

# New Jersey's School Funding Reform Act at 10 Years

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## Executive Summary

Over the last decade, researchers have reached a consensus about school funding: money *does* matter.<sup>1</sup> How states like New Jersey allocate funds for schools has a profound impact on student outcomes, because **adequate funding is a necessary precondition for educational success**.

New Jersey's School Funding Reform Act (SFRA) of 2008 was never a perfect law; in many ways, however, it remains a model state school finance policy:

- **SFRA directs more funding toward the students who need it the most.** Under SFRA, New Jersey distributes state aid more progressively across local public school districts with respect to students' needs.
- **SFRA directs more funding toward the school districts that can't raise enough revenue locally.** Because of SFRA, New Jersey distributes state aid progressively with respect to local income and property wealth, which serve as measures of local capacity to adequately fund schools.

Unfortunately, **SFRA has been undermined by several factors** through the years during and following the economic recession of 2008, including:

- **Cuts and freezes to state aid.** These cuts have led to larger and large shares of children attending districts falling well short of their adequacy budget targets and significant shares of children attending districts falling more than \$5,000 per pupil short of those targets.
- **Failure to enforce a minimum local fair share.** The failure to make sure each district raises its "fair share" of school funding through local taxes leaves some districts with even larger gaps between current spending and adequacy targets. To make things worse, these districts often serve high-need student populations.
- **Local property tax increase caps.** These caps prohibit districts that are levying less than their required local effort – and spending less than adequacy targets – from raising their local property taxes so as to adequately fund their schools.

This report outlines short term, medium term and longer term solutions to fixing SFRA. **Short term solutions include:**

1. **Fully funding the SFRA formula to meet its adequacy targets.**
2. **Requiring districts to fully fund their local fair share** if they fall below adequacy targets.
3. **Using a competitive wage growth index instead of a consumer price index.**  
New Jersey can only maintain a high-quality teacher workforce if it offers competitive

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<sup>1</sup> For a review of the research on school funding, see: Baker, B. D. (2017). *How money matters for schools*. Palo Alto, CA: Learning Policy Institute. [https://learningpolicyinstitute.org/sites/default/files/product-files/How\\_Money\\_Matters\\_REPORT.pdf](https://learningpolicyinstitute.org/sites/default/files/product-files/How_Money_Matters_REPORT.pdf)

wages. Keeping those wages competitive requires tying them to the wage increases of other college-educated professionals.

Medium term adjustments include:

1. **Replacing the current Geographic Cost Adjustment (GCA) factor** (which is applied at the county level) with a similarly determined adjustment (Taylor's ECWI) applied at the labor market level, to remove distortions along county lines within the same labor market.
2. **Returning special education funding to a system based on tiers of student need**, with appropriately differentiated funding based on actual distributions of children with disabilities. This change should be combined with providing 100% of special education funding through the equalization formula.

Longer term considerations include:

1. **Recalibrating funding targets and cost adjustments tied to current outcome goals.** Using current data and applying more rigorous cost analysis methods, New Jersey should reexamine the levels of resources needed for schools and districts to efficiently achieve its current educational goals.
2. **Reconsidering the role of charter schools and how they affect public school funding.** The state should direct funding to charter schools based on costs and needs while simultaneously assessing their fiscal impact on the efficiency of the *entire* system of public schools.
3. **Integrating pre-K funding into the SFRA model.**
4. **Considering a statewide, SFRA-like formula for financing the state's community college system.** This would enable the provision of free, equitable and adequate two-year public college programs for all who wish to attend.

Finally, this report notes that income inequality, racial segregation, and economic segregation remain significant barriers to reducing inequality of student outcomes in New Jersey. While improving SFRA is critically important, these costly barriers cannot be overcome by targeted school spending reform alone. The state must also attempt to disrupt the link between housing segregation and school segregation, which greatly contributes to the persistent lack of equal educational opportunity across New Jersey.

2019 is the year to act – to create better schools and better lives for the children of New Jersey. This report provides a starting point for the Murphy administration and the Legislature to enact legislation that will lead to a better statewide school funding system – and a better education for all of New Jersey's students.

## Introduction

New Jersey's School Funding Reform Act (SFRA) went into effect in 2009 and has provided the legislative framework for determining state aid to local public school districts since then. However, for several years over the past decade, the formula has been overridden by stop-gap measures imposed during the recession that were never fully lifted, even after the economy began to rebound. These measures have had a substantial, negative effect on the state's ability to provide adequate and equitable funding for all of its school districts.

SFRA came about through a series of actions taken under several administrations during the 2000s, culminating in 2008. Prior to the adoption of SFRA, school funding in New Jersey was driven by court rulings from 1998 that mandated the provision of specific educational programs and services. These initiatives, however, were only available to children attending districts which had brought suit over the constitutionality of funding over a decade earlier (in the *Abbott v. Burke* series of court cases). During this period, substantial sums of state aid were targeted to the state's highest-need districts. While affluent suburban districts were capable of very high spending on their own – thanks to their relatively high property values, which allowed them to raise local revenues at relatively low tax rates – many other districts were “caught in the middle” and felt the squeeze of diminished state aid and rising local property taxes.<sup>2</sup>

SFRA was designed as a statewide funding solution that, among other things, would bring those districts “caught in the middle” into a logical distribution scheme. The funding formula outlined in SFRA implemented a more rational *local share* calculation: the amount a school district was expected to raise with local property taxes.

In addition, SFRA was designed to drive more funding toward those districts that served more students with greater educational needs. The law was premised on the idea that students in poverty, or who were English language learners, or who had special educational needs, would require more resources to equalize educational opportunity.

### SFRA: The Basics<sup>3</sup>

At its core, SFRA has two components:

- I. A calculation of how much funding a school district needs to provide its students with an education that meets New Jersey's constitutionally mandated standards.

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<sup>2</sup> Lauer, S., Ritter, G. W., & Goertz, M. E. (2001). Caught in the middle: The fate of the non-urban districts in the wake of New Jersey's school finance litigation. *Journal of education finance*, 26(3), 281-296.

<sup>3</sup> For a more comprehensive overview of the mechanics of SFRA, see: <https://www.njsba.org/news-information/parent-connections/school-finance-101/>

2. A determination of the capacity of a school district to raise local revenues.

The cost calculation starts with a base amount, which is the cost of educating one student with no adjustments for varying educational needs. The base is multiplied by the number of students enrolled in the district; however, the enrollment is “weighted,” based on the characteristics of the district’s students. Factors that determine student weighting include:

- Free and Reduced Price Lunch eligibility, a proxy measure of student economic disadvantage.
- Limited English Proficiency (LEP).
- Grade levels, where additional weights are given to students in higher grades.

As discussed below, provisions are also made within SFRA for the needs of students with learning disabilities, although it is assumed all school districts have the same proportion of these students. SFRA further adjusts costs based on geographic differences, under the assumption that comparable wages will vary in different parts of the state.

Taxing capacity is determined through a calculation that includes a district’s property values and its residents’ income. The state expects each district to contribute its local share, which is based on its capacity, toward funding its schools. It is important to understand that districts with high property values have a critical advantage over districts with low property values: to raise equivalent revenues, a property-poor district must have a higher tax rate than a property-rich district.

Table 1 illustrates this reality with a hypothetical example: imagine two school districts of the same size, each wishing to raise the same amount of revenue per household – in this example, \$10,000. Because district B’s property values are one-fifth of district A’s, district B’s tax rate must be five times district A’s, just to raise *equivalent* revenues.

Table 1: Example of school district tax rates.

District Type	Average Housing Value	Amount of revenue to be raised.	Necessary tax rate.
A: High property values.	\$1,000,000	\$10,000	1%
B: Low property values.	\$200,000	\$10,000	5%

SFRA was designed to correct this inequity and balance out local districts’ tax effort toward funding schools. Property-poor districts do not have to impose relatively higher tax rates on their homeowners simply to match the funding raised locally by property-rich districts.

Mathematically, the state makes up the difference between the cost of educating students and the ability of a district to fund its schools:

$$\text{State Aid} = (\text{Base} \times \text{Weighted Enrollment} \times \text{Geographic Cost Adjustment}) - \text{Local Share}$$

As a practical matter, however, the state has not fully funded the formula outlined in SFRA, leaving districts with the choice of raising local taxes or spending less. New Jersey's school funding system also includes various types of *categorical aid*: aid that is not directly tied to SFRA's adequacy formula.

## SFRA at 10: An Analysis

Like any state school finance formula adopted as legislation, SFRA was a political compromise – one that would have some winners and some losers. The final law includes some temporary stop-gap measures to ease the pain of losses, otherwise known as *adjustment aid*. This additional aid guaranteed that districts would not suffer from a decrease in state funding if the SFRA formula determined they would receive less than they currently did.

In addition, SFRA included measures to distribute aid to districts that would otherwise receive none, in order to achieve political support for the legislation. SFRA was accepted by the State Supreme Court as meeting constitutional standards (Abbott XX, 199 N.J. 140 (May 2009)). The adopted formula, while imperfect, remains among the more rational, equitable, and adequate state school finance formulas among U.S. States.<sup>4</sup>

In the following policy report, I begin by providing a primer on the design, goals, and core elements of state school finance formulas. When we consider the reasons for school funding legislation, it becomes clear that New Jersey's SFRA is, in many ways, a model school finance formula.

Next, I address methods for conducting cost analyses in education, which may be used to inform the design of state school finance formulas. Policy makers originally intended for SFRA to be guided by such analyses; however, they ultimately played only a small role in guiding the recommendations that led to SFRA. In addition, many of those analyses were fraught with irregularities that should be avoided during any revision of the law.

In the next section, I provide analyses of school funding in New Jersey over time. First, I summarize a series of indicators from our national annual report *Is School Funding Fair?* These indicators include:

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<sup>4</sup> Baker, B. D., Sciarra, D. G., & Farrie, D. (2014). Is school funding fair? A national report card. *Education Law Center*.

- The “effort” – or share of economic capacity spent on K-12 schooling – put forth by states over time.
- The “progressiveness” – or the extent to which higher-poverty districts are able to spend more than lower-poverty districts – of per pupil spending.
- The competitiveness of teacher wages when compared to similarly educated workers of the same age in other sectors.

Next, I address recent findings from a study in which I, along with colleagues, estimated the relative adequacy of school spending across states toward achieving common outcome goals. We find that New Jersey does better than most other states in driving the necessary resources where they are needed to achieve average outcomes; however, the state still falls short in the highest-poverty districts.

After, I provide an in-depth, over time analysis of SFRA, specifically comparing actual current spending of school districts to estimated target spending had SFRA been fully implemented over time and kept up with growth in competitive wages. Finally, I lay out policy recommendations for the future of school funding in New Jersey.

## Background: Understanding School Finance Formulas and Education Costs

### School Finance Formulas

Modern state school finance formulas strive to achieve two simultaneous objectives:

- Account for differences in the costs of achieving equal educational opportunity (to achieve desired outcomes) across schools, districts, and the children they serve.
- Account for differences in the ability of local public school districts to cover those costs. Local districts’ ability to raise revenue might be a function of either or both local taxable property wealth and the incomes of local property owners, thus their ability to pay taxes on their properties.

Table 2 summarizes components of a typical state school finance formula and the roles of those components with respect to equity objectives. For example, many state school finance systems are built around foundation aid models originating in the 1920s, which have at their core a foundation funding level per pupil.<sup>5</sup> It is generally assumed that the foundation level of funding per pupil represents the cost of minimally adequate educational services either in the district with lowest costs or for the child with no specialized needs. Alternatively, the foundation level might be set to represent the cost of educational services in the average educational setting, for a local

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<sup>5</sup> Strayer, G. D., & Haig, R. M. (1923). *The financing of education in the state of New York: a report reviewed and presented by the Educational finance inquiry commission, under the auspices of the American council on education, Washington* (Vol. 1). Macmillan Co..



public school district facing average cost pressures and serving an average student population. Without any other considerations, the foundation level itself provides only for equity of nominal financial inputs – that is, equal dollars per pupil across districts, regardless of needs or costs.

Many foundation aid formulas also contain adjustments for variations in *input prices* across districts; specifically, adjustment for variations in the competitive wages of teachers and other school staff. School districts, like any other employer, must account for differences between various regions in wages, due to differences in the cost of living, the availability of college-educated workers, local working conditions, and other factors. The adjustments in aid formulas are intended to provide districts with sufficient funding to purchase comparable “real resources,” or comparable quantities of comparable quality teachers and other school staff.

Finally, foundation aid formulas also contain numerous adjustments related to student needs, which can refer to either individual programmatic needs of specific students or collective needs of the student population served. For example, children identified as having one or more learning disabilities or with limited English proficiency (LEP) might require specific curricular and program supports, which are provided by specially trained staff at higher costs. And schools with high concentrations of children in poverty might more generally have to adjust their programs and service delivery models to provide smaller class sizes for early grades, additional tutoring support, and/or extended learning time, also at higher costs.

**Table 2**

Components of foundation aid formulas and equity objectives

<b>Foundation formula element</b>	<b>Purpose</b>	<b>Notes</b>
<b>Foundation level</b>	Intended to represent cost of “adequate educational services” and/or cost of achieving “adequate educational outcomes” in either “average” or “lowest cost” district.	Without other considerations, guarantees only equity of nominal financial inputs (equal dollars).
<b>Input price (teacher wage) adjustment</b>	Intended to provide local public school districts sufficient funding to purchase comparable “real resources.”	May attempt to account for differences in competitive wages and other input prices across regions, or may also attempt to account for influence of local working conditions on wages required to hire high-quality teachers.
<b>Student need adjustments</b>	Intended to provide for “equal educational opportunity” by providing financial resources to achieve appropriately differentiated programs (program intensity).	Based on the premise that students with particular needs require additional school funding to achieve equal educational opportunity.

These strategies are intended to yield more equal student outcomes – to close achievement gaps between low-income and higher-income students, or between those with learning disabilities and/or limited English proficiency and other children. These adjustments are intended to provide for equal opportunity to achieve desired outcome levels as mandated by the state. As such, for a state school finance system to provide equal educational opportunity, that system must ensure sufficiently more resources in higher-need (higher-poverty) settings than in lower-need settings.

