Who Pays the Tab for K-12 Education?  

How states allocate their share of education costs

Historical Context

Public education in the United States was originally established, run, and financed by local communities. While these local districts initially used several different methods to fund education—including student fees, contributions by community members, and various forms of local taxation—they eventually moved to funding education almost exclusively through local property taxes. This came to fruition because local property taxes are a predictable funding source and relatively easy to collect. In addition, property taxes are based on the value of the taxpayer’s property, which can be used as a proxy, albeit an imperfect one, for an individual’s wealth. The use of property taxes as the primary source of education funding has resulted in a system where students living in property-wealthy communities have received a significantly higher level of educational resources than students living in property-poor areas.

Not only can this situation be unfair to students, it can be and has proven to be unfair to taxpayers in many circumstances. Property owners who live in a property-poor community often face higher tax rates than those living in property-wealthy communities. This is due to the fact that property-poor districts require a higher tax rate to raise the same amount of funding as property-wealthy communities. For example, if the per capita property wealth in District A is $100,000, and in District B it is $300,000, District A would require a tax rate three times higher than District B to raise the same amount of funding.

Since the 1920s, states have become more and more involved in public education funding to address the issue of unequal funding from district to district. State involvement in education funding accelerated in the 1970s due to court decisions, the involvement of activists, and reform-oriented governors and state legislators, along with a relatively healthy economy. This sparked a series of reforms that resulted in major structural changes in the school finance systems of more than 30 states.¹
**Education Funding Today**

Currently, the cost of education is shared among federal, state, and local governments in all 50 states. In the 2012-13 school year, for instance, the federal government supplied on average 10.1% of funding while the remaining 89.9% was divided between state and local governments.²

Forty-eight states split the cost of education based on a district’s wealth—commonly referred to as the “ability-to-pay.” The only two states that do not fund districts based on their ability-to-pay are Pennsylvania, which funds districts with a flat grant, and Hawaii, which operates as a single school district.

The purpose of careful selection of wealth measures in funding formulas is to ensure that state funding is directed toward those districts that cannot afford to fund public education.

**Why does the definition of “Ability-to-Pay” matter?³**

States use funding formulas to determine the base amount of funding that a district is entitled to for the upcoming school year—dividing the base funding amount between state education funding coffers and the local districts based on each district’s relative wealth. (For a full description of how state funding formulas function, see ECS’ *The Progress of Education Reform: Understanding State School Funding*.)

In theory, a mid-level wealth school district could expect to get 50% of the total base funding amount from the state, and it would have to fund the other 50% itself. As a district’s wealth increases, it would be expected to pay a higher percentage of the total foundation amount. Lower-wealth districts could expect to receive a higher percentage from the state.

**How do states measure a district’s wealth?**

Forty states use a school district’s property value as the only measure of a district’s ability to pay. Property values are measured by totaling the taxable property values in a district: all property values minus properties that are exempted from taxes such as churches and government property. This total “taxable value” amount would then be divided by either the total number of pupils in a district or the total population of a district—this varies by state. The remaining number is a district’s per capita wealth amount. This amount is then compared against the state average to determine the general wealth of a district.

**Why are property values used by states?**

States use property values as the measure of a district’s relative wealth for two reasons:

1. **Property values might not be a perfect measure, but they do provide states with a good estimate of a district’s relative wealth:** Up to 82.7% of local funding for education still is derived from local property taxes—and in some states 100% of local revenue comes from property taxes.⁴ Because of this, it only makes sense to measure a district’s relative wealth by looking at property values alone.

2. **The data is easy to access:** States have been collecting taxable property value data from local districts for decades. Other forms of wealth data such as incomes or sales tax base are not collected by school districts and, in some cases, would be difficult to retrieve in a timely manner.

**Why property values are not always the best measure of wealth**

Using property values as the only measure for a district’s ability can be problematic because property values alone “... (do) not accurately measure the current ability of a property owner to pay the tax imposed.”⁵ This argument is based on the fact that there is not necessarily a correlation between property values and a property owner’s ability to pay taxes. This can be particularly true for areas in the state that have had skyrocketing property increases, such as lakefront property, that greatly outstripped any increases in local income.
The impact of excluding income

By not taking taxpayer income into account when measuring a school district’s ability to pay, high property-wealth/low-income (HPW/LI) districts may be considered to have a greater tax capacity than the local community believes it can afford. A 1977 paper from Allan Odden pointed out: “It makes little sense to impute a high tax capacity to a jurisdiction whose residents lack the ability to pay the tax.” HPW/LI districts experience two potential funding dilemmas:

1. High or excessive tax burdens as a result of paying a greater proportion of their income in local school taxes
2. Decreases in school funding because residents are unwilling to vote for higher property taxes to pay for educational programs.

