Not Making the Grade

How Financial Penalties for School Absences Hurt Districts Serving Low-Income, Chronically Ill Kids

A Guide for State Policymakers

ChangeLab Solutions
Law & policy innovation for the common good.

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INTRODUCTION

When average daily attendance (ADA) is used as a factor to determine funding levels for school districts, those districts that serve low-income and chronically ill children are placed at a significant disadvantage compared to districts serving wealthier, healthier children. This brief aims to shed light on the hazards of employing average daily attendance measures as a basis for school district financing, and to increase state policymakers' awareness of how ADA-based funding formulas penalize a state's most vulnerable districts. In some states, such policies have been in place for decades, worsening the financial difficulties faced by low-income school districts. And though only seven states formally use attendance-based measures in their general aid formulas, nearly one third of U.S. children attend school in these states.

In policy literature, the prevailing assumption is that school absences are primarily due to truancy (or other types of voluntary choices made by students or parents). Some literature examines the psychological causes of truancy, including reasons why children don't like to come to school, or how difficulties at home may interfere with their desire to attend.[1] A different body of literature has, to some extent, addressed the relationship between children's health and school attendance. But even this literature tends to focus primarily on the co-occurrence of chronic health conditions with childhood poverty.[2] Thus there exists no thorough and consistent examination of how children's health impacts "truancy," nor has there been any rigorous accounting of myriad other causes of non-attendance. In this brief, we argue that attendance-based financing criteria hurt school districts that serve students with chronic health conditions.

In 2009, the National Center for Education Statistics proposed a taxonomy for school district absence accounting, including absences due to: a) non-instructional activity recognized by the state or school; b) religious observation; c) illness, injury, or health treatment or examination; d) family emergency or bereavement; e) disciplinary action; f) legal or judicial requirement; g) family activity; h) student employment; i) lack of available transportation; j) truancy; and k) unknown.[3] Clearly, there exist many causes for school absences (as well as variation in state policies as to what constitutes an excused versus an unexcused absence). But there is very little data on which to base assumptions about the proportion of absences that are due to truancy rather than to chronic health conditions or other causes. Similarly, there is a dearth of hard data on how or why absence rates correlate to family economic circumstance.

The brief begins with a summary of the different types of enrollment count methods used by state school finance systems. Next, we review the states that employ ADA-based methods and estimate the resultant loss of state funding to high-need and low-need districts. We then look at the correlations among chronic health conditions, childhood poverty, and school absences, using data from the National Health Interview Survey (NHIS). We conclude with a short discussion of policy recommendations for mitigating funding inequalities caused by ADA-based funding policies.

METHODS OF DETERMINING STUDENT ENROLLMENT

The following methods are used for counting students and determining levels of state aid to school districts. These methods may include single or multi-day counts:

- **Fall Enrollment Count:** Fall enrollment is generally based on the number of students either enrolled or in attendance on a specific date early in the fall of the school year. In other words, the figure may be based on the number of students enrolled in a district, or on the number who actually attended on the specified date. These fall single-day student counts are sometimes reconciled with a spring/January recalculation, triggering adjustments in remaining aid payments.
- **Average Daily Attendance:** Average daily attendance (ADA) counts are based on the numbers of children actually in attendance in a school or district each day, and then, typically, averaged on a bimonthly or quarterly basis.
- **Average Daily Membership:** Average daily membership (ADM) or average daily enrollment (ADE) measures the numbers of children enrolled to attend a specific district throughout the year, and may also be periodically reconciled.

Two issues – how children are counted, and the timing and updating of those counts – are relevant here. In most cases, regardless of count method, a coming year's state funding estimates are based on a count of students from the prior year, whether that figure be prior year fall enrollment, prior year average enrollment over time (membership), or prior year average daily attendance. In some cases, states will reconcile and adjust aid based on updated or rolling estimates, an approach that can be applied to either annual membership or daily attendance figures.

Single-point-in-time enrollment counts do not allow for mid-term adjustments to aid when students come or go during the school year. One might argue that this means local public school districts with significant mid-year attrition will be overpaid throughout the year. These school districts might counter by pointing out that they have had to plan their budgets and staffing based on the numbers expected at the beginning of the year, and cannot easily make mid-year adjustments to accommodate losses in aid triggered by losses of students.

WHY USING ATTENDANCE MEASURES IN STATE SCHOOL AID FORMULAS IS PROBLEMATIC

The education policy community has long recognized that financing on the basis of attendance measures systematically reduces funding in high-poverty settings.[4] This is why few policy experts advocate such approaches. But recent fiscal pressures on states and their school funding systems have incentivized policymakers to cut corners, with little regard for the needs of children in high-poverty districts. Legislators in the State of Washington recently tried to shift toward ADA-based school district funding, but their efforts failed.[5] Meanwhile, New Jersey officials introduced an "attendance factor" to their state school funding formula through the executive budget, reducing aid for at-risk student populations below levels set by the state's School Funding Reform Act of 2008.[6]

When pushed to rationalize ADA-based school financing, state policymakers often suggest that such policies create an incentive for school officials to increase attendance rates.[7] This argument is specious for a number of reasons:

- First, depriving local public school districts of state aid lessens their capacity to provide interventions that might lead to improved attendance rates.
- Second, many school absences are simply beyond the control of local public school officials. This is particularly the case for poverty-induced, chronic health condition-related absences.
- Finally, there exists little or no sound empirical evidence that ADA-based financing provides an effective incentive.[8]

Also, it is important to note that local public school districts are responsible for providing the resources to educate *all* eligible enrolled children. While only 90 percent may be in attendance on any given day, and while some children may be absent more than others, the same 90 percent are not in attendance every day. In all likelihood, 100 percent of eligible enrolled children attend at some point (at least) in the year. Furthermore, as we illustrate later in this brief, enrollment count methods that rely on ADA measures exacerbate the socio-economic disparities between school districts.

