

# LITERATURE REVIEW: EQUITABLE PUBLIC SCHOOL FUNDING

Prepared for Southeast Wisconsin Schools Alliance

July 2016



In the following report, Hanover Research examines the impacts of funding inequities on academic outcomes and reviews the ways in which states around the country address funding inequities.

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# EXECUTIVE SUMMARY AND KEY FINDINGS

## INTRODUCTION

The U.S. Department of Education estimates that nearly half of the Title I-designated school districts receive lower levels of state and local funding compared to their high-revenue peers. Per-pupil funding, as funding inequities are often measured, can significantly impact the resources that schools provide to students. To provide equitable levels of funding across all districts, states typically distribute larger amounts of funding to low-income districts that often have difficulty raising adequate funds to support student needs.

In the following report, Hanover Research reviews recent research on equitable public education funding and the ways in which equitable school funding affects student academic outcomes, before introducing the methods that states use to ensure funding equity, commonly by allocating more funding to low-income districts. This report is comprised of the following two sections:

- **Section I: Literature Review** provides an overview of the recent literature on public education funding, including the definition and impact of equitable school funding, benefits associated with equitable funding, and how states are addressing inequitable funding, including Wisconsin.
- **Section II: State Profiles** reviews state trends in public education funding, before profiling four states – Minnesota, Ohio, Michigan, and New Jersey – that are recognized by their efforts in addressing inequities in school funding.

## KEY FINDINGS

- **Based on the literature we reviewed, equitable funding is generally referred to as the practice of distributing proportionally larger amounts of state funding to high-poverty districts.** Due to the lower amount of revenue generated from local taxes, especially from property taxes, high-poverty schools often receive significantly less funding from local revenue sources compared to their low-poverty peers. However, the disparity in local taxes is usually at least partially made up through a combination of state and federal funding.
- **The average amount of per-pupil funding varies greatly by state.** The Education Law Center in New Jersey, an advocate for equal educational opportunities for children, estimates that across the United States, education funding per pupil ranges from as high as \$17,331 in Alaska to as low as \$5,746 in Idaho.
- **Research suggests that equitable funding may be associated with improved student achievement.** The amount of money that states spend on education per pupil appears to have a significant impact on academic outcomes, particularly among low-income students. More funding in low-income districts allows their schools to provide improved services, such as offering smaller classes, highly-

qualified teachers, and early childhood education, to better serve underrepresented students, promoting positive student outcomes.

- **A notable number of states use dynamic funding formulas to provide equitable funding.** These formulas consider multiple funding factors, such as average income, the number of students with disabilities, and the number of English language learners, when distributing state education funding to districts. For example, Ohio's public school funding formula considers student demographics, property value, and district income when calculating the amount of funding available for each district within the state. In establishing funding formulas, the Education Law Center of Pennsylvania found that 46 states within the United States consider individual district factors, 29 states consider districts' tax disparities, and 27 states consider district sizes.
- **In Wisconsin, most school districts receive between 70 and 90 percent of their overall funding from a combination of state general aid and local property tax revenue.** These revenues are capped by a revenue limit, which was designed to ensure equity in funding across districts. The revenue limit caps the year-to-year revenue growth for each school district based on the district's three-year rolling average of student enrollment. The state currently uses district revenues in 1993 as the baseline for revenue limit calculations.
- **Research indicates that the revenue limit may favor high-income districts.** One report found that the per-pupil revenue limits in some Wisconsin districts did not increase at the same rate as the rate of the population increase for low-income students, English language learners, students receiving special education services, and students receiving free or reduced price lunch between 2004 and 2011. As a result, the discrepancy between the actual funding levels for these student groups and the funding levels recommended by the National Center for Education Statistics increased in these districts over time. In addition, data from Wisconsin and elsewhere indicates that political ideology and district size are more likely to impact the success of a limit override referendum attempt than socio-economic status. However, property wealthy districts tend to receive higher property tax support from the state through the School Levy Tax Credit and First Dollar Credit programs, in which the state pays a portion of the property taxes levied by the district.
- **The financial impacts of voucher programs on individual school districts can be substantial.** In Wisconsin, voucher programs are funded by reductions in state aid, and districts will not be allowed to increase local revenues beyond the amount of money directly lost to student vouchers starting from the 2016-2017 school year. Therefore, certain districts with a large number of students using school vouchers are anticipated to experience substantial reductions in overall funding. In addition, funding for other districts in the state may decline as voucher enrollment caps increase over the next few years.

## SECTION I: LITERATURE REVIEW

In the following section of the report, Hanover Research discusses the definition of equitable school funding, the ways in which inequitable school funding affects student performance, and the methods that states are currently using to address inequitable funding.

### DEFINING EQUITABLE FUNDING

A 2011 report by the U.S. Department of Education estimated that up to 40 percent of school districts receiving Title I-funding receive a disproportionately lower level of state and local funding compared to their higher-income peers.<sup>1</sup> Many districts receive the majority of their funding through local property taxes, but because low-income families tend to live in communities with lower property values and a smaller tax base, their local public schools appear to receive less funding per student from local taxes.<sup>2</sup>

According to the literature reviewed, **equity in public education is generally referred to as the practice of distributing a greater amount of resources to high-poverty districts.** High-poverty schools often receive significantly less funding compared to their low-poverty peers, primarily due to the less revenue received from property taxes. However, the disparity in local tax funding is often at least partially made up through a combination of state and federal funding.<sup>3</sup>

Although the discussion on equitable funding in schools largely hinges upon inequities between high- and low-poverty school districts, states may assess equity in public school funding using a variety of metrics aside from poverty. The Education Law Center in New Jersey outlines the following metrics from its 2016 National Report Card for measuring annual school funding:<sup>4</sup>

- **Funding Level:** This measures the overall level of state and local revenue provided to school districts, and compares each state's average per-pupil revenue with that of other states. To recognize the variety of interstate differences, each state's revenue level is adjusted to reflect differences in regional wages, poverty, economies of scale, and population density.
- **Funding Distribution:** This measures the distribution of funding across local districts within a state, relative to student poverty. The measure shows whether a state provides more or less

