



Policy Perspectives on State Elementary and Secondary Public Education Finance Systems in the United States

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Introduction

The purpose of this article is to describe and compare individual state funding systems for public elementary and secondary education in the United States. States' major education funding systems are described as well as funding mechanisms for students with disabilities; English language learners (ELL); gifted and talented students; and low income or "at-risk" students, the latter more broadly defined as those who are at risk of dropping out of school. Third is a description of state funding for vocational, career, and technical education programs, an area that is of particular importance to students who do not plan to pursue postsecondary education. Fourth are funding programs that are generally, but not always, outside the state's major funding system that are district-based. These include state funding related to sparsity and density factors; transportation costs; and infrastructure-related expenses for capital outlay and associated debt.

Methodology

Information on state elementary and secondary education funding systems for the 2014-2015 school year presented in this article was gathered by means of a 50-state survey sent to a state's chief education officer, superintendent of public instruction, or designee.¹ Follow-up reminders were sent via email and ground mail. Forty-eight states responded. For the remaining two states, survey responses were submitted by a recognized authority on that state's education funding system selected by the author. After survey results were collated, they were returned to each state contact for review and verification of their accuracy.

Major Funding Systems

For the 2014-2015 school year, states provided major funding to public elementary and secondary education using one of four types of formulas, or a combination thereof:

- Foundation program. Foundations formulas provide school districts with a uniform state guarantee for

per-pupil expenditure through a combination state and local school district funding;

- **District power equalization.** District power equalization formulas provide school districts with state funding that varies based on tax rates.
- **Full state funding.** With full state funding, all school district funding is provided by the state.
- **Flat Grants.** State-funded flat grants provide school districts with a uniform amount of funding per unit, such as per pupil, teacher, or classroom.

Table 1 lists those states using each type of funding system or a combination/tiered system.

Foundation Programs

Thirty-seven states use the foundation program as their major funding system. When states that employ a foundation program as part of a combination/tiered funding approach are included, the total number of states using the foundation program is 46. Foundation formulas, originally intended to fund a basic education program, support the concept of student equity through a state guarantee of funding per pupil. School districts contribute to the state guarantee through a uniform tax rate or the revenues that rate yields. The school district contribution is generally drawn from the local property tax, although some states, like Nevada, use sales tax revenues for a portion of the local funding component.² Using the uniform tax rate, property-poor school districts generate less revenue than property-wealthy school districts. To compensate, the state funds the difference up to the state guarantee per pupil. The level of the state guarantee per pupil, uniform tax rate, and required local contribution varies across states. In addition, some states allow school districts to exceed the foundation level by levying additional local property taxes.

District Power Equalization

Only two states use district power equalization as their major funding system: Vermont and Wisconsin. In contrast to the foundation program whose focus is student equity, the goal of district power equalization is taxpayer equity, defined as providing school districts with equal yields in revenues for equal tax rates. Types of district power equalization formulas include guaranteed tax base, guaranteed yield, and percentage equalizing systems. Historically, district power equalization has not been widely used by states in large part because of its complexity.

Full State Funding, Flat Grants, and Two-Tiered Funding Systems

With regard to the use of full state funding and flat grants as major funding systems, each is used in only one state, Hawaii and North Carolina, respectively. Flat grants represent an early form of state funding, and are rarely used today due to their disequalizing potential. Also, it should be noted that Hawaii uses full state funding in the sense that the state has only one school district; that is, the state and school district are coterminous.³ Nine states use a two-tiered system, or combination approach to distribute funding to school districts: Georgia, Illinois, Kentucky, Louisiana, Montana, Maryland, Oklahoma, Texas, and Utah.

Student-Based Funding

States provide student-based funding either through pupil-weighting of the state's major funding system or through free-standing categorical aid programs. The most common types of student-based funding include aid to students with disabilities; English language learners; low income/at-risk students; and gifted and talented students. However, not all states choose to provide funding to all of these categories.

