



Splitting the Bill

A Bellwether Series on Education Finance Equity

How Does the Base Amount Work in Student-Based Funding Formulas?

#10 IN THE SERIES • OCTOBER 2023

As discussed in [Splitting the Bill: How Are State Education Funding Formulas Structured?](#), state school funding formulas generally fit one of three structures — student-based, resource-based, or program-based.¹ The cornerstone of a student-based funding formula is the per-student base amount (also appropriately called the “foundation amount”), meant to represent the cost of educating a student with no special needs or disadvantages.²

Resource-, program-based, or other hybrid funding formulas may have other versions of a per-pupil minimum but take different approaches to determine the level of funding needed to provide a comprehensive education. These kinds of formulas typically build up from inputs, like staffing ratios, or programs or services, like block grants for career and technical education.³

What Are the Common Structures for Base Amounts?

States structure their base amounts in different ways. The most common is the single base. The base is the same amount per student for every student in the system, statewide. For example:

Single Base Cost

$$\text{Per-pupil base cost: } \$7,000 \quad \times \quad \text{District enrollment: } 1,000 \quad = \quad \$7,000,000 \text{ Base funding}$$

In a weighted, student-based funding formula, additional amounts or proportional “weights” are added for different student characteristics based on district enrollment. For example:

Single Base Cost With an Economically Disadvantaged (ED) Weight

$$\left[\begin{array}{l} \text{Per-pupil} \\ \text{base cost: } \\ \$7,000 \end{array} \times \begin{array}{l} \text{District} \\ \text{enrollment:} \\ 1,000 \end{array} = \begin{array}{l} \$7,000,000 \\ \text{Base funding} \end{array} \right] + \left[\begin{array}{l} \text{25\% weight per ED student,} \\ \text{with 500 qualifying students} \\ (\$875,000 \text{ additional funding}) \end{array} \right] = \$7,875,000 \text{ funding}$$

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Some states take the base a step further and introduce variable bases for district or student characteristics, such as grade-level distribution or district size. This variation may better reflect geographic factors and cost differences among districts and students. For example, a small district in a rural area with low population density might face higher transportation costs or have extra difficulty recruiting teachers.

Variable Base Cost

$$\begin{array}{l} \text{Small district} \\ \text{base cost: } \$10,000 \end{array} \times \begin{array}{l} \text{District A} \\ \text{enrollment: } 500 \end{array} = \begin{array}{l} \$5,000,000 \\ \text{Base funding} \end{array}$$

$$\begin{array}{l} \text{Large district} \\ \text{base cost: } \$7,000 \end{array} \times \begin{array}{l} \text{District B} \\ \text{enrollment: } 10,000 \end{array} = \begin{array}{l} \$70,000,000 \\ \text{Base funding} \end{array}$$

However, these structures introduce complexity that can make it hard to keep the state’s formula current without making multiple changes through legislation, making the funding system less transparent. And, depending on the specifics of the variations chosen, the variable base might create inequities. For example, a few states use cost-of-living adjustments that vary by district. But districts with higher wages and costs of living tend also to be wealthier, creating a situation where a district with lower student needs generates additional state funds. Or additional funding for small districts might incentivize “breakaway” districts that worsen segregation and operate with less efficiency.⁴

COMMON BASE COST MODELS

Base Type	State Spotlight ⁵	Pros	Cons
<p>Single Base</p> <p>States assign a fixed base funding amount per student, which does not undergo any district-specific adjustments before being applied within the formula.</p>	<p>Indiana has a single base, which in fiscal year (FY) 2022 was \$5,995.</p>	<p>Transparent, simple to update or adjust.</p>	<p>May not capture the nuance of needs and different cost pressures on districts.</p>
<p>Simple Variable Base</p> <p>States calculate a range of base funding amounts based on student enrollment or district characteristics. States in this category use simple, easy-to-follow guidelines for setting the base applied within the formula for each student/district. Commonly used characteristics are grade-level distribution or school/district size.</p>	<p>California determines a district's base funding amount by allocating different per-student base amounts based on grade levels (utilizing four “grade spans:” K-3, 4-6, 7-8, and 9-12). In FY21, base amounts ranged from \$7,702 to \$9,329.</p>	<p>Introduces more nuance than a simple base; typically a good fit in places where districts serve varying grade levels.</p>	<p>Introduces more complexity in the system for legislators and the public; efficacy and equity are dependent on the adjustment variables chosen.</p>

COMMON BASE COST MODELS *(continued)*

Base Type	State Spotlight	Pros	Cons
<p>Complex Variable Base</p> <p>States assign base funding amounts based on complex and/or highly individualized calculations. States in this category might have a “formula within a formula” that is used to determine the base amount for each student/district on a periodic basis.</p>	<p>Nebraska determines a district's base funding amount by calculating the average per-student expenditure within a comparison group of 20 districts of similar size, with the highest and lowest spending districts excluded. Rather than using each district's individual base to calculate funding for some special-needs categories, Nebraska uses a separate, statewide base amount (\$11,323 in FY22) to which multipliers are applied.</p>	<p>Has the potential to recognize and adjust for real cost-driver differences among districts, but that depends on the formula and variations selected.</p>	<p>More difficult for the public to understand or legislators to adjust and may result in unpredictable district finances and unsustainable state budgetary pressure.</p>

How Do States Set Their Bases?