I characterize such a system as *progressive*. By contrast, many state school finance systems barely achieve flat funding between high- and low-need settings: they drive the same level of state aid to all districts, regardless of the needs of their students (or the ability of their local taxpayers to raise revenues). Other state funding systems remain *regressive*: they provide *less* funding to the schools serving the students who need actually need *more* resources.

### Estimating Costs: A Primer

In an ideal world, school funding formula targets could be set according to accurate empirical estimates of the cost of achieving desired outcomes. In other words: if school funding policies were perfect, states would know precisely, based on actual data, how much money every school district would need to meet the educational goals the state set. Cost estimates would account for both differences in input prices across settings and differences in student populations, as well as differences in other factors which may affect the per pupil costs of achieving common outcome goals.

Several states, including New Jersey, have engaged in efforts to do just this, with varying degrees of success. Before delving into New Jersey specifics, I provide here an overview of methods for determining costs and guiding state school finance formulas.

Cost estimation applied to elementary and secondary education has typically fallen into two categories:

- *Input-oriented* analyses identify the staffing, materials, supplies and equipment, physical space, and other elements required to provide specific educational programs and services. Those programs and services may be identified as typically yielding certain educational outcomes for specific student populations when applied in certain settings.
- *Outcome-oriented* analyses start with measuring student outcomes as generated by the specific programs and services offered by institutions. They can then explore either the aggregate spending on those programs and services that yield specific outcomes, or explore in greater depth the allocation of spending on specific inputs.

The primary methodological distinction here is whether one starts from an input perspective or from one that designates specific outcome measures. One approach works forward, toward actual or desired outcomes, starting with inputs; the other backwards, from outcomes achieved. Ideally, both work in concert, providing iterative feedback to one another. Regardless, any

measure of “cost” must consider the outcomes to be achieved through any given level of expenditure and resource allocation.<sup>6</sup>

### *Input-Oriented Cost Analysis*

Setting aside for the moment the modern proprietary jargon of costing-out studies, there really exists just one basic method for input-oriented analysis, which since the late 1970s has been given two names: the Ingredients Method<sup>7</sup> and Resource Cost Modeling (RCM). I will refer to this method as the latter.<sup>8</sup> RCM involves three basic steps:

1. Identifying the various resources, or “ingredients,” necessary to implement a set of educational programs and services (where an entire school or district, or statewide system for that matter, would be a comprehensive package of programs and services);
2. Determining the input price for those ingredients or resources (considering competitive wages, other market prices, etc.); and
3. Combining the necessary resource quantities with their corresponding prices to calculate a total cost estimate (Resource Quantities × Price = Cost).

Resource cost modeling was applied by Jay Chambers and colleagues in both Illinois<sup>9</sup> and Alaska in the early 1980s to determine the statewide costs of providing the desired (implicitly “adequate”) level of programs and services, long before its use in the context of school finance adequacy litigation in Wyoming in 1995.

A distinction between the input-oriented studies conducted prior to modern emphasis on outcome standards and assessments is that those studies focused on tallying the resource needs of education systems designed to provide a set of curricular requirements, programs and services intended to be available to all children. Modern analyses instead begin with goals statements—or the outcomes the system is intended to achieve—and then require consultants and/or expert

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<sup>6</sup> William Duncombe and John Yinger, “Performance Standards and Educational Cost Indexes: You Can’t Have One Without the Other,” *Equity and Adequacy in Education Finance: Issues and Perspectives* 260 (1991): 261.

<sup>7</sup> Henry Levin, (1983). *Cost-Effectiveness: A Primer*, vol. 4 (Beverly Hills, CA: Sage Publications, 1983); Henry Levin and Patrick McEwan, (2001). *Cost-Effectiveness Analysis: Methods and Applications* (Thousand Oaks, CA: Sage Publications, 2001).

<sup>8</sup> Chambers, J. G. (1999). *Measuring resources in education: From accounting to the resource cost model approach*. US Department of Education, Office of Educational Research and Improvement, National Center for Education Statistics; Jay Chambers and William Hartman, “A Cost-Based Approach to the Funding of Educational Programs: An Application to Special Education,” *Institute for Research on Educational Finance and Governance at Stanford University*, January, 1981; Jay Chambers and Thomas Parrish, “The Development of a Resource Cost Model Funding Base for Education in Illinois,” *Illinois State Board of Education*, 1983; Jay Chambers, “Measuring Resources in Education: A Comparison of Accounting and the Resource Cost Model Approach,” *School Business Affairs* 66, no. 11 (2000): 26-34.

<sup>9</sup> Jay Chambers and Thomas Parrish, “The Development of a Resource Cost Model.”

panels to identify the inputs needed to achieve those goals. Nonetheless, the empirical method is still one of tallying inputs, attaching prices and summing costs.

RCM can be used to evaluate:

1. Resources currently allocated to actual programs and services (geared toward measurably achieving specific outcomes);
2. Resources needed for providing specific programs and services where they are not currently being provided; and
3. Resources hypothetically needed to achieve some specific set of outcome goals—as defined by both depth and breadth.

In the first case, where actual existing resources are involved, one must thoroughly quantify those inputs, determine their prices, and sum their costs. If seeking findings that are generalizable, one must explore how input prices (from teacher wages to pencils and paper) vary across the sites where the programs and services are implemented, and whether context (economies of scale, grade ranges) affects how inputs are organized in ways consequential to cost estimates.

In the second case, where hypothetical (or not-yet-existing) outcome goals are involved, a number of approaches can be taken—including organizing panels of informed constituents, including professionals and researchers—to hypothesize the resource requirements for achieving desired outcomes with specific populations of children educated in particular settings. Competing consultants have attached names including Professional Judgment (PJ) and Evidence-Based (EB) to the methods they prefer for identifying the quantities of resources or ingredients. Professional Judgment involves convening focus groups to propose resource quantities for hypothetical schools defined by varying levels of school needs, scale of operations, and geographic setting to achieve specific outcomes. Evidence-Based methods involve the compilation of published research into model schools presumed adequate regardless of context because of their reliance on published research where the findings are assumed to be externally generalizable.

One should expect a well-designed input-oriented resource cost analysis to engage informed constituents in a context-specific process that also makes available sufficient information (perhaps through prompts and advanced reading) on related “evidence.” Put bluntly, these two methods should not be applied exclusively in isolation from one another. Even under the best application, the result of this process is a hypothesis of the resource needs required to fulfill the desired outcome goals. Where RCM is applied to programs and services already associated with certain actual, measured outcomes, that hypothesis is certainly more informed, though not yet formally tested in alternative settings.

### *Outcome-Oriented Cost Analysis*

The primary tool of outcome-oriented cost analysis is the Education Cost Function (ECF).<sup>10</sup> Cost functions typically focus on the outcome-producing organizational unit, or decision-making unit (DMU) as a whole—in this case, schools or districts—evaluating the relationship between aggregate spending and outcomes, given the conditions under which the outcomes are produced. The conditions regularly include economies of scale (higher unit production costs of very small organizational units), variations in labor costs, and, in the case of education, characteristics of the student populations which may require greater or fewer resources to achieve common outcome goals.

Identifying statistical relationships between resources and outcomes under varied conditions requires high-quality and sufficiently broad measures of desired outcomes, inputs, and conditions, as well as a sufficient number of organizational units that exhibit sufficient variation in the conditions under which they operate. Much can be learned from the variation that presently exists across our local public, charter, and private schools regarding the production of student outcomes, the aggregate spending, and the specific programs and services associated with those outcomes.

That said, cost functions have often been used in educational adequacy analysis as a seemingly black-box tool for projecting the required spending targets associated with certain educational outcomes. Such an approach provides no useful insights into how resources (staffing, programs and services, etc.) are organized within schools and districts at those spending levels and achieving those targets. This is an unfortunate, reductionist use of the method.

As an alternative to the black-box spending prediction approach, cost functions can be useful for exploring how otherwise similar schools or districts achieve different outcomes with the same level of spending, or the same outcomes with different levels of spending. That is, there exist differences in relative efficiency. Researchers have come to learn that inefficiency found in an ECF context is not exclusively a function of mismanagement and waste, and is often statistically explainable. Inefficient “spending” in a cost function is that portion of spending variation across schools or districts that is not associated with variation in the student outcomes being investigated, after controlling for other factors. The appearance of inefficiency might simply reflect the fact that there have been investments made that, while improving the quality of educational offerings, may not have a measurable impact on the limited outcomes under investigation. It might, for example, have been spent to expand the school’s music program, which may be desirable to local constituents. These programs and services may affect other important student outcomes

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<sup>10</sup>For a review of cost function analyses, see: William Duncombe and John Yinger, “Are Education Cost Functions Ready for Prime Time? An Examination of Their Validity and Reliability,” *Peabody Journal of Education* 86, no. 1 (2011): 28-57; Timothy Gronberg, Dennis Jansen, and Lori Taylor, “The Adequacy of Educational Cost Functions: Lessons from Texas,” *Peabody Journal of Education* 86, no. 1 (2011): 3-27.

including persistence and completion, and college access, and may even indirectly affect the measured outcomes.

Factors that contribute to this type of measured “inefficiency” are also increasingly well-understood, and include two general categories: fiscal capacity factors and public monitoring factors.<sup>11</sup> For one, local public school districts with greater fiscal capacity—that is, those with a greater ability to raise funds, and who spend more – are more likely to do so, and may spend more in ways that do not directly affect measured student outcomes. But that is not to suggest that all additional spending is frivolous, especially where outcome measurement is limited to basic reading and math achievement. Public monitoring factors often include such measures as the share of school funding coming from state or federal sources, where higher shares of intergovernmental aid are often related to reduced local public involvement (and monitoring).

A thorough ECF model considers spending as a function of (a) measured outcomes, (b) student population characteristics, (c) characteristics of the educational setting (economies of scale, population sparsity, etc.), (d) regional variation in the prices of inputs (such as teacher wages), (e) factors affecting spending that are unassociated with outcomes (“inefficiency” per se), and (f) interactions among all of the above.

### *Summarizing the Methods*

While all methods have strengths and weaknesses, some of the weaknesses represent critical flaws. For example, where the objective is to determine comprehensive, institutional costs of meeting specific outcome goals across varied contexts, the evidentiary basis for “evidence-based” analyses may fall short. While research evidence can be useful for identifying specific interventions which may yield positive outcomes, research evidence rarely addresses whole institutions or provides evidence on a sufficient array of interventions, which, if cobbled together, could constitute an entire institution (inclusive of administrative structures, etc.).<sup>12</sup>

The greatest shortcoming of the arguably more robust RCM process used in Professional Judgment is that the link between resources and outcomes is hypothetical (i.e., based on professional opinion). The greatest weaknesses of cost modeling are (a) that predictions may understate true costs of comprehensive adequacy where outcome measures are too narrow, and (b) that like any costing-out method, when desired goals far exceed those presently achieved, extrapolations may be suspect. Stressing the latter point, cost modeling and other approaches to

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<sup>11</sup> Lars-Erik Borge, Torberg Falch, and Per Tovmo, “Public sector efficiency: the roles of political and budgetary institutions, fiscal capacity, and democratic participation,” *Public Choice* 136, no. 3-4 (2008): 475-495; Shawna Grosskopf et al, “On the Determinants of School District Efficiency: Competition and Monitoring,” *Journal of Urban Economics* 49, no. 3 (2001): 453-478.

<sup>12</sup> Overly confident efforts to suggest otherwise have been met with sharp ridicule. See: Eric Hanushek, “The Confidence Men: Selling Adequacy, Making Millions,” *Education Next* 7, no. 3 (2007).

costing out are most useful where there exist institutions in the sample or population which actually perform to expectations and/or meet desired standards. That is, where the range of variation among existing institutions includes sufficiently resourced, successful, productive, and efficient institutions as well as those which are not, reducing the need to extrapolate well beyond observed conditions. Given these weaknesses in costing-out approaches, there are a number of ways researchers can explore the validity and reliability of the costs estimated using input- and output-oriented approaches.

## The Origins of SFRA

### How Cost Analysis Informed New Jersey's School Finance Reform Act

Empirical estimates of costs are imperfect to begin with. Adoption of state school finance formulas is necessarily a messy, political process – one that requires consensus building, or at minimum enough votes among constituents with disparate and competing interests. Where reasonable cost estimates are available, one can hope that the introduction of those cost estimates into the political deliberations has at least some influence on the final adopted legislation. In some states, the influence of empirical evidence on state school finance policies has been more evident than in others. But it is also the case that the quality of the empirical evidence varies widely; in addition, empirical evidence itself is often subject to political influence.

The New Jersey case is particularly illustrative when we look back on the origins of SFRA.

Consultant John Augenblick and colleagues were contracted through the Department of Education (NJDOE) in the early 2000s to prepare two analyses to inform the design of a new school finance formula:

1. A professional judgment (input based) analysis, which would use the opinions of experts to determine the resources necessary for students to receive a constitutionally adequate education.
2. A successful schools (average spending) analysis, which would determine the school resources necessary based on the fiscal practices of exemplary schools and districts.

Such studies were especially popular at the time.<sup>13</sup> The original report (never publicly released) was completed in 2003.<sup>14</sup> A version of the report, co-authored by NJDOE staff was eventually released three years later.<sup>15</sup>

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<sup>13</sup> Baker, B. D., Taylor, L. L., & Vedlitz, A. (2008). Adequacy estimates and the implications of common standards for the cost of instruction. *National Research Council*.

<sup>14</sup> Baker, B.D. (2009c) Evaluating the “Concrete Link” between Professional Judgment Analysis, New Jersey’s School Finance Reform Act and the Costs of Meeting State Standards in Abbott Districts. Education Law Center of New Jersey. <http://schoolfinance101.files.wordpress.com/2011/10/baker-pjp-sfra-report-web.pdf>.