One budget-planning-related problem entailed by ADA-based count methods is that districts must plan to serve all students who are eligible to attend, not merely those accounted for by the average rate of attendance. While some children are absent more than others, 100 percent are likely to attend at some point during the year. Therefore, on any given day, there must be desks, chairs, materials, supplies, and equipment available for every enrolled child. Districts cannot and should not plan to have only enough resources for 90 percent of their eligible children.

Because some states have created "exception policies" that exclude certain types of days from their ADA calculations, the use of ADA as a basis for determining funding can also have unintended consequences. For example, days when schools are closed because of bad weather are not factored into average daily attendance. Therefore, some districts may choose to declare more school closure days in order to reduce the risk of a low average daily attendance figure. School districts might, for example, choose to close for more days during flu season, as attendance drops off. The number of weather-related closures may increase as well (with some districts more affected than others in this regard), as fewer children may come to school in inclement weather even when school remains open. If a district cancels school on bad-weather days, postponing school for better-weather days, they can maintain a better ADA. In this way, ADA-based funding measures may create an "itchy trigger finger" on school closures.[9]

ADM requires the state, in collaboration with school districts, to accurately manage enrollment information, tracking students who enroll and un-enroll throughout the year. But districts plan their budgets and staffing on an annual basis, and mid-year adjustments to enrollment (as with changes in ADA) that lead to reductions in aid may not be easily absorbed mid-stream. Budgeting is an annual process and annual budget predictability is very important. Mid-year budget fluctuations complicate a district's planning. Not surprisingly, mid-year family moves tend to occur more frequently in higher-poverty, urban districts, and are often related to housing and employment instability.

AN OVERVIEW OF THE STATES THAT USE AN AVERAGE DAILY ATTENDANCE MEASURE AS A BASIS FOR FUNDING

Based on a recent review of state school finance formulas, only seven states rely on a measure of average daily attendance for funding purposes. These measures differ in how they are formulated. For example, Illinois uses the best three months of the prior year, rather than the entire prior year. This approach moderates, to a degree, the funding reductions that result.

Table 1 lists the states that use ADA measures in their state school finance systems. Idaho and Illinois use modified ADA counts, which permit districts to report their best three months (Illinois) or best 28 weeks (Idaho), thereby mitigating aid reductions. Nonetheless, other characteristics of the formulas employed by these states lead to overall regressive patterns. It is also important to consider the "fairness" of the overall state school finance system. In some cases, use of ADA measures in aid formulas can be more harmful than in others, because the overall formulas may include reinforcing and/or counterbalancing factors.

The national report *Is School Funding Fair?*[10] presents estimates of expected state and local revenue for high-poverty school districts, where 30 percent of 5-to-17-year-old children live in families below the poverty line, in comparison with revenue for low-poverty districts. The report defines "fair" school funding as a state financing system that ensures equal educational opportunity by providing sufficient funding to districts to account for additional needs generated by student poverty. The report also introduces the concept of a "fairness ratio," which is the amount of per-student funding that high-poverty districts receive in comparison to low-poverty districts. Thus, a ratio of over 100 percent indicates a progressive school finance system, while a ratio of under 100 percent signifies a regressive system. A ratio of 100 percent indicates that high-poverty districts receive the same state and local revenue as low-poverty districts (and the system is therefore neither progressive nor regressive). In essence, the fairness ratio quantifies the extent to which a state's school finance system provides additional support for school districts that serve a large number of children from low-income families.

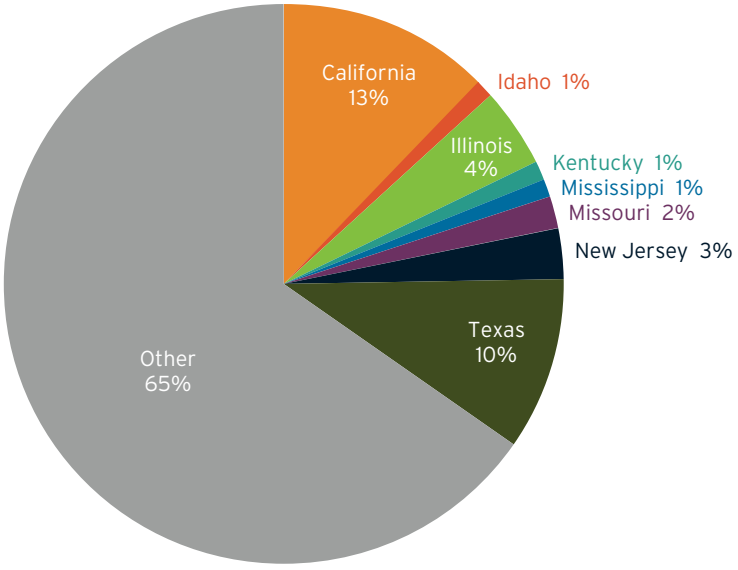
The fairness ratios for each state that uses ADA measurements in their funding formulas are listed in the right hand column of Table 1. Illinois, Idaho, and Texas in particular operate highly regressive state school finance systems, whereby high-poverty districts, on average, receive only 81 to 89 percent of the state and local revenue that low poverty districts do. These inequities are reinforced by ADA-based financing calculations.