In setting a base, states are attempting to answer the difficult question, “How much does it cost to provide typical students with an adequate education such that they have the resources they need to achieve target outcomes?” A too-low base will hurt educational adequacy, and a too-high base is an inefficient use of state funds that leaves less money for students and districts in need of greater resources.

Policymakers may look to cost studies to help quantify an adequate level of base funding with evidence from school expenditures. There are four main types of costing-out studies:⁶

- **Cost-function studies**, which link educational spending with student need, district size, efficiency, and educational outcomes.
- **Professional-judgment studies**, where experts (typically panels of educators, other types of practitioners, researchers, and others with specific relevant professional knowledge and expertise) specify resources required for adequate outcomes.
- **Successful-school/district studies**, which identify high-performing districts and examine their spending.
- **Evidence-based studies**, which rely on literature reviews to specify needed resources, although they may not always align with local context or district characteristics.

Cost studies can provide input for policymakers to consider, but each method has its limitations, and different methods may arrive at hugely different recommendations. Policymakers must also consider not only an ideal funding scenario, but also what is feasible given the state's available resources and competing budget priorities, past revenue allocation practices, the varying needs across different schools and districts, and the political dynamics at play. A base cost should also be considered in the context of weights and other school funding streams in the state that affect the overall allocation and expenditure of resources for students.

Balancing these factors is essential in developing an effective funding formula, and states should consider their student composition, geographic differences, and resource constraints alongside their overall goals and priorities for educational outcomes in their decision-making.

How Do States Update Their Bases?

Updating the base amount within state education funding formulas is a common practice, often mandated by policy. In most states, state legislators revisit the base when each new state budget is passed. This makes the base subject to greater political uncertainties, which can make funding less predictable for schools and districts. To mitigate this, some states choose to tie their base amount to economic indicators or inflation. For example, in Minnesota, recent legislation includes a provision that would see the statewide base automatically increase each year with inflation for years into the future — capped at 3% annually.⁷ States should be thoughtful in setting an update policy that enables stability in education funding and allows them to be responsive to changing economic conditions or student needs.

Questions for Advocates

- *If your state has a student-based funding formula, how does it structure the base amount?*
- *How does your state's base amount stack up to peer states? Is it higher, lower, or about the same? What might be the rationale for that?*
- *How do weights for student and community characteristics build off the base? What proportion of state funding for schools is allocated through the base funding versus weights or other funding streams?*
- *What methods or data do policymakers in your state use to inform and determine the base cost?*
- *What is the process for updating your state's base and how often do adjustments occur? Are there any automatic adjustments or limitations in place?*

Endnotes

- 1 Indira Dammu, Bonnie O’Keefe, and Jennifer O’Neal Schiess, *Splitting the Bill: How Are State Education Funding Formulas Structured?*, Bellwether, October 2021, <https://bellwether.org/publications/splitting-the-bill/>; *Funding Formula Guidebook*, Connecticut School Finance Project, November 2016, <https://schoolstatefinance.org/resource-assets/Funding-Formula-Guidebook-2016.pdf>.
- 2 “FundEd: Base Amount Policies in Each State,” EdBuild, <http://funded.edbuild.org/reports/issue/base-amount>.
- 3 Dammu, O’Keefe, and Schiess, *Splitting the Bill: How Are State Education Funding Formulas Structured?*; “Desired Features of a State Funding System,” Georgetown University Edunomics Lab, <https://edunomicslab.org/state-decision-tree/>.
- 4 “Fractured: The Accelerating Breakdown of America’s School Districts, 2019,” EdBuild, <https://edbuild.org/content/fractured>.
- 5 “FundEd: Base Amount Policies in Each State.”
- 6 *Funding Formula Guidebook*.
- 7 Pratik Joshi, “Bill Seeks Automatic Inflation Adjustment for School Funding Formulas,” Session Daily, Minnesota House of Representatives, Mar. 2, 2022, <https://www.house.mn.gov/sessiondaily/Story/17180#:~:text=The%20basic%20formula%20allowance%20for,the%202022%2D23%20school%20year>.

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Any errors in fact or analysis are the responsibility of the authors alone.

About Bellwether

Bellwether is a national nonprofit that exists to transform education to ensure systemically marginalized young people achieve outcomes that lead to fulfilling lives and flourishing communities. Founded in 2010, we work hand in hand with education leaders and organizations to accelerate their impact, inform and influence policy and program design, and share what we learn along the way. For more, visit bellwether.org.

ABOUT THE SERIES

Splitting the Bill is a crash course in the essentials of school finance equity for advocates and others interested in reforming state education finance systems. Learn more and read the other briefs in this series [here](#).

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