Table 1 | **Major School Finance Funding Systems by State**

Major Funding System	Number of States	State
Foundation Program	37	Alabama, Alaska, Arizona, Arkansas, California, Connecticut, Colorado, Delaware, Florida, Idaho, Indiana, Iowa, Kansas, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Virginia, Washington, West Virginia, Wyoming
Full State Funding	1	Hawaii
Flat Grant	1	North Carolina
District Power Equalization	2	Vermont, Wisconsin
Combination/Tiered System	9	Georgia, Illinois, Kentucky, Louisiana, Montana, Maryland, Oklahoma, Texas, Utah

Table 2 | **State Funding Mechanisms for Special Education**

Funding Mechanism	Number of States (Total =49)	State
Per Pupil/Weighting	21	Arizona, Florida, Georgia, Hawaii, Iowa, Kansas, Kentucky, Louisiana, Maryland, Missouri, New Mexico, New York, Ohio, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Washington, West Virginia
Cost Reimbursement	9	Arkansas, Indiana, Maine, Michigan, Minnesota, Nebraska, Vermont, Wisconsin, Wyoming
Unit-Based	6	Alabama, Delaware, Idaho, Mississippi, Nevada, Virginia
Census-Based	8	California, Idaho, Illinois, Massachusetts, New Jersey, North Carolina, North Dakota, Pennsylvania
Other	16	Alabama, Arkansas, California, Colorado, Connecticut, Idaho, Illinois, Maryland, Minnesota, Montana, New Hampshire, New York, North Dakota, Oregon, South Dakota, Washington

Note: Multiple funding mechanisms are used in some states.

State Funding for Special Education

All states except Rhode Island provide some level of funding for services for students with disabilities, commonly referred to as special education funding. There is a strong rationale for states to do so, based upon federal law that protects the educational rights of students with disabilities. Table 2 lists mechanisms states use to fund special education: per-pupil/weighted funding; cost reimbursement; unit-based funding; and census-based funding. Each of these is described in more detail below.

Per-pupil/weighted funding. As the most widely used approach, 21 states provide special education funding through their major funding system with the addition of pupil weights. Weights vary across states. For example, Maryland, Oregon, and Utah use a single weight to calculate special education aid, while other states, such as Arizona, Delaware, Kentucky, and Oklahoma, use multiple weights, based upon a student's disability.

Cost reimbursement funding. With cost reimbursement funding, school districts must first use their own fiscal resources to provide special education services and then seek reimbursement from the state for all or some portion of the cost. Nine states currently use this approach: Arkansas, Indiana, Maine, Michigan, Minnesota, Nebraska, Vermont, Wisconsin, and Wyoming.

Unit-based funding. Unit-based funding mechanisms are usually classroom-based, instructional unit-based, or teacher-based. This is the least common approach, and is used by six states: Alabama, Delaware, Idaho, Mississippi, Nevada, and Virginia. Unit-based funding was more common in the past when students with disabilities were often placed in self-contained classrooms rather than mainstreamed.

Census-based funding. With census-based funding, the state provides every school district with aid based upon a fixed percentage of the school district's total enrollment.

Eight states use census-based funding: California, Idaho, Illinois, Massachusetts, New Jersey, North Carolina, North Dakota, and Pennsylvania.

Other approaches to funding special education. Sixteen states use other funding approaches. These may be singular approaches, like the use of block grants by Alaska,⁴ or combinations of one or more of the previously mentioned special education funding mechanisms. For example, Texas uses both unit-based weights and weighted per-pupil funding, the latter for mainstreamed students. In addition, other approaches include state funding for special education students whose educational needs may present a school district with an extraordinary financial burden. States, such as Alabama, Connecticut, and Alabama, provide this type of aid.