<sup>15</sup> Dupree, A., Augenblick, J., Silverstein, J. (2006) Report on the Cost of Education (RCE) <http://nj.gov/education/sff/archive/report.pdf>

The professional judgment process used in New Jersey, however, had notable irregularities, suggesting political interference. Typically – and in every similar study up to that time – professional judgment studies involve convening panels of informed professionals, providing those panels with outcome goals, and providing blank templates for prescribing the resources those professionals feel would be required to achieve those goals. In New Jersey, panels were instead provided with templates where resources had already been filled in by department officials, and panelists were provided the opportunity to adjust those resources upward or downward.

Again, the original analyses included both a modified professional judgment approach and calculation of average spending of districts meeting specific performance standards, based outcome measures relevant in 2005. Student need adjustments were addressed only in the professional judgment analysis, by way of proposing additional staffing and other resources needed to serve low income students, English language learners, and children with disabilities; need adjustments were *not* part of the successful schools analysis.

The 2006 cost study report was followed by a 2007 report titled *A Formula for Success: All Children, All Communities* that laid out the framework for SFRA. The framework, however, made several substantial changes to the empirical findings in the original cost study:

- The foundation level was now based on an inflation adjusted figure derived from the 2005 professional judgment estimate (tied to 2005 outcome goals), with some additional modifications (both additions and subtractions).
- Where the PJ analysis had included separate per pupil costs for elementary, middle and high school prototypes, the *Formula for Success* proposal included weights to be applied to the numbers of students in elementary, middle and secondary grades. Those weights had no relationship to the cost study findings.
- The *Formula for Success* proposal also recommended a regional cost (competitive wage) adjustment to be based on recent work from the National Center for Education Statistics by Taylor and Fowler.<sup>16</sup> This recommendation was not included in the cost study. While such adjustments are intended to be applied at the labor market level (which is related to the core based statistical area), NJDOE officials decided instead to apply the index at the county level.<sup>17</sup>

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<sup>16</sup> Taylor, L. L., & Fowler Jr, W. J. (2006). A Comparable Wage Approach to Geographic Cost Adjustment. Research and Development Report. NCES-2006-321. *National Center for Education Statistics*.

<sup>17</sup> Baker, B.D. (2009c) Evaluating the “Concrete Link” between Professional Judgment Analysis, New Jersey’s School Finance Reform Act and the Costs of Meeting State Standards in Abbott Districts. Education Law Center of New Jersey. <http://schoolfinance101.files.wordpress.com/2011/10/baker-pjp-sfra-report-web.pdf>. Baker, B. D. (2008). Doing more harm than good? A commentary on the politics of cost adjustments for wage variation in state school finance formulas. *Journal of Education Finance*, 33(4), 406-440.



- The *Formula for Success* proposal recommended a sliding scale weight for low income children that started at 47% of base funding and rose to 57%, figures also not tied directly to any findings of the cost analysis.
- The *Formula for Success* proposal included a weight of 50% on children with limited English language proficiency, but also added a combination weight, which was less than the sum of the low income and ELL weights for children who qualified for both (which includes most ELL children, and thus reduces aid for many districts serving the neediest populations).
- Finally, the *Formula for Success* report proposed a census-based system for financing special education, providing a flat per pupil dollar amount per 14.69% of enrolled children, uniformly across all districts, regardless of actual variations in their rates of disability classification.<sup>18</sup> Additionally, one third of special education aid is allocated outside of the equalization formula – that is, without regard for local capacity to pay.

While changes from the cost study to the formula proposal cut both ways – increasing and decreasing funding targets and changing the mix of winners and losers – many of the changes served specifically to move funding away from the highest need districts toward districts previously caught in the middle. In other words: SFRA would now distribute resources less progressively with respect to poverty than under the previous litigation-driven allocations. Specifically:

- The use of a “combination weight” based on back of the napkin reductions of resources for children who are both ELL and low-income significantly reduced targeted funding to high need districts.<sup>19</sup>
- Because there is a link between low-income concentrations and mild to moderate disability concentrations, use of a flat, or “census-based,” figure for funding special education reduced aid to high poverty settings.<sup>20</sup> More broadly, the uniform need assumption systematically underfunds districts with greater *real* shares of children with disabilities and overfunds districts with smaller shares of children with disabilities.
- Further, it also turns out that higher poverty urban districts have larger shares of children in lower rather than upper grades; therefore, the greater weight on secondary students drives money away from high poverty urban settings.<sup>21</sup>

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<sup>18</sup> <https://www.state.nj.us/education/sff/sereport.pdf>

<sup>19</sup> Baker, B.D. (2009c) Evaluating the “Concrete Link” between Professional Judgment Analysis, New Jersey’s School Finance Reform Act and the Costs of Meeting State Standards in Abbott Districts. Education Law Center of New Jersey. <http://schoolfinance101.files.wordpress.com/2011/10/baker-pjp-sfra-report-web.pdf>.

<sup>20</sup> Baker, B. D. (2008). Doing more harm than good? A commentary on the politics of cost adjustments for wage variation in state school finance formulas. *Journal of Education Finance*, 33(4), 406-440.

<sup>21</sup> Baker, B.D. (2009c) Evaluating the “Concrete Link” between Professional Judgment Analysis, New Jersey’s School Finance Reform Act and the Costs of Meeting State Standards in Abbott Districts. Education Law Center of New Jersey. <http://schoolfinance101.files.wordpress.com/2011/10/baker-pjp-sfra-report-web.pdf>.

- Using county level data to determine the regional cost adjustment creates distortions where districts in more affluent counties (for example, Ridgewood, in Bergen County) receive larger adjustments than poorer nearby districts in adjacent counties (Paterson, in Passaic County) with lower non-teacher wages.<sup>22</sup> Yet those districts are competing on the same labor market for teachers, even as the poorer districts are already at a recruitment and retention disadvantage.
- Finally, allocating one-third of special education aid without regard for local capacity to pay leads to substantial allocations of state aid to some of the nation's wealthiest school districts, at the expense of districts with both greater need and less capacity.

These distortions would be less problematic if they were justifiable, conceptually or empirically and based on legitimate cost analysis. But they are not.

The extent of the differences between the cost study report and the formula proposal beg the question as to why the cost study report itself required such extensive internal vetting and editing prior to release. If the cost study was going to be largely ignored, why worry so much about its findings?

### Imperfectly Constitutional: The Design of SFRA

The *Formula for Success* was adopted as legislation: the School Funding Reform Act of 2008.<sup>23</sup> New Jersey's courts determined that the problems noted above with the newly adopted formula did not rise to a level that compromised the constitutionality of that formula (Abbott XX, 199 N.J. 140 (May 2009)). Overall, the formula was built on sound principles and yielded a progressive, need and cost-based distribution of funding. Further, the statute itself included provisions for periodic review and temporary hold-harmless aid for districts that would see declining aid.

The original act required that the Commissioner of Education produce regular reviews (on 3-year cycles) of the act, including proposals for departmental revision of limited features of the formula. The commissioner's authority (and responsibility) was limited to making adjustments to the various weights and cost factors used in calculating adequacy budgets.<sup>24</sup> Since adoption, the

<sup>22</sup> Baker, B. D., & Ramsey, M. J. (2010). What We Don't Know Can't Hurt Us? Equity Consequences of Financing Special Education on the Untested Assumption of Uniform Needs. *Journal of Education Finance*, 245-275.

<sup>23</sup> [https://www.njleg.state.nj.us/2006/Bills/A0500/500\\_12.PDF](https://www.njleg.state.nj.us/2006/Bills/A0500/500_12.PDF)

<sup>24</sup> Specifically:

1. the base per pupil amount based upon the core curriculum content standards established pursuant to N.J.S.A. 18A:7F-46(a);
2. the per pupil amount for full-day preschool;
3. the weights for grade level, county vocational districts, at-risk pupils, bilingual pupils, and combination (at-risk and bilingual) pupils;
4. the cost coefficients for security aid and transportation aid;
5. the state average classification rate for general special education services pupils and for speech-only pupils;
6. the excess cost for general special education services pupils and for speech-only pupils; and
7. the extraordinary special education aid thresholds.

<https://assets.njspointlight.com/assets/12/1217/2204>

target funding levels provided for under the act have been considered by the court to represent the state's constitutional funding obligation (Abbott XXI, 206 N.J. 332 (N.J. (May 2011))).

In its original form, SFRA was, and is, a classic weighted pupil foundation aid formula that contains each of the relevant policy levers of such a formula. It calculates an adequacy budget per pupil for each district based on a foundation level, pupil need weights, and a geographic cost (competitive wage) adjustment. It then assigns a local fair share contribution based on a combination of the income and property wealth in each district.

A unique feature of the New Jersey formula is that the formula acknowledges that as poverty concentration increases, so too do the costs associated with providing low income children equal educational opportunity. Districts with fewer than 20% low income children receive a “weight” of .47 (47% additional funding) for each “need weighted” (low income) child. But, for districts with greater than 60% low income children, the “weight” is increased to .57 (or 57% additional funding).

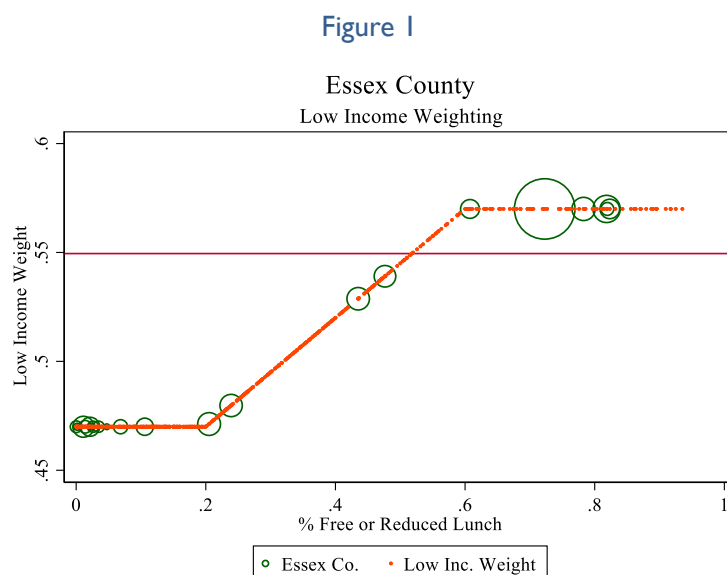
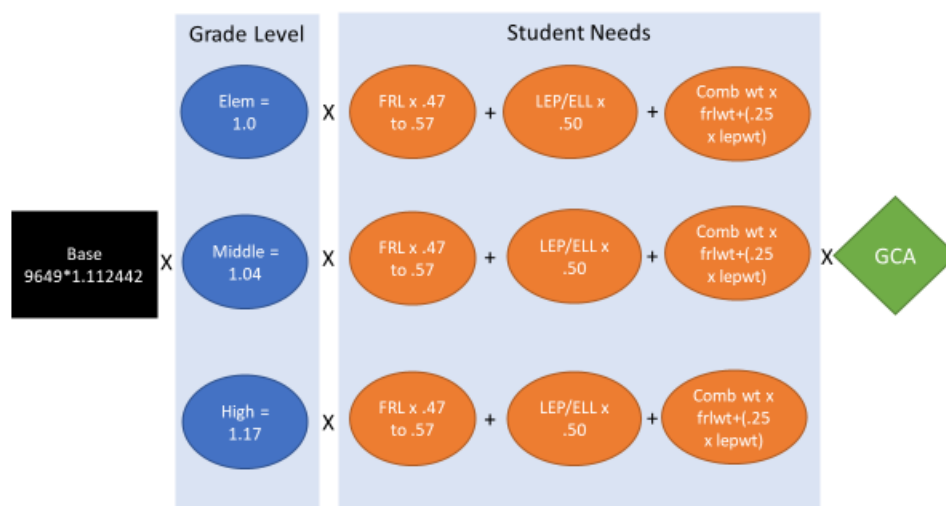


Figure 1 displays the application of the low-income weighting to districts in Essex County. Districts with less than 20% of their enrollment qualifying as low income receive a weighting of 47% times the grade level adjusted base. From 20% up to 60%, the weight increases until it maximizes at 57%. Many New Jersey counties, like Essex County, have mostly districts at one end or the other of this distribution and few along the slope in between. The circles (bubbles) along the line represent Essex County districts, with bubble size indicating enrollment size. Newark City schools are the largest bubble, at slightly less than 80% low income and with the maximum weight. Several very low poverty districts in the county each receive the minimum weight.

Figure 2 shows that the formula is multiplicative in some parts, and additive in others. The base aid figure (here, simulated at 2016 levels) is first multiplied by a grade level factor (based on numbers of children in a district in certain grades). That figure is multiplied by “weighted pupil counts” which include weights applied to low income students, to students with limited English Language Proficiency, and to students who fall into both categories (a reduction of what would be the sum of the two weights). After multiplying the base cost figure by grade level and student need weights, the figure is multiplied by the Geographic Cost Adjustment for each county. Because of this structure, any differences in weights – for example, for children from low income families – have a ripple effect through the formula calculations.

Figure 2



While this legislated framework has remained in place since 2008, it has not been fully funded or implemented as intended. It has also been subjected to manipulation, including alteration of pupil need weights and introduction of an “attendance factor” to adjust funded enrollments (effectively funding districts based on “average daily attendance” rather than fall enrollment).<sup>25</sup> It is well understood that using average daily attendance in lieu of enrollment counts to calculate funding levels reduces funding for districts serving high poverty student populations, which for a variety of reasons have lower average attendance rates.<sup>26</sup>

In a later section of this report, I provide simulated annual estimates of the adequacy budgets for all districts, compared to their actual current spending levels. These estimates answer the question: how far short is current spending when compared to the state’s own acknowledged

<sup>25</sup> <https://www.nj.gov/education/stateaid/1213/report.pdf> see also: <https://assets.njspotlight.com/assets/12/1217/2204>

<sup>26</sup> Baker, B.D. (2014) Not Making the Grade: How Financial Penalties for School Absences Hurt Districts Serving Low-Income, Chronically Ill Kids [http://changelabsolutions.org/sites/default/files/School-Financing\\_StatePolicymakers\\_FINAL\\_09302014.pdf](http://changelabsolutions.org/sites/default/files/School-Financing_StatePolicymakers_FINAL_09302014.pdf)

constitutional obligation? I begin the analysis with long-term trends in the progressiveness – poverty targeting – of school funding in New Jersey.