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<sup>1</sup> "More Than 40% of Low-Income Schools Don't Get a Fair Share of State and Local Funds, Department of Education Research Finds." U.S. Department of Education, November 30, 2011. <http://www.ed.gov/news/press-releases/more-40-low-income-schools-dont-get-fair-share-state-and-local-funds-department-education-research-finds>

<sup>2</sup> Lafortune, J., J. Rothstein, and D.W. Schanzenbach. "Can School Finance Reforms Improve Student Achievement?" *Equitable Growth*, March 16, 2016. <http://equitablegrowth.org/can-school-finance-reforms-improve-student-achievement/>

<sup>3</sup> Baker, B.D. and S.P. Corcoran. "The Stealth Inequities in School Funding." Center for American Progress, September 2012. p. 3. <https://www.americanprogress.org/wp-content/uploads/2012/09/StealthInequities.pdf>

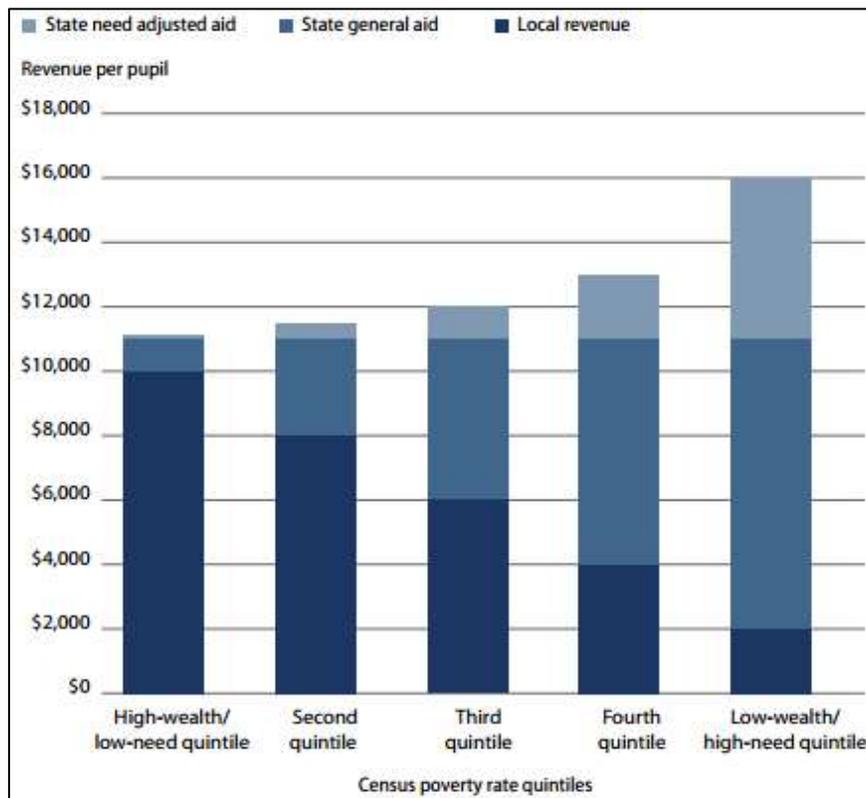
<sup>4</sup> Bullets taken verbatim from: Baker, B. et al. "Is School Funding Fair? A National Report Card." Education Law Center, March 2016. p. 2. [http://www.schoolfundingfairness.org/National\\_Report\\_Card\\_2016.pdf](http://www.schoolfundingfairness.org/National_Report_Card_2016.pdf)

funding to schools based on their poverty concentration, using simulations ranging from 0 percent to 30 percent child poverty.

- **Effort:** This measures differences in state spending for education relative to state fiscal capacity. “Effort” is defined as the ratio of state spending to gross state product (GSP).
- **Coverage:** This measures the proportion of school-aged children attending the state’s public schools, as compared with those not attending the state’s public schools (primarily parochial and private schools, but also home schooled). The share of the state’s students in public schools and the median household income of those students is an important indicator of the distribution of funding relative to student poverty (especially where more affluent households simply opt out of public schooling), and the overall effort to provide fair school funding.

A graph portraying a hypothetical need-based, wealth-equalized state funding formula is presented below in Figure 1.1. As shown, low-income districts typically receive the least amount of funding from local taxes and thus depend on state need-adjusted and general funding the most. Meanwhile, high-wealth districts receive the vast majority of their school funding from local revenues.

**Figure 1.1: Hypothetical Need-Based, Wealth-Equalized State Aid Formula**



Source: Center for American Progress<sup>5</sup>

<sup>5</sup>Baker, B.D. and S.P. Corcoran., Op. cit. p. 4.

A 2013 *Education Week* article discusses some measures that states have undertaken to address funding inequities, such as adopting certain funding formulas designed to address funding inequities in public education.<sup>6</sup> However, a report commissioned by the U.S. Secretary of Education questioned the efficacy of these efforts, indicating that state funding formulas that use larger state-level contributions may still fail to fully address funding inequities across districts.<sup>7</sup>

## ISSUES WITH INEQUITABLE SCHOOL FUNDING

Both the Education Law Center in New Jersey and the Center for American Progress have noted several issues associated with inequitable school funding, including the lack of well-qualified teachers, larger class sizes, and the lack of early childhood education.