State Funding for Low-Income/At-Risk Students and English Language Learners

A large number of states also provide student-based funding for low income and at-risk students in addition to English language learners (ELL). (See Table 3.) Here, federal law may not exert as strong an influence on states as it does for students with disabilities, but many of the same concerns for equity and equality of educational opportunity exist. To that end, 42 states provide funding for services to English language learners, while 37 states target funding to students in poverty and more broadly to at-risk students. State funding to support ELL services takes several forms: weighting, per-pupil aid, unit funding, and lump-sum appropriations, similar to flat grants. With regard to aid for low-income/at-risk students, a number of states use weighted approaches, although eligibility requirements and distribution mechanisms may vary by state. A common approach for identifying low income students for state funding is through ascertaining their eligibility for or participation in federally funded free and reduced-price school meals.

Table 3 | **State Funding for Low-Income/At-Risk Students, English Language Learners, and Gifted and Talented Students**

Low-Income/At-Risk (Total States = 37)	English Language Learners (Total States = 42)	Gifted and Talented (Total States = 33)
Alaska, Alabama, California, Colorado, Connecticut, Delaware, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Massachusetts, Maryland, Maine, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Vermont, Virginia, Washington, Wisconsin	Alabama, Alaska, Arizona, Arkansas, California, Connecticut, Florida, Hawaii, Idaho, Illinois, Indiana, Iowa, Georgia, Kentucky, Kansas, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Ohio, Oregon, Rhode Island, Tennessee, Texas, Utah, Virginia, Vermont, Washington, Wisconsin, West Virginia, Wyoming	Alaska, Arkansas, California, Colorado, Florida, Georgia, Hawaii, Idaho, Iowa, Indiana, Kentucky, Louisiana, Maine, Maryland, Minnesota, Mississippi, Missouri, Montana, New Jersey, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Pennsylvania, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, Wisconsin, Wyoming

Note: Multiple funding mechanisms are used in some states.

State Funding for Gifted and Talented Students

There is no standard definition for "gifted and talented." Further, existing definitions offered by the U.S. Department of Education and national advocacy groups have changed over time. The same can be said for state definitions. Some definitions tend to focus on high academic achievement, in part because there exist standard definitions that can be used to determine eligibility. Broader definitions include creative and artistic potential which admittedly is more difficult to define. At present, 33 states provide some level of funding for gifted and talented students. (See Table 3.) Funding mechanisms include per-pupil weights and unit funding. Also, some states cap the percentage of students that a district may define as gifted and talented for the purposes of state funding. For example, Arkansas places a cap of five percent of school district enrollment while Hawaii imposes a three percent cap.

State Funding for Vocational, Career, and Technical Education

Although no standard definition exists for K-12 vocational, career, and technical education, the education programs and offerings in this area share a common goal of providing students with the knowledge and skills in order to be "college and career ready."¹⁵ Historically, such programs have been targeted to students who did not plan to pursue postsecondary education. Although this focus has expanded over time to include all students, regardless of their post-graduation plans, vocational, career, and technical education remains vitally important for those students who would prefer to enter the workforce directly after high school graduation. In all, a little more than half of states provide some level of funding to school districts or intermediate units. (See Table 4.) Areas of study in this category vary widely, including, for example in Pennsylvania: agriculture education; health occupations; business education; and trade and industrial education. State funding approaches also vary and include per-pupil/weighting, unit-based funding, and cost reimbursement.

Table 4 | **State Funding for Vocational, Career, and Technical Education, and for Sparsity and Density Factors**

Vocational, Career, and Technical Education (Total States = 28)	Sparsity and Density Factors (Total States = 32)
Alaska, Arizona, Arkansas, Connecticut, Delaware, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Massachusetts, Minnesota, Nevada, New Hampshire, New Jersey, North Carolina, North Dakota, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Virginia, West Virginia, Wyoming	Alaska, Arizona, Arkansas, California, Florida, Hawaii, Idaho, Indiana, Iowa, Kansas, Louisiana, Maine, Michigan, Minnesota, Missouri, Nevada, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming

State Funding for Other District-Based Costs

The focus of this section is state funding programs that are generally, but not always, outside the state's major funding system, and represent other district-based costs. These costs are associated with sparsity and density factors; transportation; and infrastructure-related expenses for capital outlay and associated debt.