### The Rise and Fall of Progressive School Funding in New Jersey

In this section, I begin with a review of long-term trends in New Jersey school funding, based on data from the School Funding Fairness Data System.<sup>27</sup> Next, I provide a summary of findings from a recent national analysis of the costs of achieving common national outcomes, putting New Jersey into context. Finally, I take a longitudinal look at the implementation of SFRA, comparing current spending levels to “adequacy targets” established by the formula. I also explore the extent to which the formula has been sufficiently progressive to achieve more equitable taxation across jurisdictions by their wealth and income.

#### Longitudinal Trends

Over the past 20 years, New Jersey has allocated a larger share of its economic capacity to elementary and secondary schooling than most states. In our reports titled *Is School Funding Fair*,<sup>28</sup> we refer to these measures as “effort” measures. These measures are more relevant than “shares of state revenue” or “share of total state budget” for characterizing effort, because the size of the state budget itself depends on policy choices: the choices to tax and spend on public services, or not. We use two alternative measures of effort, which tend to track together for most states, the exceptions being where natural resources and related fluctuations in value are substantial (Alaska and Wyoming, for example). First, we calculate the share of Gross Domestic Product (at the state level) that is spent in state and local revenue on schools. Second, removing the influence of natural resources, we calculate the share of aggregate personal income that is spent in state and local revenue on schools.

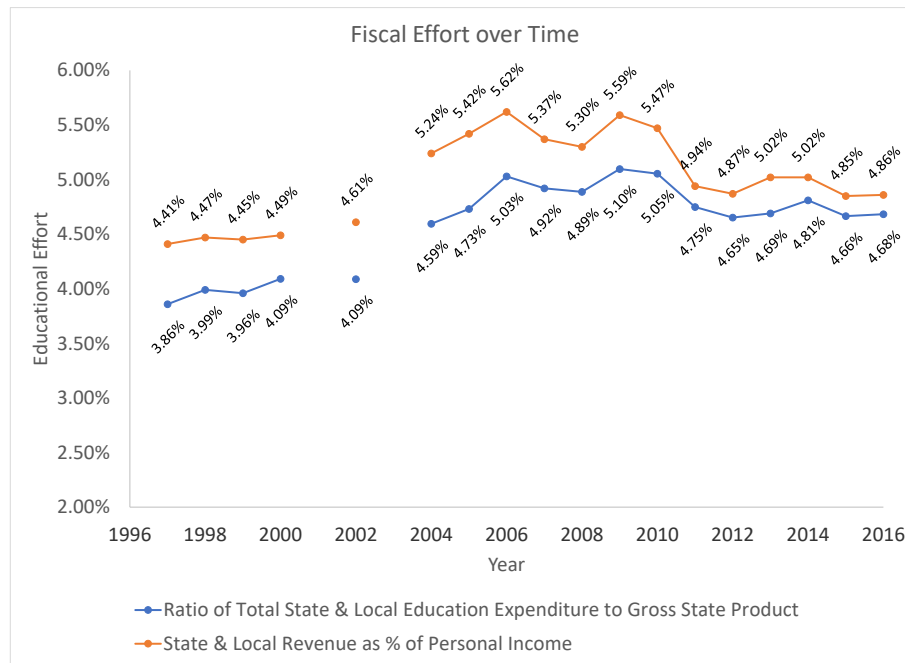
Figure 3 shows that New Jersey reached its highest effort level around 2009 with respect to GDP/State and 2006 with respect to personal income. Since that time, effort has declined, including a sharp decline from 2010 to 2012. While not back to pre-1998 levels (prior to the large increases in school spending to Abbott districts following court ruling), current effort levels are back to early 2000s levels, about halfway between their peak and pre-1998 levels. In 2015, New Jersey ranked 5<sup>th</sup> in the share of aggregate personal income spent on elementary and secondary education.

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<sup>27</sup> Baker, B.D., Srikanth, A., Weber, M.A. (2016). *Rutgers Graduate School of Education/Education Law Center: School Funding Fairness Data System*. Retrieved from: <http://www.schoolfundingfairness.org/data-download>

<sup>28</sup> Cite.

Figure 3



Baker, B.D., Srikanth, A., Weber, M.A. (2016). *Rutgers Graduate School of Education/Education Law Center: School Funding Fairness Data System*. Retrieved from: <http://www.schoolfundingfairness.org/data-download>

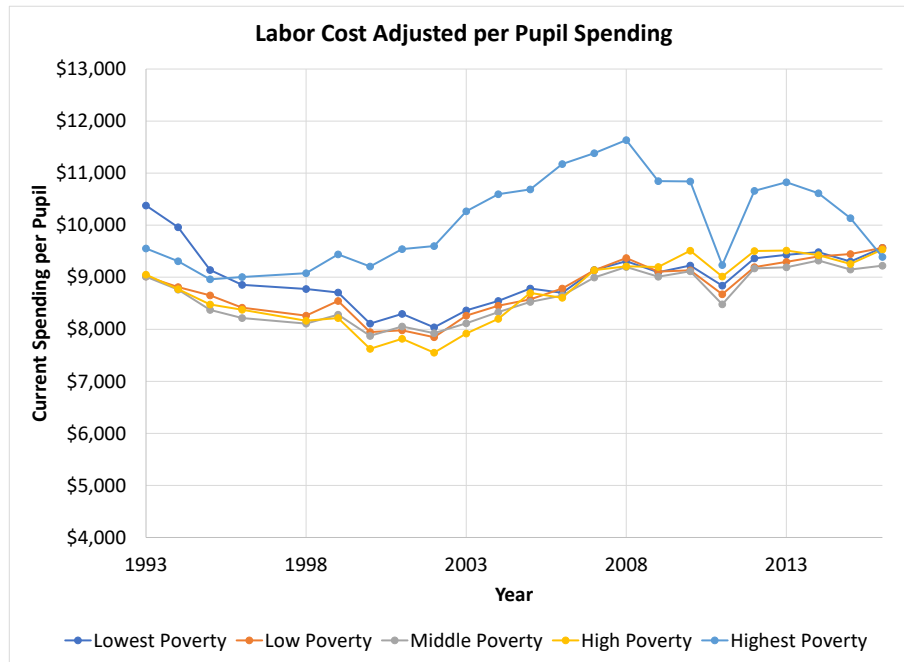
Figure 4 shows the current operating expenditures per pupil for New Jersey school districts, over time, by poverty quintile (using an adjusted census poverty measure to account for regional differences in income levels).<sup>29</sup> Spending levels are adjusted for inflation using the Education Comparable Wage Index.<sup>30</sup> Notably, for most New Jersey school districts, per pupil spending has remained roughly constant and is presently slightly below 1993 levels. For high poverty districts, spending did grow from 1998 to 2008, but has backslid since (with possible data error in 2011). High poverty districts are also, by 2015, at spending levels below what they were 22 years prior when accounting for changes in labor costs.

It is important to realize that the declining expenditures of high poverty districts pre-date recessionary cuts. The dip experienced from 2008 to 2009 and 2010 is largely a function of the phase in of SFRA, which was significantly less progressive, by design, than the litigation driven spending of the prior decade.

<sup>29</sup> Baker, B. D., Taylor, L., Levin, J., Chambers, J., & Blankenship, C. (2013). Adjusted Poverty Measures and the Distribution of Title I Aid: Does Title I Really Make the Rich States Richer?. *Education Finance and Policy*, 8(3), 394-417.

<sup>30</sup> [http://bush.tamu.edu/research/faculty/Taylor\\_CWII/](http://bush.tamu.edu/research/faculty/Taylor_CWII/)

Figure 4



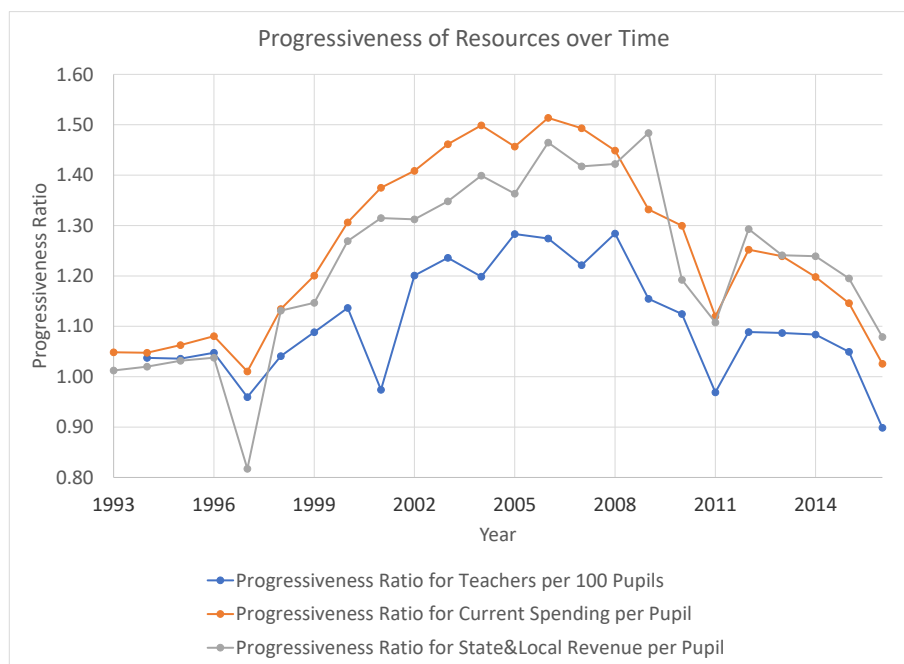
Baker, B.D., Srikanth, A., Weber, M.A. (2016). *Rutgers Graduate School of Education/Education Law Center: School Funding Fairness Data System*. Retrieved from: <http://www.schoolfundingfairness.org/data-download>

Figure 5 summarizes what we refer to as a “progressiveness index” in *Is School Funding Fair?* The progressiveness index is a measure of how well a state drives resources toward high-need/high-poverty districts compared to low-need/low-poverty districts. The index is based on modeled predictions of various resource measures for a high-poverty district and low-poverty district in each state with other characteristics, such as district size and labor costs, held constant. We then take the ratio of the resource measure for the high-poverty district and divide it by the resource measure for the low-poverty district. For example, if the typical high-poverty district is expected to spend \$15,000 per pupil and low-poverty district \$10,000 per pupil in a state, the progressiveness ratio will be 1.5. A progressiveness ratio above 1.0 is “progressive” and below 1.0 is “regressive.”

Consistent with Figure 4, Figure 5 shows that the progressiveness of current spending per pupil, or state and local revenue per pupil, reached its peak around 2006. At that point in time, after the scaling up of funding to Abbott districts, high-poverty districts on average spent 50% more than low-poverty districts making New Jersey among the most progressively funded states in the nation. However, as SFRA was phased in, and then as cuts and freezes were imposed on state aid, progressiveness dropped, largely because affluent suburban districts were able to continue increasing their spending through local property tax increases, despite soft caps on those increases.

The progressiveness of staffing ratios largely tracks with that of revenue and spending, but remains somewhat less progressive throughout. This is to be expected, as staff compensation is by far the largest portion of total spending for school districts.

Figure 5



Baker, B.D., Srikanth, A., Weber, M.A. (2016). *Rutgers Graduate School of Education/Education Law Center: School Funding Fairness Data System*. Retrieved from: <http://www.schoolfundingfairness.org/data-download>

### Teacher Wage Competitiveness

2018 was the year of the teacher uprising in many states.<sup>31</sup> For decades, teacher compensation, when compared to compensation of non-educators holding similar education levels and at the same age, has lagged.<sup>32</sup> Teacher wages have generally been more competitive in New Jersey than in other states. But even in New Jersey the competitiveness of teacher wages has lagged over time.

Figure 6 specifically compares teacher wages to those of non-teachers holding the same degree level, at age 35, working the same number of hours per week and weeks per year (essentially an hourly wage comparison) based on data from the U.S. Census Bureau's American Community Survey. Teacher wages in New Jersey currently sit below 84% of similarly educated, same-age non-teachers, down from about 94% in 2000. While teacher wages (and those of other public

<sup>31</sup> <https://www.npr.org/sections/ed/2018/04/11/600832090/walkouts-and-teacher-pay-how-did-we-get-here>

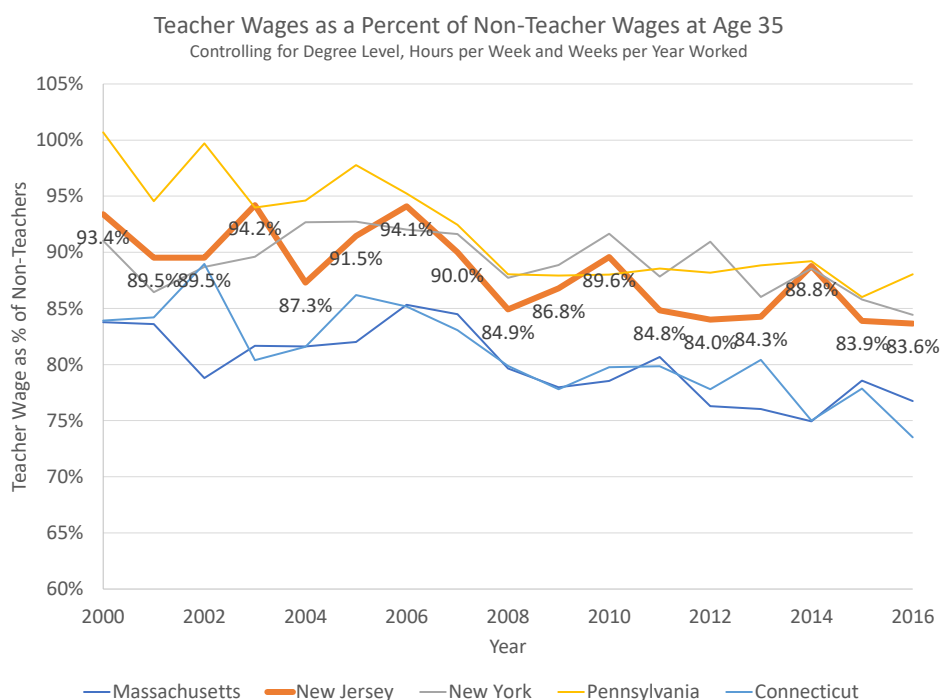
<sup>32</sup> <https://www.epi.org/publication/the-teacher-pay-gap-is-wider-than-ever-teachers-pay-continues-to-fall-further-behind-pay-of-comparable-workers/>



employees) tend not to dip as sharply during recession periods, teacher wages also tend to fall further behind as wages of others rebound.