TABLE 1
STATES USING ATTENDANCE-BASED STUDENT COUNT METHODS IN FINANCING FORMULAS

STATE NAME	PRIMARY COUNT METHOD[11]	OVERALL PROGRESSIVENESS/ REGRESSIVENESS OF SYSTEM[12]
California	Average Daily Attendance	109%
Idaho	Average Daily Attendance (prior year: (1) first half & (2) best 28 weeks)[13]	89%
Illinois	Average Daily Attendance (Best 3 months of prior year)	81%
Kentucky	Average Daily Attendance (prior year)[14]	110%
Mississippi	Average Daily Attendance[15]	95%
Missouri	Average Daily Attendance[16]	94%
Texas	Average Daily Attendance	88%

While the New Jersey School Finance Statute bases aid calculations on "resident enrollment," the Governor's budgets in 2011-12 and 2012-13 used an additional "attendance factor" to adjust aid allotments, disproportionately impacting districts that serve poor or otherwise "at-risk" students. Though this ADA-based method is no longer formally included in the state's financing formula, New Jersey has adopted a freeze in school aid, thereby retaining the "attendance factor" in effect.[17] When New Jersey is added to the states listed above that use Average Daily Attendance in their funding calculations, these seven states account for more than 1/3 of all student enrollments nationally.

FIGURE 1. NATIONAL ENROLLMENT SHARE OF CHILDREN IN STATES USING ADA FOR FUNDING PURPOSES
U.S. CENSUS FISCAL SURVEY 2010-11

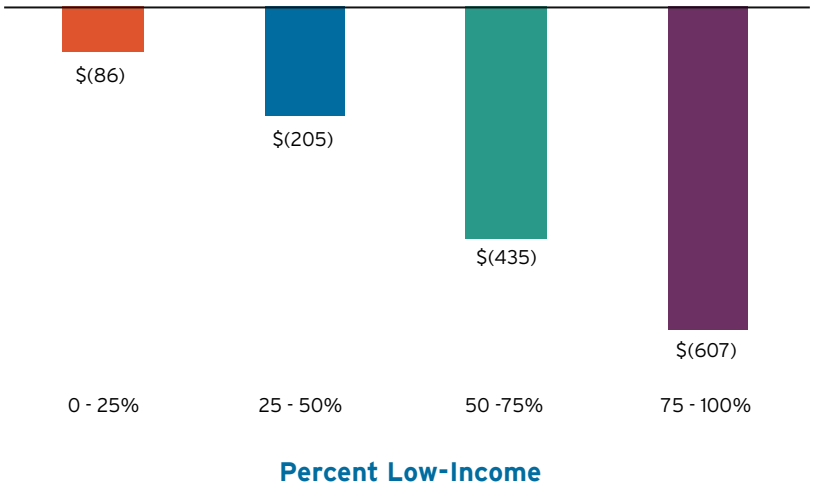


It is important to understand that, under ADA-based funding formulas, low-income/high-need districts "lose out" in more than one way. Policymakers who favor ADA-based funding assume that districts serving low-income students simply aren't trying hard enough to address truancy; they overlook the fact that many other factors which are beyond the districts' control account for a significant number of absences in these districts. Thus, the low-income districts, which experience a higher rate of absenteeism for a wide variety of reasons, lose an inequitable amount of per-student funding from the state. Further, because state funding systems generally also include a "weighting" mechanism that provides some additional funding for at-risk students, the low-income districts stand to lose more funding *per student* that is deemed to be unenrolled according to ADA-based counting methods. Finally, it is the low-income/high-need districts that can least afford reductions in state aid, as these districts rely on the state for a far greater percentage of their school budgets than do low-poverty districts, which benefit from significantly higher levels of local taxes and other local support, and can absorb reductions in state financing far more easily. (For a more detailed discussion of how state aid is calculated, see Appendix 1.)

FIGURE 2[18]

PER-STUDENT ADEQUACY TARGET REDUCTIONS RESULTING FROM ATTENDANCE ADJUSTMENT TO NJ STATE AID FORMULA (BY COMMUNITY INCOME BRACKET)

FY 2013



An "adequacy budget" or "adequacy target" refers to the amount of per-student funding required to provide essential school resources and meet the basic educational needs of all students. (An adequacy budget generally also includes considerations of the specific needs of the student population served by a district.) However, in the face of state aid reduction, despite the "realities on the ground," adequacy budgets are often forced to shrink. Figure 2 above starkly illustrates the highly regressive and disproportionate impact of New Jersey's "attendance factor" on the adequacy budgets of New Jersey school districts that serve higher numbers of low-income children.