## TEACHER QUALITY

Inequitable school funding may hamper low-income schools' ability to hire well-qualified, veteran teachers. Disparities in school funding often lead to disparities in teacher salaries.<sup>8</sup> An article published by the Center for American Progress found that employing low-paid teachers in high-poverty schools exacerbated the pre-existing issue associated with low per-pupil funding.<sup>9</sup> By increasing base teacher salaries, which account for the majority of school budgets, schools within low-income districts would be able to attract well-qualified teaching staff. The Education Law Center notes that "one of the most important ways that states can ensure that teaching jobs remain desirable in the job market is to provide competitive wages."<sup>10</sup>

In addition, a 2011 report by the Stanford Center for Opportunity Policy in Education (SCOPE) suggests that inequities in funding make it difficult for low-income districts to pay competitive salaries to teachers. This report, which examined teacher salaries in New York and California during the 2008-2009 school year, found that inequitable funding led to substantial variations in the salaries of teachers with similar levels of education and experience across school districts, with high-income districts offering much higher salaries to teachers in the same labor market.<sup>11</sup>

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<sup>6</sup> Brown, C.G. "How to Make School Funding Fair." *Education Week*, May 22, 2013. <http://www.edweek.org/ew/articles/2013/05/22/32brown.h32.html>

<sup>7</sup> "For Each and Every Child: A Strategy for Education Equity and Excellence." The Equity and Excellence Commission, February 2, 2013. p. 17. <http://www2.ed.gov/about/bdscomm/list/eec/equity-excellence-commission-report.pdf>

<sup>8</sup> Adamson, F. and L. Darling-Hammond. "What It Will Take To Get Qualified, Effective Teachers in All Communities." Stanford Center for Opportunity Policy in Education, December 2011. p. 2. [https://edpolicy.stanford.edu/sites/default/files/publications/addressing-inequitable-distribution-teachers-what-it-will-take-get-qualified-effective-teachers-all-\\_1.pdf](https://edpolicy.stanford.edu/sites/default/files/publications/addressing-inequitable-distribution-teachers-what-it-will-take-get-qualified-effective-teachers-all-_1.pdf)

<sup>9</sup> "Equal Funding for School Districts: Improving Comparability Requirements." Center for American Progress, June 18, 2008. <https://www.americanprogress.org/issues/education/news/2008/06/13/4535/equal-funding-for-school-districts-improving-comparability-requirements/>

<sup>10</sup> Baker et al., Op. cit., p. 15.

<sup>11</sup> Adamson and Darling-Hammond, Op. cit., pp. 1–2.

## CLASS SIZES

In addition, inequitable school funding may impact the overall staffing ratios and class sizes in low-income schools. Districts serving a large population of disadvantaged students may need additional staff in roles such as literacy and math specialists, instructional coaches, counselors, and nurses. In addition, smaller overall class sizes may help reduce inequities between the performances of low- and high-poverty students. According to a metric developed by the Education Law Center in New Jersey, 22 states in the United States have substantially lower average student-to-teacher ratios in high-poverty districts compared to other states nationwide, while eight states (Wisconsin, Maryland, Pennsylvania, Louisiana, Connecticut, Florida, Rhode Island, and Nevada) are “regressive” and have the highest student-to-teacher ratios in high-poverty districts. In addition, the Education Law Center identified 18 states that have no substantial difference in average student-to-teacher ratios between low- and high-poverty districts.<sup>12</sup>

## EARLY CHILDHOOD EDUCATION

The Education Law Center in New Jersey argues that early childhood education should be treated as a critical aspect of equitable public education, particularly for low-income students and families. Its 2016 National Report Card notes that, “...low-income children often come to school lagging behind their peers academically. High-quality preschool programs can help reduce those gaps.”<sup>13</sup> However, despite the important role of early childhood education in reducing the achievement gap between low- and high-income children, the Center reports that only a few states enroll more low-income students than high-income students in early childhood education programs.<sup>14</sup>

## EFFECTS OF EQUITY FUNDING ON ACADEMIC OUTCOMES

**Increased funding to low-income districts may result in significant improvement in academic outcomes.** A 2016 review of existing research on K-12 education spending, published by the Albert Shanker Institute, a research organization sponsored by the American Federation of Teachers, asserts that, “on average, aggregate measures of per-pupil spending are positively associated with improved or higher student outcomes.”<sup>15</sup> Education resources traditionally associated with well-funded school districts – low student-to-teacher ratios, early childhood education programs, and well-paid, highly qualified teachers – are often correlated with positive student outcomes. Therefore, this study concludes that, “sustained improvements to the level and distribution of funding across local public school districts can lead to improvements in the level and distribution of student outcomes.”<sup>16</sup>

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<sup>12</sup> Baker et al., *Op. cit.*, p. 15.

<sup>13</sup> *Ibid.*, p. 14.

<sup>14</sup> *Ibid.*

<sup>15</sup> Baker, B. “Does Money Matter in Education?” Albert Shanker Institute, January 20, 2016.  
<http://www.shankerinstitute.org/resource/does-money-matter>

<sup>16</sup> *Ibid.*

In addition, a 2014 study published by the National Bureau of Economic Research examined the impact of school finance reforms on long-term student outcomes. The study linked school spending and reform data to the longitudinal data on a nationally representative sample of over 15,000 students, who were born between 1955 and 1985 and followed through 2011 for this study. The authors examined the impact of changes in school funding on student achievement, and the results of the study indicated that increases in per-pupil spending had a significant, positive impact on the educational outcomes of low-income children. Specifically, the study associated a 20 percent increase in per-pupil spending each year for the entire 12 years of public school with an “additional year of completed education, 25 percent higher earnings, and a 20 percentage point reduction in the annual incidence of poverty in adulthood for low-income children.”<sup>17</sup>

### EQUITABLE FUNDING AND STATE ASSESSMENTS

**The amount of money that states spend on education per pupil may impact student achievement as measured by standardized test scores, particularly for low-income students.**<sup>18</sup> A 2014 article published in *Education Week* reviewed the recent research by the Boston Consulting Group (BCG) that examined the relationship between state funding policies and student scores on the National Assessment of Educational Progress (NAEP). BCG noted that the most statistically robust finding in its analysis “was the role of increased funding equity in student outcomes.” In particular, it noted that an increase of 20 points in the ratio used to calculate equity was correlated with an increase of 2 points on NAEP reading scores for Grade 4 students from low-income households.<sup>19</sup>

The BCG research confirmed that increased overall per-pupil spending led to positive reading outcomes for students in Grade 4. More specifically, the BCG statistical model calculated that an increase of \$1,000 in per-pupil funding was correlated with an increase of 0.42 points on low-income students’ Grade 4 NAEP reading scores. In addition, BCG found that proportional increases of state-provided school funding were correlated with increased NAEP outcomes. In addition, low-income students’ Grade 8 math scores also increased by 1 percent alongside each 20 percent increase in state-provided school funding.<sup>20</sup>