The significance of this measure is that to maintain a constant quality of entrants to the teaching profession, the state needs to maintain a constant wage competitiveness, or at least counterbalance declining wage competitiveness with other working conditions (smaller classes, lower total student load, improved benefits, or other improvements to work settings). One might expect that the recent decline in wage competitiveness to lead to a reduction in the quality of applicants to teacher preparation programs or other pathways to the teaching profession in New Jersey.

Figure 6



Baker, B.D., Srikanth, A., Weber, M.A. (2016). *Rutgers Graduate School of Education/Education Law Center: School Funding Fairness Data System*. Retrieved from: <http://www.schoolfundingfairness.org/data-download>

### More Adequate than Most –SFRA Compared to Other States’ School Funding Systems

In the summer of 2018, we released a new empirical study using school district level data on every school district in the country, over a 7-year period (2009 to 2015). Those data included standardized outcome measures from the Stanford Education Data Archive, district spending measures from the Census Fiscal Survey, and a variety of school district and student characteristics. The methodology behind the study was the “cost function” method discussed previously in this brief.

Our findings match those of a substantial and growing body of research evidence regarding school funding and student outcomes: money *does* matter. Student outcomes are significantly affected by school spending; in addition, more funding is needed in districts with more disadvantaged students just to reach average outcomes.

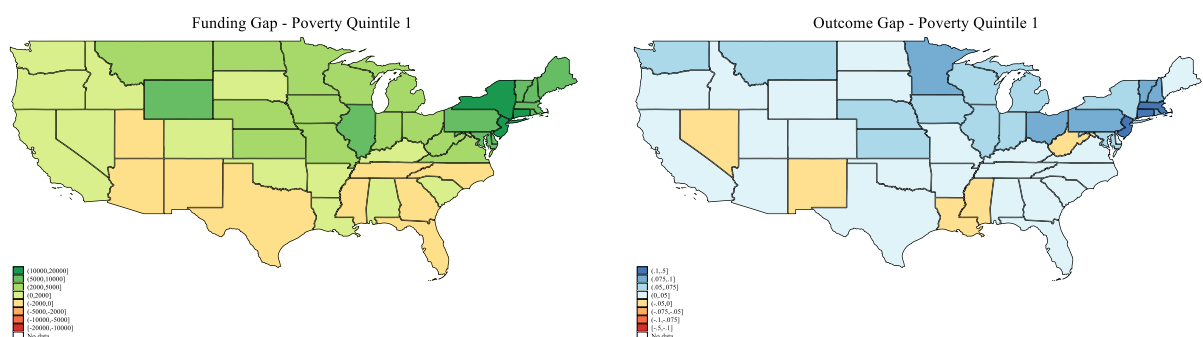
In the second half of our report , we asked this question: based on current data and using standard statistical models, how much would each district in the United States have to spend to achieve average outcomes on standardized tests? For each district in the country, we estimated the predicted per pupil cost of achieving current national average outcomes in math and reading. We then compared current spending levels in each district to those levels predicted to be needed to achieve national average outcomes. In this way, we can compare states to find which provide the resources necessary for affluent, average, and disadvantaged districts to achieve average outcomes.

By definition, many states (about half) currently achieve better than national average tested outcomes in reading and math, and currently spend enough to achieve or exceed those outcomes. The other half of states, however, do not. The following maps break out these findings by poverty quintile within each state.

In many states, the lowest-poverty districts spend enough – because they have the capacity to spend enough, and have made the policy choice to do so – to achieve or exceed national average outcomes. The map on the left side of Figure 7 shows how these most-affluent districts differ between states in their spending and their outcomes. In New Jersey, and other states such as Massachusetts, these low-poverty districts spend far more than enough to exceed national average outcomes; consequently, they far exceed those outcome levels, as shown in the map on the right.

New Jersey’s policy makers should note, however, that in many other states, even the lowest-poverty schools are on the margin, having barely enough – or even not quite enough – to achieve national average outcomes. In states like New Mexico and Mississippi, even these most-affluent districts don’t spend what it takes to achieve national average outcomes; consequently, their test scores, relative to other states, lag behind.

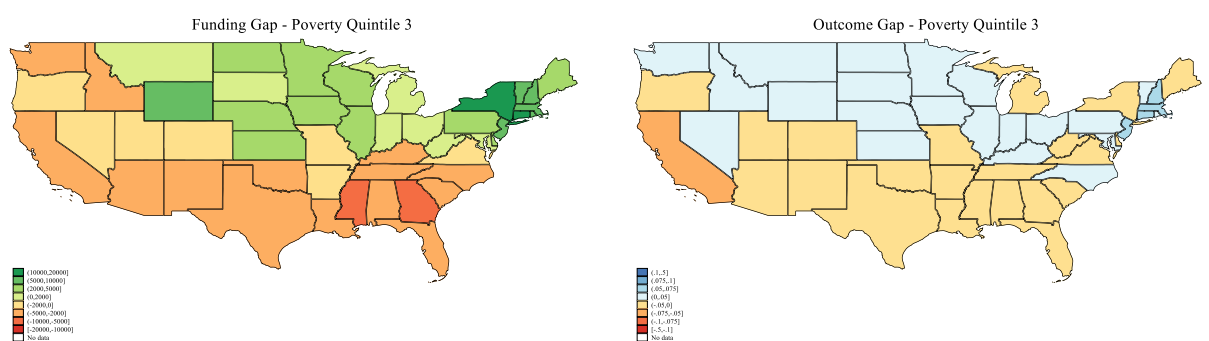
Figure 7



Baker, B.D., Weber, M., Srikanth, A., Atzbi, M., Kim, R. (2018) The Real Shame of the Nation: Causes and Consequences of Interstate Inequity in Public School Investment. Education Law Center of New Jersey & Rutgers GSE.

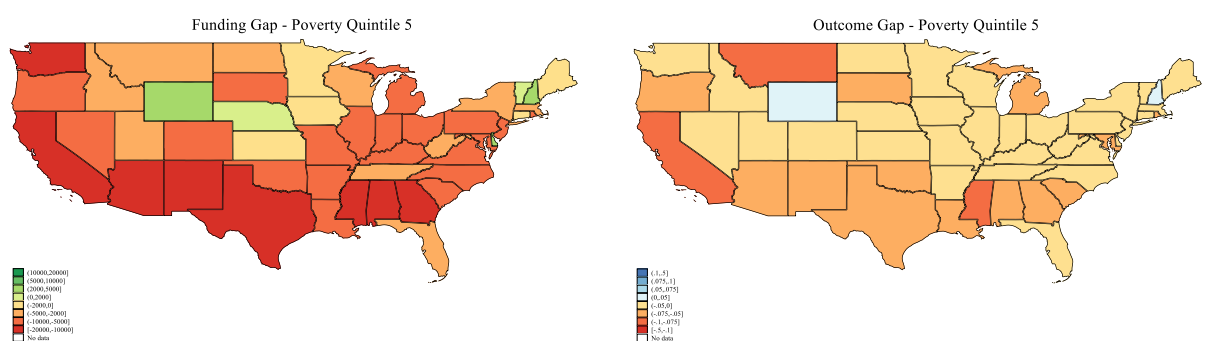
Figure 8 shows the results for the middle quintile of districts in each state by poverty – a “typical” district as determined by economic disadvantage. Again, these districts in New Jersey (and states such as Massachusetts and Connecticut) spend more than average compared to similar districts throughout the nation (left hand map, with darker shades of green showing more spending); consequently, they achieve higher than average outcomes (right hand map, with shades of blue showing higher test scores).

Figure 8



Finally, Figure 9 shows the spending and outcomes for the highest-poverty districts in each state. Very few states have sufficient funding in these districts to achieve national average outcomes, including New Jersey. Nonetheless, New Jersey’s highest poverty districts fall only marginally below national average outcomes.

Figure 9



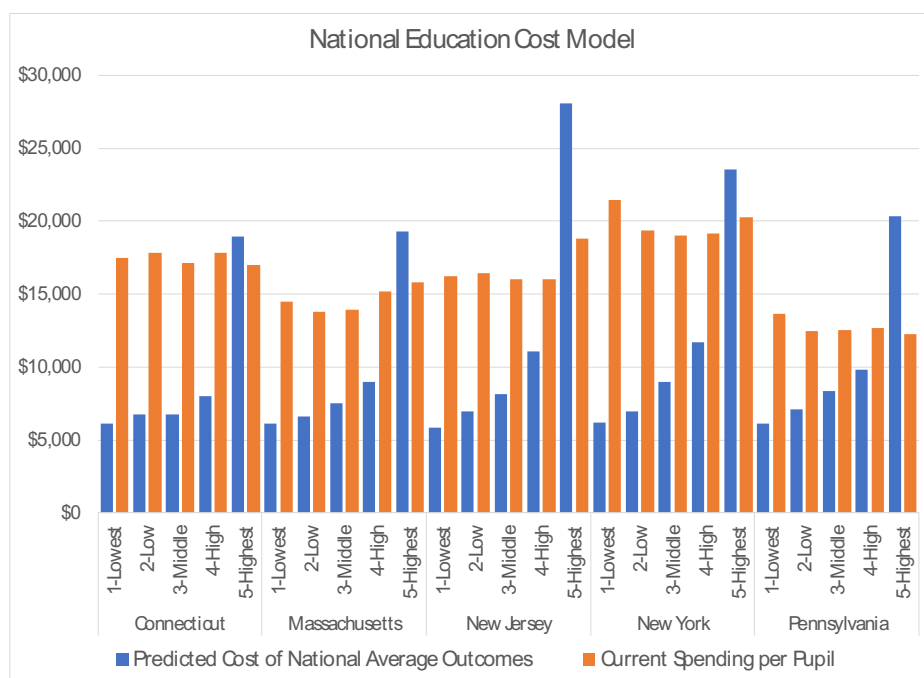
Overall, New Jersey is in a good position with respect to the rest of the nation: the state is able to shoot for much higher than prior year national average outcomes. Notably, when pundits decry the state of American education in international context, our national averages are severely compromised by the underinvestment and underperformance of southern and southwestern state education systems.

Figure 10 provides a regional close up of current spending and per pupil cost targets by poverty quintile. This particular cost model accounts for the high costs associated with concentrated child

poverty in population dense school districts. Unfortunately for New Jersey, the state remains highly segregated and is the highest in average population density, leading to a spike in costs associated with achieving even national average outcomes in the state's highest poverty settings.

These costs spike more, on average, in New Jersey than in New York or Pennsylvania because nearly all of that concentrated poverty coupled with high population density is also in very high cost labor markets (suburban New York City and Philadelphia), whereas poverty is more geographically dispersed in the much larger states of New York and Pennsylvania. Put simply: New Jersey's school segregation, coupled with its population density, is raising the costs of providing its students with an education that would allow all students to achieve average outcomes.

Figure 10



Baker, B.D., Weber, M., Srikanth, A., Atzbi, M., Kim, R. (2018) The Real Shame of the Nation: Causes and Consequences of Interstate Inequity in Public School Investment. Education Law Center of New Jersey & Rutgers GSE.

## The Current State of SFRA

### SFRA: A Decade of Underfunding

SFRA was adopted in 2009; almost immediately, however, the recession took its toll on state revenues and, in turn, the financing of major state programs and services. In 2011, a 5% cut in state aid to schools was imposed, but reinstated by the courts (Abbott XXI, 206 N.J. 332 (N.J. (May 2011))). Following the recession and during the recovery, state aid has remained largely frozen at prior levels, and insensitive to enrollment change. The result is that SFRA, as designed, has never been completely implemented or fully funded.

In this section, I evaluate the consequences of that underfunding by comparing each district's "*Budgetary Cost per Pupil*" (Indicator 1) from the New Jersey Taxpayer's Guide to Education Spending<sup>33</sup>. While not perfectly aligned with district "adequacy budgets," this figure is more or less a current operating expenditure figure (excluding capital expenses, pensions and transportation). That is, the expense categories included in the current spending figure should roughly equate to the "adequacy budgets" calculated through SFRA, if in fact those expenditures are "adequate."

Unlike the yearly analyses of New Jersey school aid distributions often found in the media, my goal here is not to produce lists of "winning" and "losing" districts; rather, I am evaluating how far the state as a whole has strayed from the original goals of SFRA. Recall that the New Jersey courts have accepted that SFRA meets the constitutional standard and has set the precedent that shortfalls (at least for plaintiff districts) or cuts against those targets may be unconstitutional.

I compare current spending per pupil to two versions of constitutional adequacy targets, both derived from "Information Only notice aid data," obtained by request from NJDOE. These data include all of the underlying elements and calculations required to simulate SFRA. First, I use the state's own calculation of Adequacy Budget divided by resident enrollment pupils, focused specifically on K-12 students. Next, I run my own simulation of the parameters of SFRA, using Taylor's Comparable Wage Index,<sup>34</sup> as an annual inflation factor (and forecasting 2016-2018 from prior year average inflation). This index reflects an important reality often missed in school funding analyses: competitive wages have grown faster over time than consumer products and services.

I note here that this first analysis sets aside the possibility that 10 years after the introduction of SFRA, there are higher outcome standards (due to changes in the state's educational standards and standardized tests), demographics have shifted, and there are additional demands on school districts (such as anti-bullying mandates, statutory changes in teacher evaluations, new physical

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<sup>33</sup> Formerly the "Comparative Spending Guide."