Figure 2 shows actual estimates of reductions in target adequacy budgets per pupil faced by New Jersey districts under the Governor's 2012 budget. Districts with high concentrations of low-income children saw their adequacy budgets reduced by over $600 per pupil, almost entirely due to reductions in state aid, whereas districts with low concentrations of low-income children saw their adequacy budgets reduced by under $100 per pupil, with little to no loss in state aid, because their local contribution represents a much

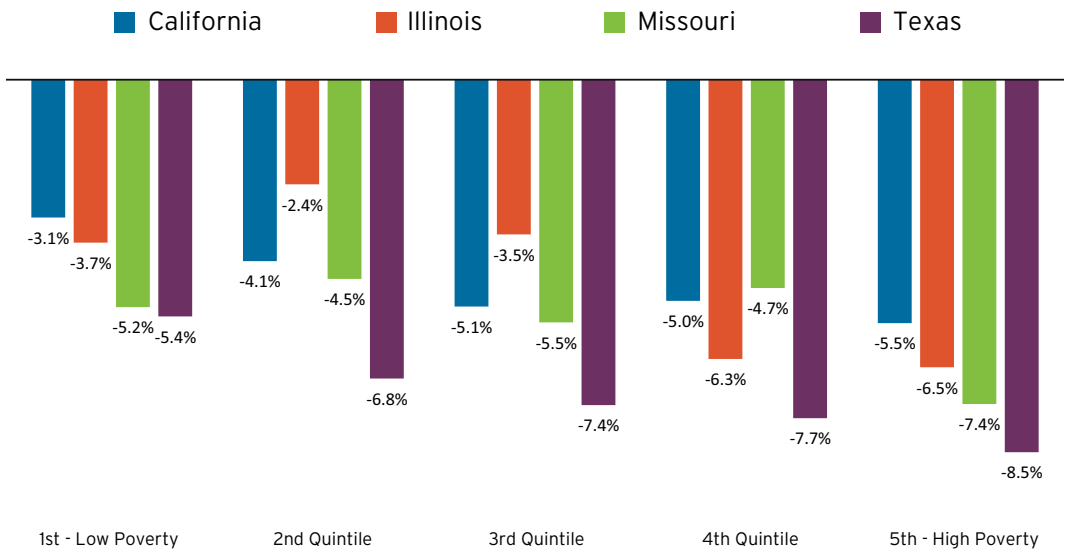
higher share of their district budgets. Low-poverty districts fund their adequacy budgets mostly through local taxes and other local funding; thus they remain relatively buffered from the effects of state aid cuts. More specifically, Camden City schools saw their adequacy budget reduced by $1,000 per pupil, Newark by $919 per pupil, and Trenton by $1,173 per pupil, while affluent districts such as Livingston, Alpine, and Mendham saw no reductions at all.

These patterns of target budget reduction and aid loss are typical. Figure 3 presents the findings of a recent analysis of states that use attendance counts in funding formulas, and illustrates that districts with the largest numbers of low-income students stand to lose the greatest amount of financial support.

NOTE: Figure 3 illustrates the inevitably regressive pattern of losses entailed by ADA-based funding, whereas the percentages in the rightmost column of Table 1 refer to overall combinations of state and local revenue – that is, the funding system as a whole for each state listed in that table. As Figure 3 shows, ADA-based count methods either reduce progressiveness (as in NJ) or make a state's funding system even more regressive (as in TX or IL). It is possible for a state, such as California, to employ ADA-based funding and yet have enough other provisions in place to maintain overall progressiveness.

FIGURE 3

PERCENT OF FINANCIAL SUPPORT LOST TO ADA BASED COUNTING BY POVERTY QUINTILE (RELATIVE TO ENROLLMENT)



HOW CHILD POVERTY AND CHRONIC HEALTH CONDITIONS RELATE TO ATTENDANCE

As mentioned at the outset of this brief, a common argument in favor of attendance-based funding is that it provides an incentive for local public school districts to engage more actively in improving student attendance. This incentive argument is built on the unfounded assumption that lagging attendance is entirely (or primarily) voluntary, and that the primary cause of attendance variation across districts is truancy. In fact, there exist a variety of causes for variations in attendance rates, which include family economic conditions, housing instability, access (or lack thereof) to transportation, and the ability of parents to support school participation and help their kids get to school on time (either by driving them or making sure they catch the bus).[19]

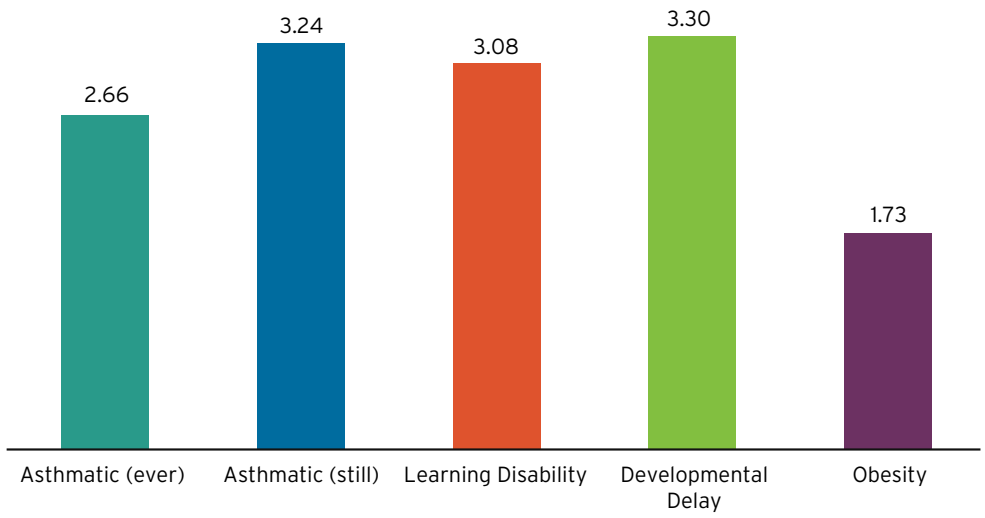
Broadly speaking, research examining the relationship between chronic health conditions and school absences has been limited; however, there have been a number of studies that specifically examine asthma's role in student absences. This research illustrates why it is important to consider health-related causes of student absences, particularly in poorer school districts. In 2008, asthma accounted for approximately 14.4 million lost school days.[20] A study of over 9,000 students in a predominantly African American urban school district in St. Louis, Missouri found that students with any degree of asthma experienced, on average, 30 percent more absent days than those without asthma. Students with moderate to severe asthma experienced, on average, 4.3 times the number of absences of non-asthmatic children.[21] In a smaller study of 528 students in an inner-city school in Los Angeles, younger students with known asthma missed, on average, two more days of school than children without known asthma.[22] Using data from a state-wide survey, researchers in California found that students who attended schools with the highest concentrations of low-income students were more likely to miss school because of asthma than those at schools where the concentration of low-income students was lower. Noting that California schools receive funding based on average daily attendance, the researchers suggested that schools with a large proportion of low-income students may receive fewer state funds because their children are more likely to miss school because of asthma. They suggest that school-level interventions that help children manage their asthma may decrease school absenteeism.[23]