### STATE APPROACHES TO EQUITABLE FUNDING

To equitably allocate state funding among students, especially among low-income students, states often use dynamic funding formulas. Data from a 2015 study conducted by the Education Trust indicates that states allocate an average of \$1,200 less per pupil to high-poverty districts compared to low-poverty districts. When accounting for the additional

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<sup>17</sup> Jackson, C.K., R. Johnson, and C. Persico. “The Effect of School Finance Reforms on the Distribution of Spending, Academic Achievement, and Adult Outcomes.” National Bureau of Economic Research Working Paper, May 2014. p. 4. [http://socrates.berkeley.edu/~ruckerj/Jackson\\_Johnson\\_Persico\\_SFR\\_LRImpacts.pdf](http://socrates.berkeley.edu/~ruckerj/Jackson_Johnson_Persico_SFR_LRImpacts.pdf)

<sup>18</sup> Puckett, M.G., J. and M. Ryder. “Equity Is the Key to Better School Funding.” *Education Week*, February 19, 2014. <http://www.edweek.org/ew/articles/2014/02/19/21puckett.h33.html>

<sup>19</sup> Ibid.

<sup>20</sup> Ibid.

costs associated with educating students in high-poverty districts, the difference in state spending on high-poverty districts increased to approximately \$2,200 per pupil.<sup>21</sup> However, a recent study of school funding by National Public Radio (NPR) found that the increased state funding for high-poverty schools in most states was not enough to make up the gaps in local revenues.<sup>22</sup>

## DYNAMIC FUNDING FORMULAS

**Dynamic funding formulas allow states to provide an adequate amount of education funding to students with different skills and needs.**<sup>23</sup> States commonly use “data-driven, cost-based education funding formulas” to allocate funds across districts to meet different student needs. For instance, a 2013 report from the Education Law Center of Pennsylvania recommends that the State of Pennsylvania establish a dynamic funding formula to increase funding accuracy and transparency within its department of education.<sup>24</sup> However, not all states use such formulas.

**Nevertheless, without considering the differences of individual districts and schools, state funding formulas may become inequitable.**<sup>25</sup> In creating funding formulas designed to distribute state funds equitably across districts of different sizes, demographics, and locations, states often consider the following factors:<sup>26</sup>

- Students’ learning needs as affected by poverty, disabilities, or English language proficiency;
- District characteristics, including education costs affected by cost of living (i.e., higher cost of living, higher education costs); and
- District ability to raise revenue through local property taxes.

In addition to specific district characteristics, common state funding formulas often include three components: base-cost, formula factors, and adequacy goals. Appendix A at the end of this report provides a detailed overview of these components for all 50 states, including the weights assigned for low-income students, district poverty factors, and states’ current practices on calculating adequacy targets.

Specifically, the **base-cost** of the funding formula indicates the basic funding necessary for students to meet individual state academic standards. The Education Law Center of

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<sup>21</sup> “Is Our School Funding Equitable?” Center for Public Education. <http://www.data-first.org/data/is-school-funding-equitable/>

<sup>22</sup> “Why America’s Schools Have A Money Problem.” NPR, April 18, 2016.

<http://www.npr.org/2016/04/18/474256366/why-americas-schools-have-a-money-problem>

<sup>23</sup> “School Funding.” Advance Illinois. <http://www.advanceillinois.org/policy-areas/school-funding/>

<sup>24</sup> “Funding, Formulas, and Fairness: What Pennsylvania Can Learn from Other States’ Education Funding Formulas.”

Education Law Center, February 2013. p. i. [http://www.elc-pa.org/wp-content/uploads/2013/02/ELC\\_schoolfundingreport.2013.pdf](http://www.elc-pa.org/wp-content/uploads/2013/02/ELC_schoolfundingreport.2013.pdf)

<sup>25</sup> Ibid.

<sup>26</sup> Bullets adapted from Ibid.

Pennsylvania found that 36 states used base-cost estimates in building their funding formulas.<sup>27</sup>

In addition, **formula factors** direct state funding towards students who need additional resources. These formula factors are calculated using two variables: student factors and district factors, both of which are weighted. For example, a state that applies a 1.5 weight for student poverty would multiply the base-cost by 1.5 for that specific student group. According to the Education Law Center of Pennsylvania, 30 states employed student factors for low-income students specifically, and 37 states employed *at least one* student factor in their funding formulas (states may apply multiple factors at once). States may also apply weights to English language learners and/or students with disabilities.<sup>28</sup> Meanwhile, district factors consider the differences in individual districts' property taxes and district sizes. The Education Law Center of Pennsylvania indicates that among the 46 states employing at least one district factor, 29 states considered district factors specifically for taxes and 27 considered factors specifically for district sizes.<sup>29</sup>

Finally, **adequacy goals** address potential gaps between current funding and the funding needed for students to receive adequate education. They allow states to monitor student data and costs, help states continually reallocate funds to districts in need, and identify districts with "adequacy gaps" or the funding amount necessary to bridge the difference between a district's current funding and the amount needed to facilitate student success. The Education Law Center of Pennsylvania found that 12 states considered adequacy goals when building their funding formulas.<sup>30</sup>

## SCHOOL FUNDING IN WISCONSIN

In Wisconsin, schools are funded primarily through a combination of general state aid, federal aid, and local property tax levies:<sup>31</sup>

- **State Aid:** Most state funding is distributed using an equalization formula, which aims to guarantee a minimum per-pupil tax base. The equalization formula allocates greater amounts of state funding to districts with a lower ability to pay their bills through property taxes. In addition, Wisconsin distributes categorical aid to districts to support specific educational programs, such as special education programs.
- **Local Property Taxes:** Under the equalization formula, districts with a higher property tax rely more on local property tax revenue. Property owners in districts that rely heavily on local property taxes receive some property tax relief through

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<sup>27</sup> Ibid., p. 5.

