs for ISDs in the same geographic area.
- <sup>18</sup> Because our simulator uses data from the final year before the repeal of ASATR, funding from this program is included as a default funding stream. Users of our simulator can turn off this funding stream, but the simulator does not have the option of replacing it with the Financial Hardship Transition Program as this grant program took effect in the year following the repeal of ASATR. The program provides \$100 million for fiscal year 2018 and \$50 million for fiscal year 2019.
- <sup>19</sup> We classify as *rural* the schools that are designated as “rural” or “town” by the National Center for Education Statistics (NCES) locale codes, and we classify as *urban* the schools designated as “urban” or “suburban.”
- <sup>20</sup> We limit the analysis to independent school districts, consolidated independent school districts (and Stafford Municipal School District), and charter school districts. We do not include several special public schools and districts, such as the Texas School for the Blind and Visually Impaired, Texas School for the Deaf, and Windham School District.
- <sup>21</sup> The NCES has not updated the CWI since 2005. Lori Taylor developed a methodology for updating the index, and we use the most up-to-date version, which is current as of 2013. More information about these data can be found at “Extending the NCES CWI,” Texas A&M University, Bush School of Government and Public Service, accessed October 25, 2018, [http://bush.tamu.edu/research/faculty/Taylor\\_CWI/](http://bush.tamu.edu/research/faculty/Taylor_CWI/).
- <sup>22</sup> Furthermore, if the comparison is limited to rural students living in predominantly rural districts and urban students living in predominantly urban districts, the difference narrows substantially, and for the regular allotment, it almost fully disappears.

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## About the Authors



**Stipica Mudrazija** is a senior research associate in the Income and Benefits Policy Center at the Urban Institute, where he studies issues related to population, family, and public and private intergenerational supports. Before joining the Urban Institute, Mudrazija was a postdoctoral scholar at the University of Southern California. Previously, Mudrazija worked as a junior analyst in the research department of the Croatian National Bank. He was also a trainee in the Social Protection unit of the European Commission's Directorate-General for Employment, Social Affairs, and Inclusion as well as a graduate research intern in the Center on Budget and Policy Priorities. Mudrazija holds a bachelor's degree in economics from the University of Zagreb, a master's degree in public policy from Georgetown University, and a doctorate in public policy from the University of Texas at Austin.



**Kristin Blagg** is a research associate in the Center on Education Data and Policy at the Urban Institute. Her research focuses on K-12 and postsecondary education. Blagg has conducted studies on student transportation and school choice, student loans, and the role of information in higher education. Blagg spent four years as a math teacher in New Orleans and New York City. In addition to her work at Urban, she is pursuing a PhD in public policy and public administration at the George Washington University. Blagg holds a BA in government from Harvard University, an MEd from Hunter College, and an MPP from Georgetown University.

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2100 M Street NW  
Washington, DC 20037

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