Moreover, in those cases where individuals live on a fixed income, high property values create a risk that such individuals will be forced out of their homes.

What are the alternative measures of district wealth?

As noted above, 40 states use property values as the only measure of a district’s fiscal capacity or ability to pay for schools from local sources. In an attempt to better measure a district’s ability to pay for schools, eight states adopted additional fiscal capacity measures to supplement property values. These typically rely on some measure of income to be included (along with property wealth) in the measure of fiscal capacity.

<table>
<thead>
<tr>
<th>States that Measure Fiscal Capacity with Factors in Addition to Property Wealth</th>
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</thead>
<tbody>
<tr>
<td><strong>Property</strong></td>
</tr>
<tr>
<td>Connecticut</td>
</tr>
<tr>
<td>Maryland*</td>
</tr>
<tr>
<td>Massachusetts</td>
</tr>
<tr>
<td>New Jersey</td>
</tr>
<tr>
<td>New York</td>
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<tr>
<td>Rhode Island</td>
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<tr>
<td>Tennessee</td>
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<tr>
<td>Virginia</td>
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</tbody>
</table>

* Maryland uses the following formula to determine a district’s relative wealth: (Total real property values x 40%) + (total personal property x 50%) + (100% of public utilities’ assessable base) + (100% of net taxable income) = total district wealth.
Using income as a measure of a district’s wealth

Some feel that using income as part of the fiscal capacity measure provides a more comprehensive measure of a district’s wealth and can likely redirect state funding to districts with low median-household income.

Issues around the use of income

It makes sense that states would take into account the average income in a school district when trying to determine their citizens’ “ability-to-pay” for education. After all, if the taxpayers in a district had low-incomes they could not, and should not, be expected to shoulder a greater burden of the costs to educate their children. So if this is true, then why do more states not take income into account? There are four basic reasons:

1. Many states do not collect school district residency information via their state income tax forms, making it hard to measure household income by district.
2. Nine states do not have an income tax, making collection of such data by district even more difficult.
3. States that have used income as a measure of wealth have not always seen net funding distribution changes, meaning the problem they sought to solve did not go away.
4. If not incorporated correctly into the formula, the results could be counter to expectations, reducing state aid to districts with low median-household incomes.

If using income as a measure of wealth, you need to do it the right way

How income is incorporated as a measure of a school district’s wealth is just as important as whether it is included at all. Simply adding income to property values can result in unintended consequences, such as funding decreases for low-income districts and funding increases for high-income districts. To ensure that an income factor benefits low-income districts, it needs to be used as a multiplier to property values. If a district’s income is turned into a ratio of the district’s income to the state average, a high-income district would have a ratio greater than 1.0, and a lower-income district would have a ratio less than 1.0. When this income factor is multiplied by the district’s property wealth per pupil to determine that district’s local funding capacity, it then would raise the relative fiscal capacity for a high-income district but decrease the fiscal capacity of a low-income district. In the case of a district with median-household income below the state average, the impact would be to lower the fiscal capacity measure and increase the share of total funding provided by the state.

* Using low-income students as part of the fiscal capacity measure is essentially an income-based measure.
To illustrate how a multiplicative income factor might work, consider how two different districts would fare using income as both an additive factor and as a multiplicative factor.

- **District No. 1** has an average property value per pupil that is equal to the state’s average, so it would be assigned a property wealth factor of 1.0. The district’s per pupil income is 10% above the state average, so its income factor would be 1.10.

- **District No. 2** also has an average property value per pupil that is equal to the state’s average, so it, too, would be assigned a property wealth factor of 1.0. This district’s per pupil income is 10% below the state average, so its income factor would be 0.90.