<sup>28</sup> Ibid.

<sup>29</sup> Ibid., p. 6.

<sup>30</sup> Ibid.

<sup>31</sup> Bulleted text adapted from: "School Finance 101." Wisconsin Association of School Boards, 2012. pp. 6–9.  
[http://www.ddschools.org/UserFiles/Servers/Server\\_9594/File/District/Referendum/WASB\\_School\\_Finance\\_101.pdf](http://www.ddschools.org/UserFiles/Servers/Server_9594/File/District/Referendum/WASB_School_Finance_101.pdf)

two measures – the School Levy Tax Credit and the First Dollar Credit programs. In both cases, the state pays a portion of the property taxes levied by the district.

- **Federal Aid:** Most federal aid to schools is distributed through the Individuals covered by the Disabilities Education Act (IDEA), Title I, and other federal programs.

According to the Wisconsin Department of Public Instruction (DPI), state and local funding sources typically make up between 70 and 90 percent of districts' general fund revenues.<sup>32</sup> In 2015, the DPI proposed to reform the state's funding formula to establish a minimum state funding level of \$3,000 per student and include a poverty factor to increase funding for districts with high student poverty rates.<sup>33</sup> However, the proposed reforms do not appear to have been enacted as of April 2016.<sup>34</sup> In addition to state aid and local property tax revenues, some districts also receive small amounts of revenue through fees, athletic ticket sales, grants, and/or student transfer payments.<sup>35</sup>

**A defining feature of public education financing in Wisconsin is the revenue limits on general state aid and local property tax levies.**<sup>36</sup> First enacted in 1993, the revenue limit law caps the year-to-year revenue growth for each school district based on the district's three-year rolling average of student enrollment, as well as adjustments for inflation.<sup>37</sup> The purpose of the revenue limit law is to ensure that low property wealth districts receive comparable levels of total funding compared to high property wealth districts. However, over the course of time, the state stopped adjusting the revenue limit to the rate of inflation. In fact, during the last biennial budget (2015-17), there was zero inflationary increase.<sup>38</sup> Figure 1.2 below demonstrates the calculation process of district revenue limit in Wisconsin as of December 2015. The law uses the 1993 revenues as the base year for calculation. The revenue limit law also includes a "low-revenue adjustment" provision that allows districts below a low-revenue ceiling (\$9,100 in 2013-14) to raise additional funds in excess of the revenue limit.<sup>39</sup>

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<sup>32</sup> "Revenue Limits." Wisconsin Department of Public Instruction. <http://dpi.wi.gov/sfs/limits/overview>

<sup>33</sup> "School Finance Reform Overview: 2015-17." Wisconsin Department of Public Instruction. <http://dpi.wi.gov/sites/default/files/imce/budget/fairfunding/pdf/f3overview-2014.pdf>

<sup>34</sup> "A Summary of Recent Legislative Action on Education." Wisconsin Council on Children and Families, March 21, 2016. <http://www.wisconsinbudgetproject.org/a-summary-of-recent-legislative-action-on-education>

<sup>35</sup> "School Finance 101," Op. cit., p. 9.

<sup>36</sup> "Revenue Limits," Op. cit.

<sup>37</sup> Kava, R. and R. Olin. "Local Government Expenditure and Revenue Limits." Wisconsin Legislative Fiscal Bureau, January 2015. pp. 2–3. [https://docs.legis.wisconsin.gov/misc/lfb/informational\\_papers/january\\_2015/0012\\_local\\_government\\_expenditure\\_and\\_revenue\\_limits\\_informational\\_paper\\_12.pdf](https://docs.legis.wisconsin.gov/misc/lfb/informational_papers/january_2015/0012_local_government_expenditure_and_revenue_limits_informational_paper_12.pdf)

<sup>38</sup> Updated information provided by the Southeast Wisconsin Schools Alliance.

<sup>39</sup> Amiel, L., J. Knowles, and A. Reschovsky. "The Political Economy of Voter Support for School Property Taxation." La Follette School of Public Affairs (University of Wisconsin), May 2016. p. 25. <http://www.lafollette.wisc.edu/images/publications/workingpapers/reschovsky-2016-003.pdf>

**Figure 1.2: Wisconsin Revenue Limit Calculation Process**

STEP	DESCRIPTION	EXAMPLE
Step 1	The revenue base is created by summing the district's General Aid amounts and local levies for General Operations (Fund 10), Capital Projects (Fund 41), and Non-Referendum Debt (Fund 38) from the previous year. The per-member revenue base is computed by dividing the revenue base by a "base" membership average. The "base" membership average is defined as an average of the district's most recent three September FTE membership counts, excluding the current year for which the limit is being calculated. (Districts are also allowed to add 40% of their FTE summer school membership to the September FTE membership before computing the three year average.)	Assume a district received \$3,000,000 in General Aid and levied a total of \$2,850,000 for Funds 10, 41, and 38 in the previous year. This district's revenue base would be \$5,850,000. Then, assuming the base membership average for this district was 650 $((600+650+700)/3)$ , the per-member revenue base would be \$9,000 $(\$5,850,000/650)$ .
Step 2	State law provides for every district to add a per-pupil inflationary index at this point to the per-member revenue base from Step 1.	Assuming the inflationary increase was \$250 per member, our sample district's per-member revenue base of \$9,000 would be increased by \$250. The result, \$9,250 per member, is known as the "maximum allowable revenue per member." An additional provision was added to this step in 1995-96. Recognizing the variation in per-member maximum revenue numbers across the state, the legislature established a "minimum" amount for the result in Step 2. If a district's per-member revenue amount from Step 2 (after adding the inflationary increase) was less than an established per-member minimum, the district's per-member allowable revenue amount would be increased to the minimum amount.
Step 3	Compute a "current" three-year membership average. This average uses the 2 previous year's membership plus membership for the current year, the year for which the limit is being calculated. Again, districts are allowed to add 40% of their FTE summer school membership to the FTE September membership before computing the three year average.	So, assuming the three years of data are 650, 700, and 675, the "current membership average" computation would be $((650 + 700 + 675) / 3)$ , getting a result of 675.
Step 4	Compute the "maximum allowable revenue" by multiplying the maximum allowable revenue per member (\$9,250) by the new three-year average (675), resulting in \$6,243,750 $(\$9,250 \times 675)$ . An additional provision was added to this step beginning with the 2007-08 Revenue Limit calculation: If the district's result in Step 4 is less than the district's base number from Step 1, the district could increase the number used in Step 4 to equal that of Step 1. The amount of the increase becomes an extra amount the district can levy just for the current year. Districts qualifying for this extra amount are those with severely-declining enrollment. Our sample district would not qualify for this extra amount because the amount from Step 4 (\$6,243,750) exceeded that of Step 1 (\$5,850,000).	The total amount of revenue limit authority allowed in the new year for our sample district at up to this point is \$6,243,750. The amount just calculated can further be increased if various factors are occurring within the district. They may include: new costs when a district attaches property from another district, costs of new service responsibilities assumed from another governmental unit, loss of Federal Impact Aid funds, referenda-approved increases in the revenue limit for operating expenses, increases allowed for declining enrollment, increases for implementing energy efficiency measures and, beginning in 2012-13, increases allowed to reflect resident pupils who attended a non-resident district under Open Enrollment in the prior year and should have been included in the resident district's prior year pupil count, but were not counted.