<sup>34</sup> [http://bush.tamu.edu/research/faculty/Taylor\\_CWII/](http://bush.tamu.edu/research/faculty/Taylor_CWII/)

education requirements, and so on). There is a very real possibility that SFRA adequacy calculations no longer meet the state's constitutional standard. Nonetheless, it is still instructive to compare the actual spending of school districts to their SFRA targets.

Figure 11 shows the condition of SFRA at three points since implementation: 2010, 2014 and 2018. In each case, I'm comparing prior year current spending to current year adequacy targets. The left-hand panels show my simulated adequacy targets in blue triangles; the targets as calculated by NJDOE in orange diamonds; and current, actual spending per pupil green circles. The size of the markers indicates district enrollment size. The horizontal axis is the share of children from low income families. The right-hand panel shows the difference (gap) between current spending and the simulated target. Again, marker size indicates enrollment size. Districts with gaps greater than \$5,000 are marked with a red diamond.

In 2010, we can see that, for the most part, green circles are close to and generally aligned with their adequacy targets (the blue triangles and orange diamonds). A group of higher poverty districts fall below their adequacy targets and some smaller, generally low-poverty districts rise above their adequacy targets. The right-hand panel shows that in 2010, a handful of districts fell more than \$5,000 per pupil below their adequacy targets. In addition, a significant number of districts in the middle ranges of low-income concentrations fell over \$1,000 per pupil short of their adequacy targets.

There are two reasons why districts fall below their adequacy targets.

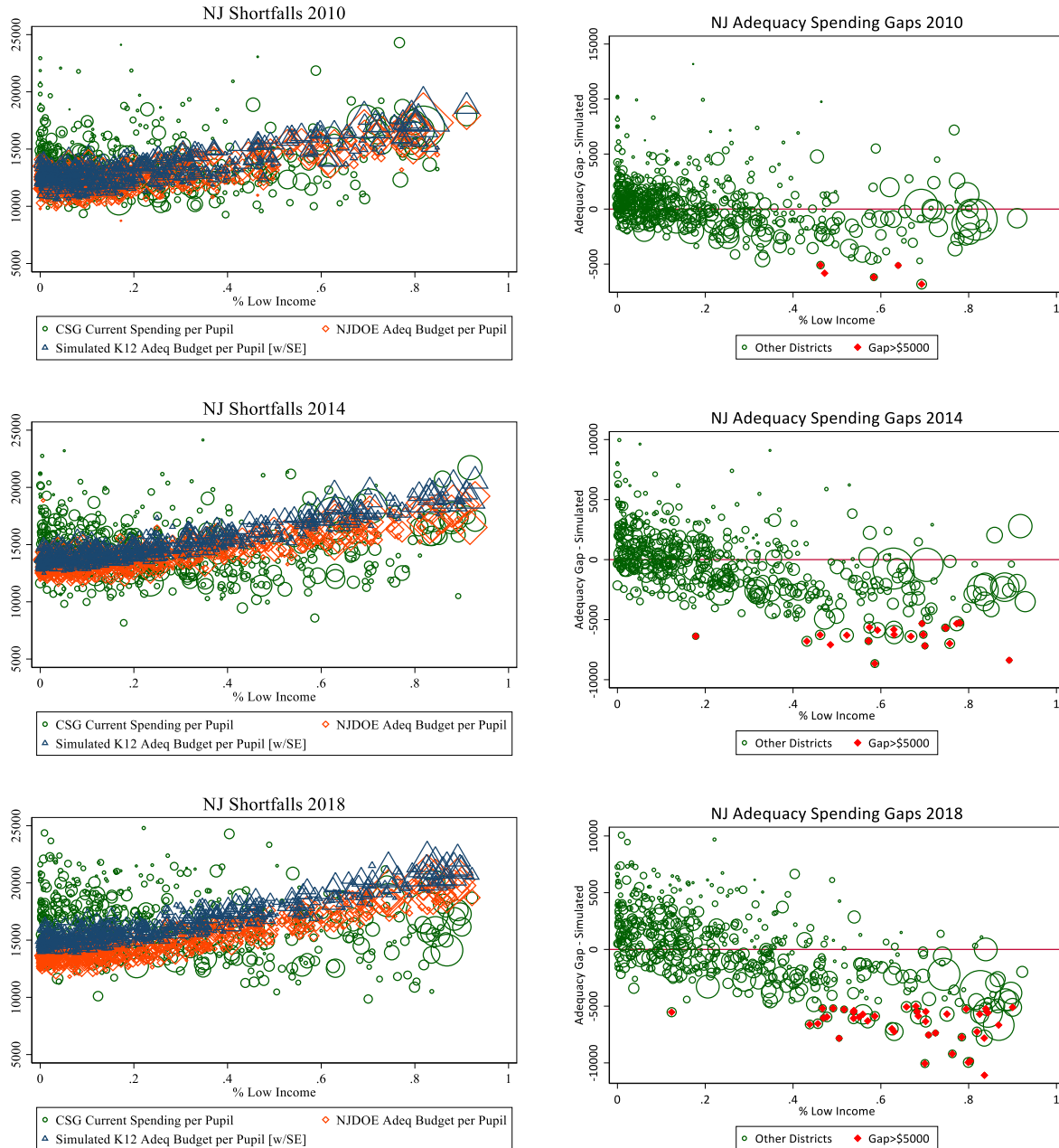
- First, many are not yet receiving the state aid that would be required to make them whole.
- Second, the required local effort – the local contribution from local property taxes – within SFRA is, in fact, not actually required, and a handful of districts do not put up the full required local contribution.

Under the prior Abbott funding, the state was fully obligated to ensure that schools in Abbott districts were able to offer specific programs and services. This requirement was without regard for local contribution. Consequently, many Abbott districts including Jersey City did not raise what would become the local effort required under SFRA. Complicating matters, in 2010 the legislature imposed a 2% cap on increases to local property taxes, making it implausible for many districts to increase their property taxes to even achieve their local effort requirement.<sup>35</sup>

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<sup>35</sup> [https://www.njleg.state.nj.us/2010/Bills/PL10/44\\_\\_PDF](https://www.njleg.state.nj.us/2010/Bills/PL10/44__PDF)

Figure 11

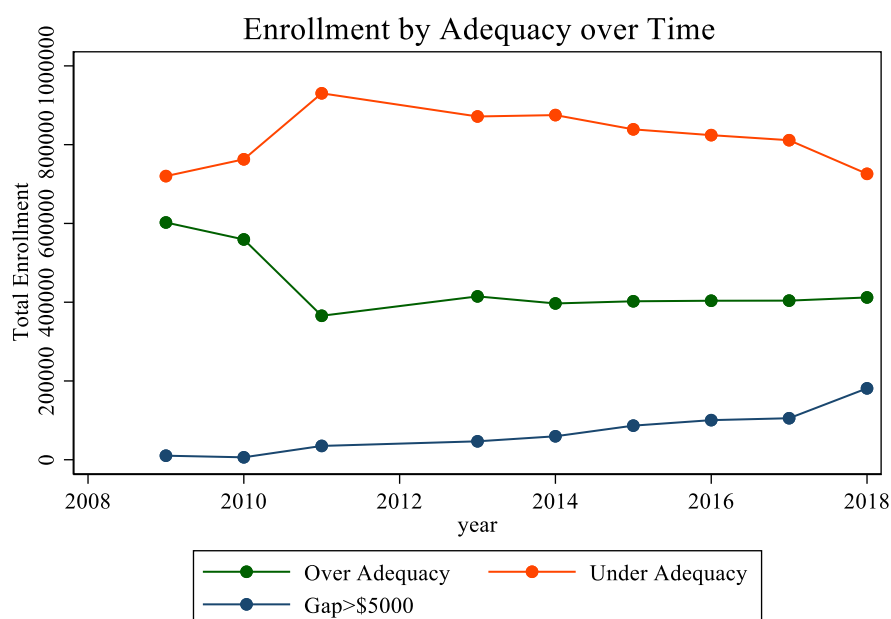


The middle and bottom panels of Figure 11 show that, over the next 8 years, more districts fell below their adequacy targets, and those already under fell even further behind. Disturbingly, those gaps grew disproportionately for districts serving larger shares of low-income children. At the same time, districts with smaller shares of low-income children rose further and further above their adequacy targets, exacerbating inequality across the state. Several high-poverty, large districts now fall well below their calculated or simulated adequacy targets; in addition, many mid-sized, high-poverty districts now fall more than \$5,000 per pupil below their adequacy targets.

The more these gaps grow, the more expensive they are to remedy. Worse, these adequacy gaps are calculated against targets which are based on the cost of achieving outcome levels that were relevant in 2008 (and prior). Again: given the state's new, higher outcome standards and the new mandates to districts from the Legislature, it is likely even the targets shown here may be inadequate. This would mean even more districts are receiving far less state aid than needed to achieve the objectives the state has set.

Figure 12 (which continues to use my simulated adequacy targets) shows the numbers of children attending districts that are a) below adequacy and b) more than \$5,000 per pupil below adequacy. About 800,000 children attend districts below adequacy and nearly 200,000 children attend districts with adequacy gaps greater than \$5,000 per pupil. These gaps alone require a minimum of \$1 billion to close.

Figure 12



### Funding Gaps Translate to Classroom Resource Gaps

The next several figures make use of our forthcoming *New Jersey School Data Panel*, which will be available later this year. This panel includes data from 2009 to 2018, combining data from NJDOE school enrollment files, School Performance and Assessment Reports, and School Report Cards database.<sup>36</sup> We also construct several indicators using statewide, individual level, Fall Staffing Reports obtained by request from NJDOE.<sup>37</sup> One specific indicator we construct is a statewide measure of the total certified staffing salaries per pupil for each school. At the time of this report, our data on this measure were compiled only through 2017. This measure serves as a proxy for

<sup>36</sup> [https://www.njleg.state.nj.us/2010/Bills/PL10/44\\_.PDF](https://www.njleg.state.nj.us/2010/Bills/PL10/44_.PDF)

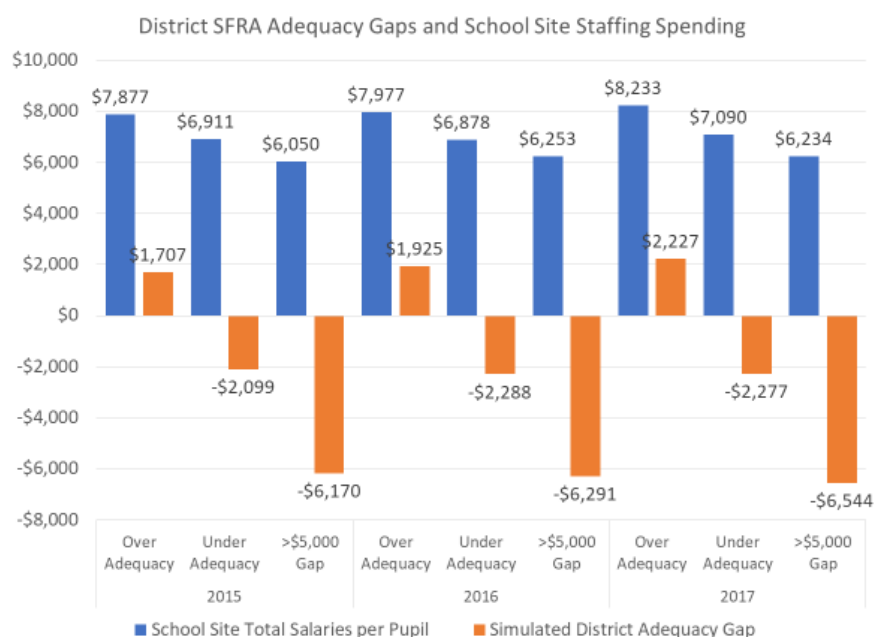
<sup>37</sup> <https://www.state.nj.us/education/opra/index.html>



school site spending per pupil, as the majority of school site spending is used for certified staff, specifically teacher, salaries.

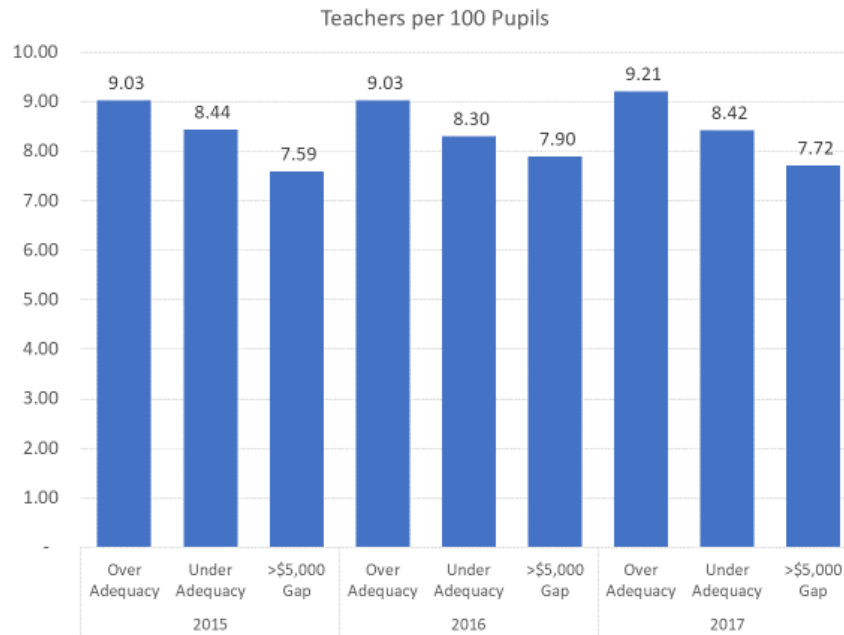
Figure 13 shows the school site spending consequences of adequacy shortfalls. Again, the districts with the greatest adequacy shortfalls are generally those with the greatest student needs; that is, districts that need to be able to spend more per pupil at the school level than those serving lower-need populations. Figure 13, however, shows that school site per pupil spending on certified salaries is systematically *lower* in districts facing larger adequacy gaps. The entire adequacy gap does not translate directly to the school spending shortfall, because the adequacy targets are higher for higher-need districts, but school spending per pupil is still about \$2,000 less in districts with large adequacy gaps than in districts spending over adequacy. The consequence of the adequacy gaps, therefore, is that the intended progressive aid formula is still resulting in regressive school site per pupil spending.