State Funding for Sparsity and Density Factors

Sparsity factors are often associated with the concept of diseconomies of scale; that is, sparsely populated areas, such rural and remote regions within a state, generally contain school districts with lower than average student enrollments, and, in turn, individual schools with small enrollments. Yet these school districts must offer a full curriculum in compliance with state standards. In addition, small districts can face challenges in recruiting and retaining teachers, administrators, and other staff due to salaries and wages which may be lower than those of larger school districts.

Conversely, urban school districts may face challenges associated with densely populated areas, referred to as municipal overburden. The concept of municipal overburden recognizes higher costs associated with urban areas, inclusive of expense categories from personnel to classroom supplies and equipment. Like their rural counterparts, urban school districts may face challenges in recruiting and retaining qualified employees, but for different reasons. For example, employees generally face higher housing costs in urban areas. Teachers and support staff in urban schools may face overcrowded classrooms that make teaching and learning difficult. Third, issues of security and safety within and outside schools in some urban neighborhoods may also be a cause for concern for teachers, administrators, and staff.

In all, 32 states provide some level of funding to school districts for sparsity and/or density factors. (See Table 4.) In general, states use pupil weights and unit-based funding along with "supplemental aid," which is similar to a flat grant. These funding mechanisms are often narrowly tailored to the specifics of the state. For example, Oklahoma adds per-pupil weights to its major funding system for "small" school districts, defined as those with fewer than 529 students. Wyoming uses unit-based funding for additional teachers for small schools in sparsely populated rural districts. Even a state like New York, which is generally considered densely populated, has small rural school districts. There, sparsity is a factor in the state's foundation funding program. As we shall see in the next subsection, density can also be a factor in state funding for transportation.

State Funding for Transportation

Table 5 shows state funding mechanisms for transportation. In all, 46 states provide some level of state funding for student transportation. The most common method, used in 17 states, is referred to as an "allowable reimbursement," where the state sets guidelines for what school district transportation costs it will reimburse and a specific dollar amount or percentage. This form of cost reimbursement may or may not include an equalization component. In contrast, nine states include transportation as a component of their major funding system: Florida, Iowa, Michigan, Minnesota, New Hampshire, Oregon, South Dakota, Tennessee, and West Virginia.

Less common state funding mechanisms for transportation are density formulas, per-pupil allocations, equalized reimbursement, and full cost reimbursement. Eight states fund transportation using a density formula: Arizona, Colorado, Kansas, Kentucky, Maine, Mississippi, Texas, and Virginia. Density formulas often use a per-pupil allocation based upon bus route miles, pupils per bus route mile, and/or square miles in the school district. Five states use a straightforward per-pupil allocation, which is a uniform amount for each transported student: Alaska, New Jersey, Vermont, Washington, and Wisconsin. The least common state funding method, full cost reimbursement, is found in three states: Delaware, Hawaii, and Wyoming.

Table 5 | State Funding Methods for School Transportation

Funding Methods	Number of States (Total = 46)	States
Included in State's Major Funding System	9	Florida, Iowa, Michigan, Minnesota, New Hampshire, Oregon, South Dakota, Tennessee, West Virginia
Density Formula	8	Arizona, Colorado, Kansas, Kentucky, Maine, Mississippi, Texas, Virginia
Equalized Reimbursement	4	Connecticut, New York, Oregon, Pennsylvania
Full Cost Reimbursement	3	Delaware, Hawaii, Wyoming
Allowable Reimbursement	17	Alabama, California, Georgia, Idaho, Illinois, Maryland, Massachusetts, Missouri, Montana, Nebraska, New Mexico, North Carolina, North Dakota, Nevada, Ohio, South Carolina, Utah
Per Pupil	5	Alaska, New Jersey, Vermont, Washington, Wisconsin

Note: Multiple funding mechanisms are used in some states.