Further, data from the National Health Interview Surveys (NHIS) provides significant evidence that childhood chronic health and psychological conditions are strongly associated with school absences:

- Children who are obese are 1.7 times more likely to have 10 or more school absences in a given year than their non-obese peers at the same poverty level, of the same gender, and in the same region and year.
- Children with developmental delays are 3.3 times as likely to have 10 or more school absences as their peers at the same poverty level, of the same gender, and in the same region and year.
- Children with learning disabilities are 3.1 times as likely to have 10 or more absences as their peers at the same poverty level, of the same gender, and in the same region and year.
- Children with persistent asthma are 3.2 times as likely to have 10 or more absences as their peers at the same poverty level, of the same gender, and in the same region and year.
- Children who have ever been identified as having asthma are 2.7 times as likely to have 10 or more absences as their peers at the same poverty level, of the same gender, and in the same region and year.

Figure 4 below provides a visual depiction of the odds ratios described above. The bars illustrate that children with chronic conditions are statistically more likely than their peers to miss school 10 or more times during the school year. For example, the leftmost bar shows that a child who has had asthma in the past is 2.66 times as likely to miss school 10 or more times as a child who has never had asthma, while the next bar illustrates that a child who currently has asthma is 3.24 times as likely to miss school 10 or more times as a healthy child.

FIGURE 4
ODDS OF GREATER THAN 10 ABSENCES PER SCHOOL YEAR
NATIONAL HEALTH INTERVIEW SURVEY
(CONTROLLING FOR CHILD AGE, REGION, GENDER, AND YEAR OF DATA)



Data Source: Centers for Disease Control, National Health Interview Survey. *www.cdc.gov/nchs/nhis/quest_data_related_1997_forward.htm#2012_NHIS* Specific values in chart estimated by author. The author controlled for child age and year of data.

The same data source, the National Health Interview Survey, also indicates a strong link between child poverty and chronic health conditions (controlling for the child's age and the year of the data):

- Children from families in poverty are 86 percent more likely to be obese than their non-poor peers of the same age, of the same gender, and within the same geographic region.
- Children from families in poverty are 22 percent more likely to be identified as having developmental delays than their non-poor peers of the same age, of the same gender, and within the same geographic region.
- Children from families in poverty are 73 percent more likely to be identified as having learning disabilities than their non-poor peers of the same age, of the same gender, and within the same geographic region.
- Children from families in poverty are 34 percent more likely to have been identified at some point as having asthma and 47 percent more likely to still have asthma than their non-poor peers of the same age, of the same gender, and within the same geographic region than their non-poor peers.

The health and poverty statistics above are sobering. While school financing mechanisms are complex, state policymakers can take actions to prevent or mitigate the funding disparities caused by ADA-based funding policies. The next section discusses possible strategies.

POLICY STRATEGIES TO ADDRESS THE IMPACT OF ADA-BASED FUNDING FORMULAS

The simplest and most appropriate policy remedy is for states to stop basing funding on average daily attendance. But the simplest and most appropriate policy is not always the most politically palatable or technically expedient. Changing the underlying enrollment count method for an entire state school system requires a statewide change in enrollment reporting. Further, assuming that total available state aid remains unchanged, shifting from an ADA-based method to a method based on enrollment or ADM means that some districts (low-poverty ones) will lose funding while others (high-poverty districts) will gain, and not everyone will deem this a just outcome. That said, New Jersey officials found it easy enough to slip a factor into the funding formula through executive budgeting that moved the system in the opposite direction, cutting aid to high-poverty districts and preserving resources for lower-poverty ones.

Less intrusive fixes to state aid formulas include making adjustments that counterbalance the regressive effects of ADA-based count methods, including scaling up cost adjustments (student need weights) for low-income children. The national report *Is School Funding Fair?* identifies a number of states, including New Jersey, Massachusetts, Minnesota and Ohio, that are doing better than most at targeting greater financial support to disadvantaged children and their schools.[24] Other enrollment count methods like those used in Illinois – best three months of ADA – can also mitigate funding reductions.