Source: Wisconsin Department of Public Instruction<sup>40</sup>

<sup>40</sup> Chart content taken verbatim from: "Revenue Limit Formula." Wisconsin Department of Public Instruction, December 8, 2015. <http://dpi.wi.gov/sfs/limits/revenue-limit-formula>

Districts may obtain recurring or non-recurring exemptions to the revenue limit through a referendum or upon securing the approval from the DPI and raise additional funds through non-controlled levies, including referendum-approved debt, community service funding, and prior-year levy chargebacks. In addition, districts in Wisconsin are allowed to levy less than the revenue limit.<sup>41</sup> Moreover, the DPI provides computer aid funding to replace a local property tax exemption for computer equipment and software. However, this funding is subject to the overall revenue limit and will be deducted from the local property tax base.<sup>42</sup> Figure 1.3 below illustrates Wisconsin’s revenue limit exemptions listed on the DPI’s website.

**Figure 1.3: Wisconsin Revenue Limit Exemptions**

EXEMPTION	DESCRIPTION
Energy Efficiencies <sup>43</sup>	Districts may obtain a non-recurring revenue limit exemption to finance projects that will improve energy efficiency.
Transfer of Service <sup>44</sup>	Districts may obtain an exemption for students in need of special services who transfer from another program or district. However, the 2015 budget does not allow a Transfer of Service exemption for students who transfer from open enrollment programs.

Source: Wisconsin Department of Public Instruction<sup>45</sup>

Wisconsin’s revenue limit policy appears to be somewhat uncommon, when compared to other states across the United States. According to a 2013 article in *Governing the States and Localities*, a magazine focused on state and local governments, only five states had explicit revenue limits for school districts in 2013. Limitations specifically on local property tax revenues were substantially more common across the country, with 47 states reporting these limits in 2013.<sup>46</sup>

### EQUITY IMPACTS OF SCHOOL FUNDING IN WISCONSIN

Critics of Wisconsin’s school funding policy argue that the revenue limit policy results in inequitable school funding. A study of school funding in Wisconsin from 2004-2011, prepared by the Forward Institute on behalf of the Association for Equity in Funding, an organization that advocates for reforms in general state aid to reduce funding discrepancies across districts, found that districts with high student poverty rates had lower per pupil

<sup>41</sup> Ibid.

<sup>42</sup> “Computer Aid.” Wisconsin Department of Public Instruction, July 30, 2015. <http://dpi.wi.gov/sfs/limits/computer-aid>

<sup>43</sup> “Revenue Limit Exemption for Energy Efficiencies.” Wisconsin Department of Public Instruction, December 31, 1969. <http://dpi.wi.gov/sfs/limits/exemptions/overview>

<sup>44</sup> “Transfer of Service.” Wisconsin Department of Public Instruction, April 20, 2015. <http://dpi.wi.gov/sfs/limits/exemptions/transfer-service>

<sup>45</sup> Chart contents adapted from: “Exemptions.” Wisconsin Department of Public Instruction, December 8, 2015. <http://dpi.wi.gov/sfs/limits/exemptions>

<sup>46</sup> Scott, D. “Property Tax Revenue Limits Squeeze School Budgets.” *Governing The States and Localities*, February 6, 2013. <http://www.governing.com/blogs/view/gov-revenue-limits-put-squeeze-on-wisconsin-schools.html>

revenue limits (PPRs) compared to their peers. In addition, this report noted that decreases in state general aid had forced school districts to increase local tax levies, creating a disproportionate impact on districts with low property wealth.<sup>47</sup>

In the study, the Forward Institute assessed the impact of state funding on the financial support available for students receiving free or reduced price lunch (FRL), English language learners (ELLs), and students with special needs (SpN) by calculating an index of the disparity between the actual per-student funding for these student groups and the funding levels recommended by the National Center for Education Statistics in 1997.<sup>48</sup> Disparity in funding for FRL students increased across the state from an average disparity of 17 percent in 2004 to an average disparity of 34 percent in 2011, partially due to an increase in the percentage of FRL students during this time. This increase in disparity was higher in districts with high FRL rates, and lower in districts with relatively low FRL rates. The study also found that disparity in funding for SpN students remained largely stable in suburban districts with low initial disparities in funding, but increased in rural districts with higher initial funding disparities. In addition, funding disparities for ELL students increased substantially in districts with disproportionate increases in the percentage of ELL students, but remained stable in districts that did not see an increase in the percentage of ELL students above the statewide average.<sup>49</sup>