State Funding Methods for School Infrastructure

Thirty-seven states provide one or more funding mechanisms for school infrastructure, defined as school district expenditures for capital outlay and associated debt. (See Table 6.) The most common method is a state-funded project grant which is used in almost half of states. These grants are approved on a case-by-case basis and may or may not be equalized. Thirteen states use equalized grants: Connecticut, Delaware, Kansas, Minnesota, New Hampshire, New Jersey, New Mexico, Ohio, Oregon, Rhode Island, Tennessee, Vermont, and Washington. Almost an equal number use nonequalized project grants: Alaska, Georgia, Hawaii, Kentucky, Massachusetts, Maine, Minnesota, Pennsylvania, South Carolina, South Dakota, and Wyoming.

Less common state funding methods include: debt service grants (equalized and nonequalized); inclusion in the major funding system; state loans and bond guarantees; and targeted funding for aging facilities. A total of eight states provide debt service grants to school districts to defray costs associated with capital outlay. Of these, only Massachusetts and New York provide equalized debt service grants, while the grants in the remaining six states are nonequalized: Alaska, Arkansas, Kentucky, Montana, New Jersey, and Texas. In six states, capital outlay and associated debt are considered part of the major funding system: Alabama, Florida, Minnesota, Mississippi, Virginia, and Wisconsin.

State loans and state guarantees (against default) of locally issued bonds can be helpful in reducing school districts' interest costs on capital projects. Five states—California, Massachusetts, Maryland, Texas, Utah—provide bond guarantees, but only three provide state loans: Minnesota, North Carolina, and Virginia. In six states funding for modernizing aging school facilities is available: California, Maryland, Montana, New York, Virginia, and Wyoming.

Finally, it is important to point out that twelve states use multiple methods to fund school infrastructure, as follows:

- Alaska: Debt service grants and approved project grants
- California: Bond guarantees and approved project grants
- Kentucky: Debt service grants and approved project grants
- Massachusetts: Bond guarantees, equalized debt service grants, and approved project grants
- Maryland: Bond guarantees and funding for modernization of aging school facilities
- Montana: Debt service grants and funding for modernization of aging school facilities
- Minnesota: Part of state's major funding system, state loans, approved project grants, and equalized project grants

Table 6 | **State Funding Methods for School Infrastructure: Capital Outlay and Associated Debt**

Funding Methods	Number of States (Total = 37)	States
Equalized Project Grants	13	Connecticut, Delaware, Kansas, Minnesota, New Hampshire, New Jersey, New Mexico, Ohio, Oregon, Rhode Island, Tennessee, Vermont, Washington
Approved Project Grants	11	Alaska, Georgia, Hawaii, Kentucky, Massachusetts, Maine, Minnesota, Pennsylvania, South Carolina, South Dakota, Wyoming
Debt Service Grants	6	Alaska, Arkansas, Kentucky, Montana, New Jersey, Texas
Equalized Debt Service Grants	2	Massachusetts, New York
Part of Major Funding System	6	Alabama, Florida, Minnesota, Mississippi, Virginia, Wisconsin
Aging School Facilities	6	California, Maryland, Montana, New York, Virginia, Wyoming
State Bond Guarantee	5	California, Massachusetts, Maryland, Texas, Utah
State Loans	3	Minnesota, North Carolina, Virginia

Note: Multiple funding mechanisms are used in some states.

- New Jersey: Debt service grants and equalized project grants
- New York: Equalized debt service grants and funding for modernization of aging school facilities
- Texas: Debt service grants and bond guarantees
- Virginia: Part of state's major funding system, state loans, and funding for modernization of aging school facilities
- Wyoming: Approved project grants and funding for modernization of aging school facilities

While the use of multiple funding methods does not necessarily mean that this group of states provides a higher dollar amount of funding, it does indicate that school districts in these states have more than one state funding option available.

Summary and Conclusions

The research reported in this article was based upon a 50-state survey of chief education officers with regard to their respective state's funding system for public elementary and secondary education for the 2014-2015 academic year. As a result, this article presents a comprehensive view of formulas and other mechanisms states employ to fund PK-12 education at present.