Under this example, if the state simply used property values as its measure of a district’s fiscal capacity in its formula, then both districts would be viewed as having perfectly average fiscal capacity and would receive the same amount of state funding. But under a system where property wealth and income wealth factors were both given a weight of 50% and simply added together, it would look like this:

**Table 1: Income as an Additive: Districts with Equal Property Wealth**

<table>
<thead>
<tr>
<th>Property Value per Pupil</th>
<th>Income factor</th>
<th>Adjusted District Fiscal Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>District No. 1</td>
<td>(1.0 x 50%) = 0.50 + (1.10 x 50%) = 0.55 = 1.05</td>
<td></td>
</tr>
<tr>
<td>District No. 2</td>
<td>(1.0 x 50%) = 0.50 + (0.90 x 50%) = 0.45 = 0.95</td>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows that under a system where a district’s property values are added to an income factor, District No. 1 has an adjusted district wealth (or fiscal capacity) that is 5% above the state average, and District No. 2 is 5% below the state average. However, if the state were to use a multiplicative income factor, then each district’s fiscal capacity calculation would be as follows:

**Table 2: Using Income as a Multiplier – Districts with Equal Property Wealth**

<table>
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<tr>
<td>District No. 1</td>
<td>1.0 X 1.10    = 1.10</td>
<td></td>
</tr>
<tr>
<td>District No. 2</td>
<td>1.0 X 0.90    = 0.90</td>
<td></td>
</tr>
</tbody>
</table>

Under a system where a district’s property values are multiplied by an income factor, District No. 1 has an adjusted district fiscal capacity that is 10% above the state average, and District No. 2 is 10% below the state average. Table 2 shows that the higher-income district would receive less state aid because it would be defined as being even wealthier using the multiplicative factor (its new fiscal capacity number would be 1.10 vs. 1.05), and the lower income district would receive more state aid because the multiplicative factor would show it to be even poorer (its new fiscal capacity number would be 0.90 vs. 0.95).

**States that use sales tax base**

Only two states—Tennessee and Virginia—currently use a district’s sales tax base as a measure of their fiscal capacity. Both of these states provide for local-option sales taxes that can be used to fund schools. While this system may work in other states with a local-option sales tax, it would make much less sense in a state where a local-option sales tax is not an option for districts.
What can states do?

If states are considering improving the way they share funding costs with local districts, there are a few steps that they can take:

1. Know what measures of wealth are available in your state: In a state without an income tax, it would make little sense to attempt to measure a district’s wealth by the average income. But even in states that have an income tax it may be difficult to collect income data by district. The availability of wealth data will vary greatly by state.

2. Ensure that any change results in the intended consequences: As shown earlier in this paper, adding income data as a wealth measure can result in decreases in state funding for low-income school districts. Before making any change, your state should run the numbers to make sure that the new wealth measure directs additional funding to low-income districts.

3. Look at other ways to achieve your goal: The goal of reconsidering or carefully selecting wealth measures in funding formulas is to ensure that state funding is directed toward those districts that cannot afford to fund public education. An additional goal is to help reduce the tax burden on those individuals who have low incomes but live in a home with a high property value. These goals might be better met through other tax/budget policies. For instance:

   • To help redirect funds to low-wealth districts, states can increase their funding for at-risk students or they can create special funding programs outside of the state’s primary funding formula.

   • To offset property tax costs for taxpayers with high property values and low incomes, the state can make use of circuit breaker property tax credits, property valuation caps, or property tax exemptions aimed at homestead property.

ECS Resources

The Progress of Education Reform:
Understanding State School Funding

When policymakers don’t understand the basics of their state’s funding system, it is difficult for them to determine what changes are needed to encourage innovation. This issue of The Progress of Education Reform sets out to ease some of the confusion by helping readers better understand these complex systems, with the hope that this knowledge will be used to help support education reform in the states.

http://www.ecs.org/clearinghouse/01/02/86/10286.pdf

Education Commission of the States (ECS)

ECS has a collection of information on current state funding formulas, as well as a number of reports that outline best practices. For school finance more broadly, also see:


Other Recommended Resources

Lincoln Institute of Land Policy

The institute has a collection of reports and databases on state and local tax and policies.

http://www.lincolninst.edu/

National Conference of State Legislatures (NCSL)

NCSL collects information on state level taxation and spending policies.

http://www.ncsl.org/
Endnotes
5 Michael Brennan and Orlando Delogu, "The Argument For: Retaining Income as One of Two Factors in Maine’s School Aid Funding Formula," Maine Policy Review, Volume 9, Issue 1, 2000, 78.
6 Ibid Odden, 356-379.