In additional, **research studies have shown that the revenue limit law and school levy tax credit tend to favor property-wealthy districts more than property poor districts.** A May 2016 study published by the La Follette School of Public Affairs at the University of Wisconsin-Madison analyzed the characteristics of the districts that attempted to override the revenue limit through a popular referendum. Between 2002 and 2012, there were 483 cases of districts proposing one or more revenue limit override referenda, of which 265 passed (54.9 percent).<sup>50</sup> This study found that successful cases increased per-pupil revenue variation across districts by 14 percent compared to a model in which no override referenda occurred.<sup>51</sup> School districts with larger populations of elderly voters, Democratic voters, and wealthier families were more likely to attempt a limit override referendum. In addition, districts were more likely to hold an override referendum if a district within the same athletic conference successfully passed an override referendum within the prior two years.<sup>52</sup>

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<sup>47</sup> Wittkopf, S. et al. "Segregation of Opportunity: Education Funding." Forward Institute, on behalf of the Association for Equity in Funding. p. 6. <http://www.forwardinstitutewi.org/wp-content/uploads/2014/09/AEF-Funding-Study-FINAL.pdf>

<sup>48</sup> Ibid., p. 11.

<sup>49</sup> Ibid., pp. 11–16.

<sup>50</sup> Note: During this period, 599 separate override referenda were held. However, in some year, single districts proposed multiple referenda. Similarly, some districts proposed referenda multiple times during this period. This study used districts as the unit of analysis, thus focusing on the 483 cases in which a district proposed one (or more) referenda in any year during that period. Amiel, Knowles, and Reschovsky, Op. cit., p. 6.

<sup>51</sup> Ibid., p. 27.

<sup>52</sup> Ibid., pp. 18–19.

Interestingly, studies have also found that “standard economic, demographic, and political variables do little to explain the outcomes of override referenda.”<sup>53</sup> Instead, the 2016 La Follette School study discovered that districts were more likely to succeed in their referendum override if they were small, had success in previous overrides via referendum, and are located next to a district that successfully passed an override referendum or in the same athletic conference as a successful district.<sup>54</sup> Studies examining referenda in other states have found that referenda to fund capital projects and districts with higher proportions of Democratic voters are more likely to succeed in their attempts.<sup>55</sup>

In another study published by the La Follette School in 2010, Dr. Andrew Reschovsky showed how the school levy tax credit and first dollar credit favor the owners of expensive properties, including owners of second/vacation properties and out-of-state property owners. Using the 2008-09 data, Reschovsky calculated the school levy tax credit per student in districts of varying property values, as shown in Figure 1.4 below.

**Figure 1.4: School Levy Credit per Student (2008-09)**

EQUALIZED PROPERTY VALUE PER STUDENT	NUMBER OF DISTRICTS	NUMBER OF STUDENTS	PERCENTAGE OF STUDENTS	SCHOOL LEVY CREDIT PER STUDENT
Less than \$250,000	3	8,202	1.0%	\$375
\$250,000-\$324,000	24	22,900	2.7%	\$452
\$325,000-\$400,000	84	203,871	23.7%	\$573
\$400,000-\$499,000	86	221,697	25.8%	\$656
\$500,000-\$749,000	127	250,698	29.1%	\$929
\$750,000-\$999,999	47	106,664	12.4%	\$1,384
\$1,000,000-\$1,999,999	33	37,442	4.4%	\$1,823
\$2,000,000 and over	21	8,903	1.0%	\$2,596
Total	425	860,377	100.0%	\$869 (average)

Source: La Follette School of Public Affairs<sup>56</sup>

## VOUCHER EXPANSION PROGRAMS

According to the National Conference of State Legislatures, the District of Columbia and 13 states have enacted state-funded school voucher programs.<sup>57</sup> **Many proponents of equity public school funding oppose voucher expansion programs**, arguing that the funds should be better spent on improving public school education instead of diverting students to

<sup>53</sup> Ibid., p. 4.

<sup>54</sup> Ibid., p. 20.

<sup>55</sup> [1] Maher, C. and M. Skidmore. “Voter Responses to Referenda Seeking to Exceed Revenue Limits.” *Public Budgeting & Finance*, 29:2, Summer 2009.

[2] Shober, A. “Attracting Capital: Magnets, Charters, and School Referendum Success.” *Journal of School Choice*, 5:2, June 2011. Accessed via EbscoHost

<sup>56</sup> Table content adapted from: Reschovsky, A. “A Critical Review of Property Tax Relief in Wisconsin: The School Levy Credit and the First Dollar Credit.” La Follette School of Public Affairs, University of Wisconsin, January 20, 2010. p. 6. <https://www.lafollette.wisc.edu/images/publications/workingpapers/reschovsky2010-003.pdf>

<sup>57</sup> “School Voucher Laws: State-by-State Comparison.” National Conference of State Legislatures. <http://www.ncsl.org/research/education/voucher-law-comparison.aspx>

private schools.<sup>58</sup> Because most state funding formulas allocate education funding based on the number of students enrolled in public school districts, students moving to private schools as a result of a voucher program may reduce the state funding eligible for districts.<sup>59</sup>

The state of Wisconsin operates three voucher programs.<sup>60</sup> Among them, the Milwaukee Parent Choice Program (MPCP) and Racine Public Choice Program (RPCP) are available for students in Grades K-12 living in Milwaukee and Racine with a family income up to 300 percent of the federal poverty level. Especially, students must meet certain attendance and residence requirements to participate in the RPCP. Meanwhile, the Wisconsin Public Choice Program is available to students in Grades K-12 living elsewhere in Wisconsin with a family income up to 185 percent of the federal poverty level, although the Wisconsin state law limits the participation in the WPCP to 1 percent of all students enrolled in an individual school district for the 2016-2017 school year. If more than 1 percent of the students enrolled in a district decide to apply for the WPCP, students will be selected for participation through a random drawing, and the remaining students will be placed on a waiting list.<sup>61</sup> Under the current law, the enrollment cap will increase by 1 percent of the total enrollment per school year until reaching 10 percent of the total enrollment in the 2025-2026 school year. After that, the enrollment cap will be lifted.<sup>62</sup>

## FISCAL IMPLICATIONS OF WISCONSIN'S VOUCHER PROGRAMS

In Wisconsin, vouchers are funded by reductions in state aid, and districts are not allowed to increase property taxes to compensate for these reductions moving forward. However, since districts were historically allowed to increase the overall revenue limits, voucher programs may have had the effect of shifting funding from the state to the local level.<sup>63</sup>

For the 2015-2016 school year, the Wisconsin DPI reported that voucher programs in the state resulted in a total reduction in state funding of \$16,090,735 across all school districts, with an estimated increase in revenue limit authorities of \$21,374,926. However, many school districts in the state were not affected by Wisconsin's voucher programs, suggesting that such programs may have a disproportionate impact on districts. For example, the voucher program resulted in a reduction of \$4,164,500 in state funding for Racine Unified

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<sup>58</sup> Cortez, A. "Fair Funding of Schools." Intercultural Development Research Association, 2009.