Given the evidence cited herein about the link between child poverty, chronic illness, and student absences, it also makes sense to support programs that target root causes of lower attendance rates in high-poverty settings. Communities and schools that want to improve their attendance rates might consider looking outside the school sector to address conditions that result in poor student health. For example, many communities have adopted Safe Routes to School (SRTS) programs which encourage students to walk and bike to school. Research shows that by walking to school, students get more exercise, reduce their risk of obesity and diabetes, and improve their overall health.[25] Local jurisdictions can also enact policies that promote healthy housing (such as effective, proactive code enforcement laws and integrated pest management) in order to reduce some of the substandard housing conditions that trigger illnesses such as asthma that result in school absences. For more information about local strategies to mitigate the impact of ADA-based funding policies, see *Hidden Costs: How to Mitigate the Perils of School Financing Based on Average Daily Attendance.*

Lastly, conventional truancy programs may help improve attendance figures. However, schools may find greater benefit in working closely with community health services and other stakeholders to institute wellness programs that address root causes of student absences. Unfortunately, these endeavors require investment, which is less likely to be available where state aid for schools is reduced on the basis of "lagging" attendance.

CONCLUSION

Put simply, children's health matters. Chronic illness is a significant contributor to school absences and it correlates highly with child poverty. Further, children's health conditions are largely outside the direct control of local school officials (though they may be mitigated by more comprehensive coordination of community and school wraparound services). By reducing state aid to schools on the basis of student absences, states are disproportionately (and substantially) penalizing schools that serve children from lower-income families—children who are far more likely to suffer childhood obesity, asthma, and other chronic diseases; and far more likely to be absent from school as a result.

APPENDIX 1
HOW ATTENDANCE-BASED FUNDING REDUCES STATE AID

State school finance formulas take many shapes and forms, but many are built on the following basic framework.

Step 1 typically involves the determination of a need- and cost-adjusted spending target for each district:

STEP 1: Target Funding = [Base Funding x Enrollment + (Cost Adjustments for High-Need Children x Base Funding x High-Need Student Enrollment)] x Geographic Cost Adjustments

Calculating the spending target begins with a "base funding" figure which represents the per-pupil costs of providing an adequate education in a district or school that faces no extraordinary costs or needs. Student-need adjustments are often subsequently applied as "weightings" for certain types of higher-need student populations (such as low-income students, children with limited English language proficiency, and children with disabilities). Or, alternatively, some states simply provide categorical grants for populations with needs that go beyond those addressed by the general aid formula.

State aid formulas also often include adjustments for differences in labor market costs (such as geographic variation in competitive wages, requiring higher salaries in some districts than in others) and differences in economies of scale and population density. For example, due to their lack of collective bargaining/volume purchasing power, smaller-population districts may face higher expenses than higher-population districts. Also, rural schools that serve sparsely populated areas may require different teacher-student ratios and more administrative overhead than urban schools, as well as higher transportation costs per pupil.

Once the target funding, or adequacy budget figure, is determined for each district, the second step involves determining the share of funding that will be covered by local taxes and the share to be covered by the state. This step is important because, in addition to facing differing regional needs and expenses, local public school districts also vary significantly in their fiscal capacity to cover those needs and costs on their own.

STEP 2: State Aid = Target Funding – Local Revenue Requirement

The local share to be paid is arrived at usually either by determining the amount of per-pupil revenue that can be generated by a uniform local property tax, or by generating an index of local fiscal capacity that combines measures of local taxable property, wealth, and income.

Table 2 illustrates the impact of using Average Daily Attendance-based criteria in a state school finance system, comparing typical low- and high-need districts. The lower-need district enrolls 20 percent low-income children and enjoys a 98 percent attendance rate. The higher-need district enrolls 80 percent low-income children and has a 92 percent attendance rate. (As the foregoing brief has shown, it is almost universally the case that school attendance rates increase and decrease in correlation with a district population's income level/economic status. That is, the more severe the poverty, the higher the rate of school absences.) The hypothetical state in Table 2 operates on a formula with a base funding level of $8,000 per pupil. In the low-need district, enrollment based funding generates a weighted, fundable pupil count of 11,080:

Weighted Fundable Pupils (11,080) = 10,000 + (.2 $_{\text{low-income population}}$ x 10,000 x .5 $_{\text{cost weight}}$) + (.02 $_{\text{ell population}}$ x 10,000 x .4 $_{\text{cost weight}}$)

By contrast, in the high-need district, enrollment based funding generates a weighted, fundable pupil count of 14,800:

Weighted Funded Pupils (14,800) = 10,000 + (.8 $_{\text{low-income population}}$ x 10,000 x .5 $_{\text{cost weight}}$) + (.2 $_{\text{ell population}}$ x 10,000 x .4 $_{\text{cost weight}}$)

If ADA-based funding is applied, the pupil count figure for the low-need district is reduced from 11,080 to 10,858, or about 98 percent which is the attendance rate. Thus the target funding for the lower-need district is reduced by $177 per pupil.

By contrast, the pupil count figure for the high-need district is reduced from 14,800 to 13,616, or 92 percent, which is the attendance rate, and the target funding is reduced by $947 per pupil.

In the second step described above, the lower-need district, by virtue of its relative wealth and income, is expected to pay 75 percent of the cost of its own target funding, receiving only 25 percent in the form of state aid. This relative "self-sufficiency" serves to buffer this district from losses in state aid that result from attendance-based funding. In effect, the lower-need district only loses the proportion of target-budget funds that are financed through state aid, which is 25 percent of the $177 reduction, or $44 per enrolled pupil. By contrast, the high-need district loses 80 percent of the $947 per pupil, or nearly $760 per pupil in state aid. In some states, districts might be forced to reduce their per-pupil spending to the new target figure, as necessitated by the loss in per-pupil funding.