Figure 13



Data Source: Baker, B.D., Weber, M. (2018) New Jersey School Data Panel. Available on Request.

Figure 14



Data Source: Baker, B.D., Weber, M. (2018) New Jersey School Data Panel. Available on Request.

Figure 14 shows the counts of full-time equivalent (FTE) teachers per 100 pupils by adequacy gap. As with total certified staffing spending per pupil, these patterns are regressive: districts whose funding is below adequacy have fewer teachers per 100 students than districts funded above adequacy. Again, districts serving higher need student populations tend to have much larger adequacy gaps. Those districts also have the fewest certified staff per pupil, which translates into such tangible school site factors as class sizes and case-loads for certified support staff. Despite the progressive intent of SFRA, staffing ratios appear regressive as a function of adequacy gaps.

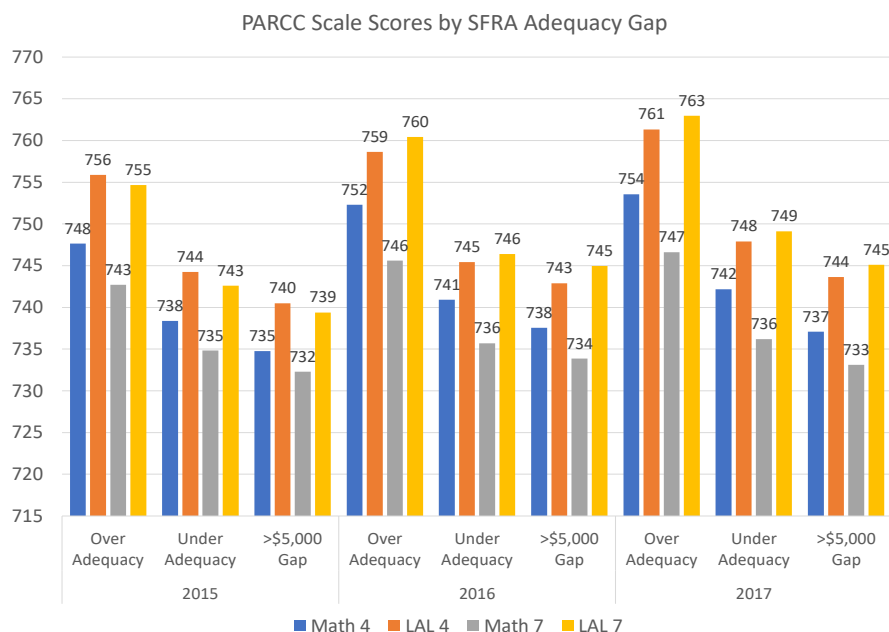
#### Funding Gaps are Associated with Outcome Gaps

Figure 13 and Figure 14 summarize average student outcomes by adequacy group. Figure 13 summarizes average PARCC scores for the past three years, showing lower average scores in schools in districts with larger adequacy gaps. Admittedly, this relationship is, to an extent, circular: districts serving higher-need populations tend to have lower scores, and also tend to have larger adequacy gaps. But therein lies the point. The goal of a progressive school finance formula is to leverage additional resources in order to assist in closing the funding gaps – and therefore, the outcome gaps – between high-need and low-need districts. National data shows SFRA has helped to shrink these gaps – but state data shows New Jersey’s school funding system is still falling short of what is needed to equalize educational opportunity.

The previous graphs showed that the adequacy gaps to full funding of SFRA are largest in districts serving higher need populations, AND that there are school level resource consequences of those adequacy shortfalls. School level resources remain regressively distributed in New Jersey

– and, therefore, so do student outcomes. Again: New Jersey does better than in many other states in funding progressiveness and outcomes.<sup>38</sup> But the state still has not committed the resources necessary to fully close these gaps.

Figure 15

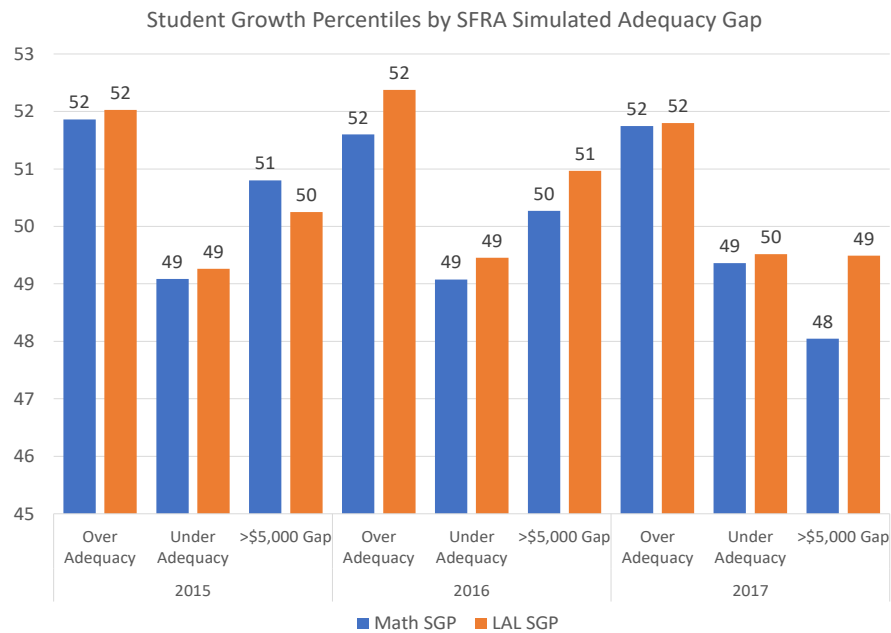


Data Source: Baker, B.D., Weber, M. (2018) New Jersey School Data Panel. Available on Request.

<sup>38</sup> <https://schoolfinance101.wordpress.com/2014/06/03/stronger-than-the-scorn-how-do-nj-schools-really-stack-up/>

Figure 16 shows the differences in student growth percentiles (SGPs) by adequacy gap group. Growth percentiles are a calculation of the relative gain (around a median of 50) in language arts and math assessment scores from one year to the next. Because SGPs take into account a student's previous test scores, they are measures of how test scores have changed over time, rather than measures of absolute proficiency. Here, there is less clear distinction between districts below adequacy and those well below adequacy. In 2015 and 2016, districts well below adequacy (greater than \$5,000 below) saw growth similar to those generally below adequacy. By 2017, however, growth was similar across these two groups. In contrast, districts above adequacy (which are those serving more advantaged populations) saw greater growth in test scores in each year.

Figure 16



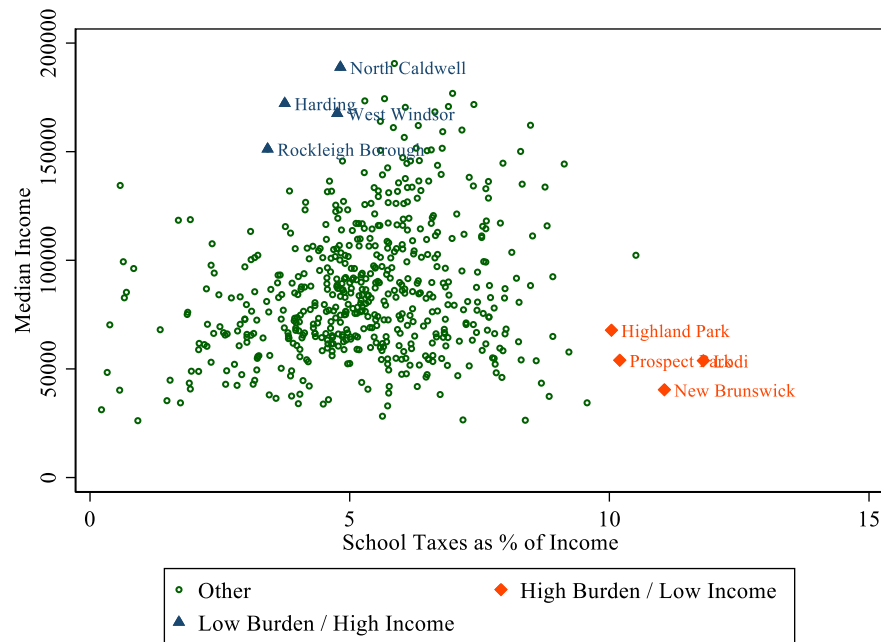
Data Source: Baker, B.D., Weber, M. (2018) New Jersey School Data Panel. Available on Request.

### Progressive... But Not Quite Progressive Enough

Recall that foundation aid formulas have two major goals. The first is to raise all districts to the level of funding that would be needed to achieve desired outcome levels. That's the goal I have thus far emphasized. But the second is that these spending levels should be attainable with equitable tax effort. In many state school finance systems, tax effort is measured merely in terms of nominal local property tax rate for schools. In New Jersey, the "local fair share" determination includes consideration of both local taxable property wealth and income. As such, a reasonable way to assess effort is to consider property taxes paid as a share of income. A progressive system would be one in which the share of income paid in property taxes would be higher in higher-income communities. A flat system would at least have equal shares of income paid in property taxes.

Figure 15 shows the relationship between the share of income paid in property taxes and median income for New Jersey property taxing jurisdictions. In general, there's little or no relationship between the two. Property taxes are certainly not progressive, nor are they flat – but neither are they clearly regressive. They do, however vary widely, with some high-income towns paying less than 5% of their income in property taxes, and some much lower income towns paying more than double the share of their income in property taxes. It should be noted that there are still many low-income jurisdictions with relatively low property tax effort, including some Abbott districts like Camden.

Figure 17



[https://www.nj.com/data/2018/09/school\\_taxes\\_are\\_hammering\\_people\\_in\\_these\\_23\\_nj\\_t.html](https://www.nj.com/data/2018/09/school_taxes_are_hammering_people_in_these_23_nj_t.html)

### Short and Long-Term Policy Recommendations

Here, I provide guidance on both the shorter-term and longer-term roads ahead for improving school funding in New Jersey. That process should start in the short term with fully funding SFRA and making the most obvious corrections to the formula for improving taxpayer and student funding equity.

SFRA, however, is now 10 years old; it is based on cost analyses that considered old standards and outcomes (these were old even at the time of SFRA's inception), conditions, and technologies of educating students in New Jersey. The next 3-year status reports on SFRA should consider the use of new, improved, and more empirically rigorous methods for recalibrating SFRA to meet updated outcome goals. A handful of additional issues should also be considered, including how to best achieve equitable funding for students attending charter schools, how to bring early childhood education programs "onto the formula" (rather than operating as a separate funding stream) and finally, how to ensure fully publicly financed, accessible and equitable community college programs.

### Making SFRA Whole in its Current Form

In the short term, state legislators must advance tax policies to generate sufficient revenue in order to fully fund SFRA in its current form, using its current parameters and determination of adequacy budgets. A few adjustments are necessary to make all districts whole, improve taxpayer and student equity, and ensure that funding at least keeps pace with the increased costs of maintaining a teaching corps of comparable quality. Those fixes include:

- Using a competitive wage index approach to set inflation targets for SFRA calculations. This can be done by using publicly accessible data on the wages of non-teachers (at similar age and degree level) in New Jersey, estimating the average annual growth in those wages and projecting future years. This method is consistent with the method used for determining geographic variation outlined below.
- Adopting a hard minimum local fair share requirement and phasing in local tax increases in districts which are currently below their adequacy targets and do not presently levy the minimum local fair share. This will ensure that all districts are making equivalent efforts to fund their schools, leading to a more equitable distribution of state aid. The phase in time frame toward the hard minimum should not exceed 3 years.
- Replacing the current Geographic Cost Adjustment (GCA) factor, which is applied at the county level, with a similarly determined adjustment (Taylor's ECWI) applied at the labor market level. This change will remove distortions along county lines within the same labor market, thus better equalizing the differences school districts face in recruiting and retaining workers.
- Returning special education funding to a system based on tiers of student need, with appropriately differentiated funding based on actual distributions of children with disabilities. This change should be combined with providing 100% of special education funding through the equalization formula.

This final change is more complex than the first three, but has the potential to more substantially improve both taxpayer and student equity. The special education formula as it presently operates dramatically overfunds needs in high-wealth districts, many of which have low shares of children with disabilities. As such, the census-based aspect of the formula overfunds the student needs of these districts by setting a statewide average need target, and then overfunds the capacity by allocating aid – even where local districts could cover the costs at relatively small increase in local taxes – in districts where tax effort remains low.

#### Recalibrating SFRA with Hybrid Cost Analysis

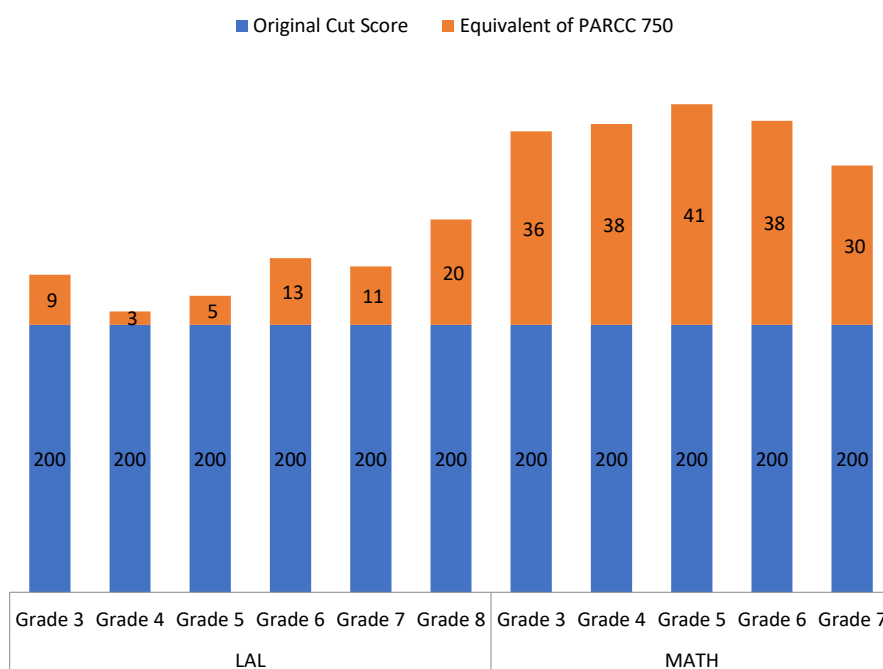
Concurrent with short term efforts to make SFRA whole, the state should begin the process of procuring high quality, empirical analyses to guide the recalibration of SFRA. First and foremost, the outcome goals to which students and schools are expected to strive toward today and in the near future are substantively higher and broader than those which existed at the time of the Augenblick study in the early 2000s.