The article begins with a description and comparison of state's major funding systems and related aid distribution formulas. These are designed primarily to provide support for school districts' day-to-day operating costs. The goal of the most widely used formula, the foundation program, is student equity, and more recently, adequacy. Here, the state seeks to provide sufficient funding so that all students, regardless of a school district's wealth (or poverty), receive, at least, a basic education. At the same time, the formula is built upon a state-local partnership that requires a uniform local school district tax effort. Although this approach has much to recommend it, it behooves state policymakers to question whether funding a basic education is sufficient in today's global and highly competitive economy.

Many states go beyond the general support of major funding systems to fund students who may require additional funding to ensure equality of opportunity and academic success. These state funding programs commonly include students with disabilities; English language learners (ELL); gifted and talented students; and low income or "at-risk" students. Overall, state funding mechanisms include per-pupil allocations, weighted formulas, unit-based formulas, and cost reimbursement. Some level of funding for special education is nearly universal across states, followed closely by state funding mechanisms for English language learners, while approximately two-thirds of states provide funding for students identified as low income, at-risk, or gifted and talented.

Chief state education officers were also asked to describe state funding mechanisms to support vocational, career, and technical education programs. Although the goals of these programs have expanded over time to include all students under the banner of "college and career ready,"⁶ vocational, career, and technical education remains critically important

for students who plan to enter the workforce immediately after high school education. In that respect, the finding that only slightly more than half of states provide aid is disappointing.

Fourth, the survey sought information on funding programs that are generally, but not always, outside the state's major funding system that are district-based. These include state funding related to sparsity and density factors; transportation costs; and school infrastructure. The impact of sparsity and density factors on school districts represents, at one end of the continuum, diseconomies of scale in rural, remote, sparsely populated areas and municipal overburden in large cities and urban areas at the other. Approximately, 60% of states have funding mechanisms to address these factors.

The long tradition of state funding for student transportation in the United States continues with 46 states providing aid to school districts. The most common funding mechanism, used by approximately half of states, provides cost reimbursement, up to and including 100% district-based transportation costs, in some cases. Nine states include transportation as a component in their major funding system.

On the other hand, school infrastructure costs, also referred to as capital outlay and debt service, have a long history of being considered a local responsibility although school finance litigation, particularly in recent decades, has played a role in starting to change that mindset.⁷ According to survey results, approximately three-fourths of states provide some level of support for capital outlay and associated debt. The most common state funding mechanism takes the form of a grant either for a project or debt service. It should be noted that eleven states use more than one infrastructure funding program, including not only grants, but also state loans, bond guarantees, and targeted funding to modernize older school facilities. A few states also include infrastructure as a component of their major funding system.



Endnotes

¹ Survey results were previously presented at the 2015 National Education Finance Conference, Jacksonville, Florida. This article also draws upon, "A Quick Glance at School Finance: A 50-State Survey of School Finance Policies (2015)," by Deborah A. Verstegen, <http://www.schoolfinances.info>.

² See, "Nevada," <https://schoolfinancesdav.files.wordpress.com/2015/04/nevada.pdf>.

³ See, "Hawaii," <https://schoolfinancesdav.files.wordpress.com/2015/04/hawaii.pdf>.

⁴ Alaska's block grant funds not only special education, but also gifted and talented, bicultural/bilingual, and vocational education programs. Illinois and several other states use additional types of funding for special education, such as personnel reimbursement, and preschool and private school placement funding allocations.

⁵See, for example, "Career and Technical Education," Office of Superintendent of Public Instruction, State of Washington, <http://www.k12.wa.us/CareerTechEd>.

⁶State of Washington, "Career and Technical Education," Office of Superintendent of Public Instruction.

⁷See, for example, the Arizona Supreme Court case, *Roosevelt Elementary School District No .66 v. Bishop*, 877 P.2d 806 (Ariz. 1994).