TABLE 2
HYPOTHETICAL IMPACT OF AVERAGE DAILY ATTENDANCE ON DISTRICT FUNDING

	LOW-NEED DISTRICT		HIGH-NEED DISTRICT	
Step 1a: Weighted Enrollment Calculation	**Enrollment**	**ADA**	**Enrollment**	**ADA**
Enrollment	10,000	9,800	10,000	9,200
% Low-Income	20%	20%	80%	80%
Low-Income Weight	0.50	0.50	0.50	0.50
% ELL (English Language Learners)	2%	2%	20%	20%
ELL Weight	0.40	0.40	0.40	0.40
Weighted Pupils	11,080	10,858	14,800	13,616
Step 1b: Target Funding Calculation				
Base Cost	$8,000	$8,000	$8,000	$8,000
Total Cost	$88,640,000	$86,867,200	$118,400,000	$108,928,000
Total per Enrolled Pupil	$8,864	$8,687	$11,840	$10,893
Loss (Target Reduction) per Enrolled Pupil		-$177		-$947
Step 2: State Aid Determination				
Local Fair Share	75%	75%	20%	20%
State Aid	$22,160,000	$21,716,800	$94,720,000	$87,142,400
State Aid per Formula Pupil	$2,216	$2,216	$9,472	$9,472
State Aid per Enrolled Pupil	$2,216	$2,172	$9,472	$8,714
Loss (State aid Reduction) per Enrolled Pupil		-$44		-$758

APPENDIX 2
GLOSSARY OF TERMS

Adequacy Budgets & Target Funding

Adequacy budgets and target funding are often interchangeable terms that pertain to the amount of combined funding required by local public school districts for achieving desired outcome levels (usually benchmarks for college and/or workforce readiness, as measured by state-mandated student assessment tests) a) in the setting in question and b) given the demographics of the student population. As a first step in many school finance formulas, a target level of funding, or adequacy budget, is calculated by adding up the basic costs of regular education programs and the additional costs of meeting the specific needs of the student population served, with additional adjustments for contextual factors that may affect cost (economies of scale, regional wage variation).

Average Daily Attendance

Average Daily Attendance counts are based on the numbers of children actually in attendance in a school or district each day, and then (typically) averaged on a bimonthly or quarterly basis.

Average Daily Membership

Average Daily Membership or Average Daily Enrollment measures the numbers of children enrolled to attend a specific district throughout the year, and may also be periodically reconciled.

Fall Enrollment Count

A Fall Enrollment Count is based on the number of students either enrolled or in attendance on a specific single date early in the fall of the school year. The figure may be based on the number of students who have enrolled in a district or on the number of students who actually attended on the specified day. These single-day counts in the fall are sometimes reconciled with a spring/January re-calculation, leading to either upward or downward adjustments in remaining state aid payments.

Fairness Ratio

The "fairness ratio" is the ratio of projected (using a statistical model of national school finance data for the most recent three years) combined state and local revenue per pupil for a school district with 30 percent children in poverty in comparison to a district with 0 percent children in poverty. The fairness ratio is a measure of funding progressiveness or regressiveness.

Progressive vs. Regressive Financing (Fairness)

Progressiveness and regressiveness, as these terms pertain to state school finance systems, refer to the relationship between a) the state education funding formula and b) some measure of local economic conditions. In the national report *Is School Funding Fair?*, a "progressive" state school finance system is defined as one in which local public school districts serving higher shares of children in poverty receive systematically higher combined state and local revenue per pupil than do local public school districts serving lower shares of children from families in poverty. A regressive system is the opposite – one in which districts with higher child poverty concentrations have systematically lower per-pupil revenue than districts with lower poverty concentrations.

ENDNOTES

[1] Reid, K. (2008). The causes of non-attendance: An empirical study. *Educational Review,* 60(4), 345-357.

[2] See, e.g., Newacheck, P. W., Strickland, B., Shonkoff, J. P., Perrin, J. M., McPherson, M., McManus, M., Lauyer, C., . . . Arango, P. (1998). An epidemiologic profile of children with special health care needs. *Pediatrics*, *102*(1), 117-123; Fowler, M. G., Johnson, M. P., & Atkinson, S. S. (1985). School achievement and absence in children with chronic health conditions. *Journal of Pediatrics, 106*(4), 683-687.

[3] National Forum on Education Statistics. (2009). *Every school day counts: The forum guide to collecting and using attendance data* (NFES 2009-804). Washington, DC: National Center for Education Statistics. Retrieved from *http://nces.ed.gov/pubs2009/2009804.pdf.*

[4] Baker, B. D. & Green III, P. C. (2005). Tricks of the trade: State legislative actions in school finance policy that perpetuate racial disparities in the post-*Brown* era. *American Journal of Education, 111*(3), 372-413.

[5] Ely, T.L. & Fermanich, M.L. (2013) Learning to count: School finance formula count methods and attendance-related student outcomes. *Journal of Education Finance, 38*(4), 343-369.