The recent shift from the state's own NJASK assessments to the national consortium PARCC assessments provides one example of how outcome expectations have been raised. Figure 16 is based on school level data from the transition years from NJASK to PARCC. Under NJASK, a cut score of 200 (on a scale that effectively ranged from 100 to 300) was set for defining student proficiency. On a totally different scale, a cut score of 750 was set for PARCC, based on a crosswalking of PARCC scores to SAT scores, in which it was found that achieving a 750 on

PARCC was associated with achieving an 1150 combined score on the SAT – a score that is often cited as indicating “college readiness.” While the state recently announced it was replacing the PARCC with another assessment, all indications are that these new tests will be just as rigorous, if not more so, than PARCC was.

Figure 18 uses a similar method to ask what NJASK score is associated with a PARCC score of 750 on each grade and subject area assessment. In math, PARCC raises the bar substantially – where in Grade 5 a student would have had to achieve a score of about 241 on NJASK to be likely to achieve a score of 750 on PARCC. The adoption of PARCC and the setting of a cut score of 750 for proficiency is roughly the same as raising the proficiency bar on NJASK from 200 to 241 for grade 5 math.

Figure 18



Put bluntly: empirical analysis shows that achieving higher outcomes costs more than achieving lower outcomes, all else being equal. These are substantive increases in the desired outcomes of New Jersey public schools, and they should be accompanied by commensurate increases in adequacy budgets. Even if – and it’s a big if – adequacy budgets are sufficient to achieve the lower NJASK standards, they are almost certainly insufficient to achieve these new, higher standards. New cost estimates are required to better understand a) the average costs of achieving the new standards and b) whether and to what extent these higher standards increase the costs of providing equal opportunity for children in higher-need settings.



The most valid cost estimation method for estimating how changes in outcome standards affect costs, including cost variation across children and settings, is a cost modeling approach. But, as noted earlier in this brief, I and my colleagues suggest that cost modeling be coupled with a deeper exploration of the resource allocation strategies and relative efficiency of New Jersey school districts. Such analyses can provide useful additional guidance in reforming SFRA.

These analyses will also assist in understanding the influence of the state's changing demography on the costs of achieving these new and higher outcomes, and on the effects of expanded choice programs, especially in urban settings.

A thorough recalibration must involve a thorough evaluation of need factors and their measurement. That is, what factors or measures of individual students and of student populations are most predictive of difficulties in improving student outcomes that might be addressed by resource intensive specific interventions and/or schoolwide strategies. The currently used measure of low income concentration – shares of children qualifying for subsidized lunch – is less precise now that schools are able to declare “community eligibility.”<sup>39</sup> Other measures, such as language proficiency status, might be measured more precisely using the “access for ELLs” assessment.<sup>40</sup>

Charter schooling was in its infancy in New Jersey at the time of the original Augenblick study; and yet, as I discuss below, the growth of charters has profound fiscal implications for many school districts.

### Integrating Pre-K into SFRA

In response to the 1998 Abbott decisions, New Jersey has developed among the most robust early childhood programs in the nation, using public financing for both public district provided programs and for qualified private providers. However, the program – as good as it is – still falls short of achieving K-12 funding adequacy standards. A core element of a high-quality preschool program is the provision of sufficient funding to pay competitive wages for education professionals. Yet early childhood educators in New Jersey remain undercompensated, second-class citizens of the education sector. It is my view that pre-K funding should be embedded within the SFRA formula, with per pupil adequacy targets for pre-K the same as for K-12. In this way, compensation for pre-K teachers in either private or public-school settings would be aligned with those of all other teachers, and equally competitive with non-educators. Only then will we have the capacity to recruit and retain the quality of teacher workforce that is needed for providing equitably distributed, publicly accessible, high-quality Pre-k programs to all New Jersey children.

### Considering the role of charter schools

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<sup>39</sup> <https://www.fns.usda.gov/school-meals/community-eligibility-provision>

<sup>40</sup> <https://wida.wisc.edu/assess/access>

At the time of the original cost analyses used for guiding SFRA, charter schools were in their early years in New Jersey; no district had a sizeable share of resident children attending charter schools. Now, Newark has approximately 30% of children enrolled in charter schools and several other jurisdictions have significant shares. Charter schooling has led to an uneven sorting of children by their educational needs between public school districts and charter operators serving common geographic spaces. Descriptive research has shown that, year after year, charters enroll fewer student proportionally who have learning disabilities, and fewer students who are Limited English proficient, than their host districts.<sup>41</sup>

Charter schooling has also increased the expenses associated with transporting children to their schools of choice within common geographic spaces. And charter schooling has led to redundant administrative structures and costs, which can induce inefficiencies that lead to higher school district spending.<sup>42</sup>

Charter schooling has also changed the composition and compensation of the teacher workforce, in some cases paying younger teachers more than their peers in host district schools for working more hours and days per year.<sup>43</sup> At the same time, most charter schools have kept staffing costs down by hiring and retaining only very young and inexperienced staffs.<sup>44</sup> Integrating charter schools into a thorough statewide cost analysis may reveal the influence of these shifts on costs and efficiency, and provide guidance for equitably financing charter schools, either through the current pass-through financing model (charters as fiscal dependents of districts) or by treating and financing charters as fiscally independent.

### Considering SFRA for Community Colleges

In the Spring of 2018, Governor Phil Murphy proposed that the state provide free access to community colleges.<sup>45</sup> The broad framework of Murphy's "free college" plan is to provide \$45 million in direct grant aid to students for tuition subsidies, and \$5 million to community colleges to support increased demand resulting from those subsidies. However, unlike K-12 funding policy,

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<sup>41</sup> Weber, M. A., & Rubin, J. S. (2018). New Jersey charter schools: A data-driven view - 2018 update, part I. Daniel Tanner Foundation. Retrieved from <https://rucore.libraries.rutgers.edu/rutgers-lib/56004/>

<sup>42</sup> Baker, B. D. (2016). Exploring the consequences of charter school expansion in U.S. cities. Washington, D.C.: Economic Policy Institute. Retrieved from <http://www.epi.org/publication/exploring-the-consequences-of-charter-school-expansion-in-u-s-cities/>

<sup>43</sup> Weber, M. A., & Baker, B. D. (2017). NPEC review: "School district reform in Newark" (National Bureau of Economic Research, October 2017) and "Impact of the Newark education reforms (Center for Education Policy Research, Harvard University, September, 2017). Boulder, CO: National Education Policy Center. Retrieved from <http://nepc.colorado.edu/thinktank/review-newark-reform>

<sup>44</sup> Weber, M. A. (2016). New Jersey charter schools: A data-driven view, part II – finances and staffing. (New Jersey charter schools: A data-driven view). Daniel Tanner Foundation. Retrieved from <http://www.saveourschoolsnj.org/save/corefiles/wp-content/uploads/2016/07/NJ-Charter-School-Report-Part2.pdf>

<sup>45</sup> [https://www.nj.com/politics/index.ssf/2018/04/murphy\\_free\\_community\\_college.html](https://www.nj.com/politics/index.ssf/2018/04/murphy_free_community_college.html)

these figures are not in any way tied to the costs of providing sufficient quality community college programs to all those who might wish to access those programs.

A forthcoming book chapter by Baker, Kolbe and Levin compares community college per pupil spending across states with K-12 per pupil spending. Presumably, per pupil costs in community colleges would mirror those of a state's secondary schools. It is unlikely that per pupil costs of operating high-quality community colleges would be substantially lower than K-12 systems. Community college expenditures may not include food service, transportation and other auxiliary services common to K-12 systems, leading to marginally lower per pupil spending. However, arguably, community college expenditures should include these services if the goal is to ensure that students can get to school, and are sufficiently well fed to succeed in academic coursework. Recent research suggests food and housing insecurity among community college students is far more widespread than previously thought.<sup>46</sup> Because many independent adult students may also need a roof over their head, in close proximity to school, community college expenditures might also include housing.<sup>47</sup>

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<sup>46</sup> Goldrick-Rab, S. (2016). *Paying the price: College costs, financial aid, and the betrayal of the American dream*. University of Chicago Press.

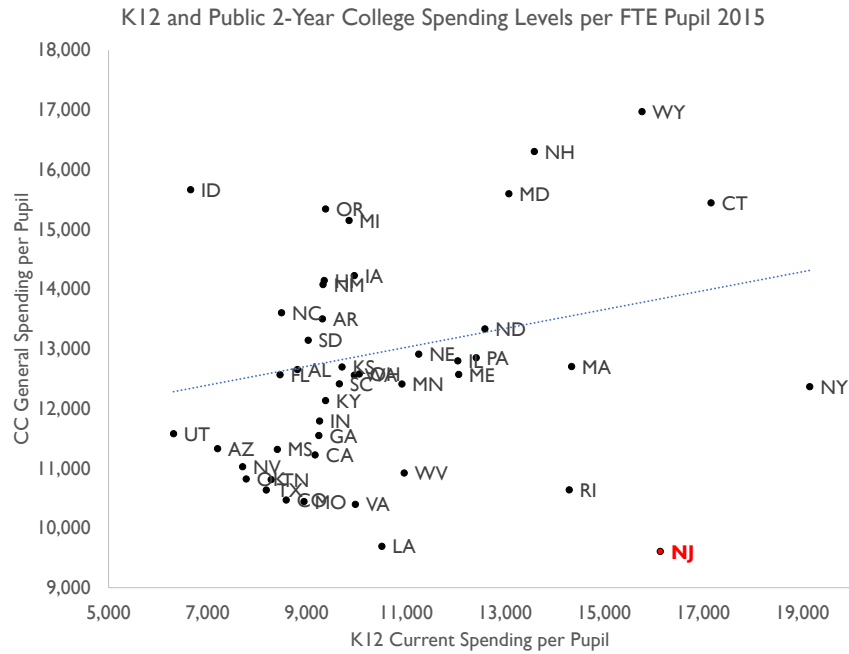
<sup>47</sup> Baker, B.D., Levin, J. (2018) *Estimating the Real Cost of Community College*. Century Foundation.  
<https://tcf.org/content/report/estimating-real-cost-community-college/>

Figure 19 shows that in New Jersey, community college per pupil general spending is substantially lower than K-12 spending per pupil. In contrast to K-12 spending, New Jersey's community college spending is among the lowest of all states (according to data from the *Delta Cost Project* compilation of fiscal data from the Integrated Postsecondary Education Data System (IPEDS)). Kolbe and Baker (2018) find that community colleges in higher-income New Jersey counties tend to spend more per pupil on instruction than community colleges in lower-income counties, which likely serve a needier student population.<sup>48</sup> But the pattern is hardly consistent. Instructional resources are highly inequitable and somewhat regressive across the state's community colleges, resulting from lack of a systematic, adequacy-oriented, need-based funding formula like SFRA.

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<sup>48</sup> Kolbe, T., & Baker, B. D. (2018). Fiscal Equity and America's Community Colleges. *The Journal of Higher Education*, 1-39.

Figure 19



Kolbe, T., Baker, B., Levin, J. (in press) Estimating the Costs of U.S. Public Two-Year Colleges: Evidence from Elementary and Secondary Education. In King-Rice, J. & Roellke, C. (2019)

Both the adequacy of funding and the equity with which resources are distributed across community colleges must be addressed in order to achieve more equitable and adequate student outcomes across community colleges, including improving persistence, completion and successful transfer rates of low-income and first-generation students. If K-12 equity and adequacy principles can be extended downward to address pre-school programs, then they can also be extended upward to address access to higher education.

## Conclusions

New Jersey is a wealthy and highly-educated state. In many ways, when it comes to elementary and secondary education – as well as early childhood education – New Jersey is already a national model in terms of equity and overall quality.

But even New Jersey can do better. The state's achievement gaps between poor and non-poor children remain average, when adjusted for the size of the state's income gap,<sup>49</sup> even though the state did significantly improve outcomes of lower-performing students during the Abbott decades.<sup>50</sup>

Within the boundaries of public financing of its education system, New Jersey should lead the way in the provision of a robust, comprehensive and high-quality Pre-K through college (PK-14) system, under a single coherent model policy – SFRA 2.0 PK-14. New Jersey's students deserve a statewide school finance formula that ensures access to high-quality programs staffed by competitively compensated and highly qualified education professionals. Adequately funded education should be available to all 3- and 4- year-olds, and should ensure that 14 years later every student has equal access to quality higher education programs and the supports they need to succeed in those programs.

Finally: income inequality, racial and economic segregation remain significant barriers to reducing inequality of student outcomes in New Jersey. The state has many districts that are racially and economically isolated, and the negative effects of this isolation are concentrated due to the state's population density. New Jersey pays a significant price for maintaining its racially segregated districts because this segregation raises the costs of providing equal educational opportunity for all students.

These costly barriers imposed by segregation cannot be overcome through targeted school spending alone. Additional efforts must also include attempts to disrupt the extent of link between housing segregation and school segregation. None of these efforts, however, will be successful unless and until New Jersey improves its school funding system. A thorough revision of SFRA is the necessary first step for the state to both ameliorate segregation and provide all of its students with the education they deserve.

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<sup>49</sup> <https://schoolfinance101.wordpress.com/2014/06/03/stronger-than-the-scorn-how-do-nj-schools-really-stack-up/>

<sup>50</sup> Hanushek, E. A., Peterson, P. E., & Woessmann, L. (2012). Is the US catching up: international and state trends in student achievement. *Education Next*, 12(4), 24.