[6] Education Law Center. (2012). Governor proposes using discredited method to count students for state school aid: Would trigger additional funding cut to high poverty schools [Press release]. Retrieved from: *www.edlawcenter.org/news/archives/school-funding/governor-proposes-using-discredited-method-to-count-students-for-state-school-aid.html.*

[7] Recently, when New Jersey slipped the attendance factor into the determination of state aid, Education Commissioner Chris Cerf argued:
When you look at the (difference) between the number of children on the rolls and the number of children in some of these schools, it can be very distressing . . . Pushing these districts to do everything in their power to get kids to attend class is good.
Method, J. (2012, April 24). Cerf said: Push districts to get kids in school. *Asbury Park Press*. Retrieved from: *http://blogs.app.com/capitolquickies/2012/04/24/cerf-said-push-districts-to-get-kids-in-school/*

[8] A study published in the Spring 2013 issue of the *Journal of Education Finance* purports to find positive effects on attendance and graduation rates in states with a "strong incentive" enrollment basis for funding, with particular emphasis on states relying on average daily attendance, but combining with them many (most) states using an average daily membership figure. Most problematically, the study draws its main conclusion from state aggregate cross sectional analyses, applying unsatisfyingly ambiguous classifications of state school finance policy count methods, and applying an approach which cannot separate finance policy effects from other contextual differences across states. The final study is published here: Ely, T.L. & Fermanich, M.L. (2013) Learning to count: School finance formula count methods and attendance-related student outcomes. *Journal of Education Finance, 38*(4), 343-369.

[9] Missouri Department of Education: *www.moga.mo.gov/statutes/c100-199/1630000021.htm*

[10] Baker, B.D., Sciarra, D.G., & Farrie, D. (2014). *Is school funding fair? A national report card.* Retrieved from *http://schoolfundingfairness.org/National_Report_Card_2014.pdf.*

11 The largest number of states uses a variant of Average Daily Membership (ADM), where membership is commonly assumed to differ from attendance in that membership represents the enrolled members of the student population. That said, there exists sufficient nuance in definitions across states such that ADM counts in some states may be more accurately characterized as attendance-based measures, and in other cases ADM counts are taken at specific points in time, making them more similar to single-day enrollment count methods. Membership may, in some cases, be calculated based on the number of student in attendance on a given day, or on quarterly count days. In nearly every case, enrollment measures for planning the coming year's budget and for projecting the coming year's state aid are based on prior year enrollments, and in some cases the greater of the most recent multiple prior years. These measures are often used to mitigate state aid loss due to declining enrollments. In effect, they are a form of hold-harmless provision.

[12] Baker, B.D., Sciarra, D.G., & Farrie, D. (2014). *Is school funding fair? A national report card*. Retrieved from *http://schoolfundingfairness.org/National_Report_Card_2014.pdf.*

[13] State Department of Education of Idaho. *Idaho public school funding*. Retrieved from *www.sde.idaho.gov/site/superintendentMeeting/Pres/Public%20School%20Finance%20Overview/Funding%20Formula%20FY12,%20Tim%20Hill.pdf.*

[14] Kentucky Department of Education. (2013). *Support Education Excellence in Kentucky (SEEK) executive summary for the 2012-13 Year.* Retrieved from *http://education.ky.gov/districts/SEEK/Documents/SEEK%20Executive%20Summary%202012-2013.doc.*

[15] Mississippi Department of Education. *Mississippi Adequate Education Program (MAEP).* Retrieved from *www.mde.k12.ms.us/docs/school-financial-services-library/maep_explanation_2010C2281CA29877.pdf?sfvrsn=2.*

[16] Mo. Rev. Stat. § 163.011(2013).

[17] For a description of the changes, see: Education Law Center. (2012). Governor proposes using discredited method to count students for state school aid: Would trigger additional funding cut to high poverty schools [Press release]. Retrieved from: *www.edlawcenter.org/news/archives/school-funding/governor-proposes-using-discredited-method-to-count-students-for-state-school-aid.html*. For details on the most recent fiscal year aid projections, see: *www.nj.gov/education/stateaid/1415/scenarios.shtml*

[18] Education Law Center. (2012). *FY13 proposed cost reduction to adequacy and categorical aids from Average Daily Attendance (ADA) modification.* Retrieved from *www.edlawcenter.org/news/archives/school-funding/governor-proposes-using-discredited-method-to-count-students-for-state-school-aid.html.*

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[22] Bonilla, S., Kehl, S., Kwong, K.Y., Morphew T., Kachru R., & Jones, C.A. (2005). School absenteeism in children with asthma in a Los Angeles inner city school. *Journal of Pediatrics, 147*(6), 802-806.

[23] Meng, Y., Babey, S.H., & Wolstein, J. (2012). Asthma-related school absenteeism and school concentration of low-income students in California. *Preventing Chronic Disease, 9,* 110312. Retrieved from: *www.cdc.gov/pcd/issues/2012/pdf/11_0312.pdf.*

[24] Baker, B.D., Sciarra, D.G., & Farrie, D. (2014). *Is school funding fair? A national report card.* Retrieved from *http://schoolfundingfairness.org/National_Report_Card_2014.pdf.*

[25] Davison, K.K., Werder, J.L., & Lawson, C.T. (2008). Children's active commuting to school: Current knowledge and future directions. *Preventing Chronic Disease, 5*(3), 1-11. Retrieved from *www.ncbi.nlm.nih.gov/pmc/articles/PMC2483568/pdf/PCD53A100.pdf*; Active Living Research. (2009). *Walking and biking to school, physical activity and health outcomes.* Retrieved from *http://activelivingresearch.org/files/ALR_Brief_ActiveTransport_0.pdf*; see also Centers for Disease Control and Prevention. (2014). *Adolescent and school health.* Retrieved from *www.cdc.gov/healthyyouth/physicalactivity/facts.htm.*

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