[http://www.idra.org/IDRA\\_Newsletter/May\\_2009\\_Fair\\_Funding/Fair\\_Funding\\_of\\_Schools/](http://www.idra.org/IDRA_Newsletter/May_2009_Fair_Funding/Fair_Funding_of_Schools/)

<sup>59</sup> "Fiscal Impact of School Vouchers and Scholarship Tax Credits." 2013. National Conference of State Legislatures. p. 3. <http://www.ncsl.org/documents/educ/FiscalImpactOfPrivateSchoolChoice.pdf>

<sup>60</sup> "Private School Choice Programs: 2016-17 Student Applications." Wisconsin Department of Public Instruction, January 24, 2014. <http://dpi.wi.gov/sms/choice-programs/student-applications>

<sup>61</sup> "Private School Choice Programs." Wisconsin Department of Public Instruction. p. 1. <http://dpi.wi.gov/sites/default/files/imce/sms/Choice/PSCP-Brochure-2016-17.pdf>

<sup>62</sup> "MPCP Enrollment Cap." School Choice Wisconsin. <http://www.schoolchoicewi.org/index.php/research/issues/mpcp-enrollment-cap/>

<sup>63</sup> "2015 Choice Revenue Limit Authority and State Aid Reduction by District." Wisconsin Department of Public Instruction. Downloaded from: <http://sfs.dpi.wi.gov/sites/default/files/imce/sfs/xls/2015-16%20Choice%20Revenue%20Limit%20Authority%20and%20State%20Aid%20Reduction%20by%20District-Sort%20Alpha.xlsx>.

School District in the 2015-2016 school year, but an increase of \$5,580,980 in local revenue.<sup>64</sup>

**Due to the recent changes in the Wisconsin state law, school districts are no longer able to increase local property tax levies beyond the actual cost of student vouchers, beginning from the 2016-2017 school year.**<sup>65</sup> However, this policy will not affect Milwaukee Public Schools or districts without students receiving vouchers. Based on a brief reviewing the recent state legislation by the Wisconsin Council on Children and Families, an advocacy organization that supports programs for children in Wisconsin, this policy would have resulted in an overall reduction in local property tax funding of \$5.3 million across all districts in Wisconsin if it were implemented during the 2015-2016 school year. The Wisconsin Council on Children and Families reports that the fiscal impacts of this policy may increase as enrollment caps increase.<sup>66</sup>

Nevertheless, the effects of this change appear to be concentrated in school districts with particularly large voucher program enrollments. Figure 1.5 below shows the estimated reductions in funding for four districts that expect to experience large reductions in funding because of this policy change, anticipated by the Wisconsin Council on Children and Families.

**Figure 1.5: Estimated Reductions in District Funding Due to the Change in the Wisconsin School Voucher Program Policy, Selected District**

DISTRICT	ESTIMATED REDUCTION IN FUNDING
Racine Unified School District	\$1,400,000
Green Bay Area Public School District	\$315,000
Kenosha Unified School District	\$263,000
Appleton Area School District	\$219,000

Source: Wisconsin Council on Children and Families<sup>67</sup>

In addition, research has found that students attending private schools on state-funded vouchers might not be qualified. According to a 2013 report published by the *Pioneer Press*, the Wisconsin DPI reported that just 21 percent of students receiving a state-funded voucher attended public school the previous year. Over 70 percent of students who participated in Wisconsin’s voucher programs had attended a private school the year before receiving a voucher.<sup>68</sup>

<sup>64</sup> Ibid.

<sup>65</sup> “UPDATE: Wisconsin Senate Approves Voucher School Compensation Plan.” WMTV. <http://www.nbc15.com/home/headlines/Republicans-to-increase-school-funding-expand-vouchers-304305001.html>

<sup>66</sup> “A Summary of Recent Legislative Action on Education,” Op. cit., p. 1.

<sup>67</sup> Chart contents taken from: Ibid.

<sup>68</sup> “Most with Wisconsin Vouchers Didn’t Come from Public Schools.” *Pioneer Press* (St. Paul), October 29, 2013. <http://www.twincities.com/2013/10/29/most-with-wisconsin-vouchers-didnt-come-from-public-schools/>

## SECTION II: STATE PROFILES

In the following section, Hanover Research reviews the trends in state education funding distribution across the nation, before presenting the in-depth profiles of four exemplary states (Minnesota, Ohio, Michigan, and New Jersey) to demonstrate their efforts in equitably funding school districts.

### TRENDS IN STATE FUNDING FOR PUBLIC EDUCATION

**Per-pupil funding levels vary greatly throughout the United States.** According to the New Jersey Education Law Center’s 2016 National Report Card, “funding levels continue to be characterized by wide disparities among states.” The report card states that the per-pupil funding amount ranges from as high as \$17,331 in Alaska to as low as \$5,746 in Idaho. The Center details the differences in per-pupil funding between districts with no students below the poverty level and districts with 30 percent of students below the poverty level.<sup>69</sup>

The Education Law Center further determined that Delaware, Minnesota, Utah, and Ohio performed the best overall in equitably funding school districts, while Maine, Illinois, North Dakota, and Nevada performed the worst.<sup>70</sup> The report card notes that schools performing poorly on fairness measures often correlate with “poor state performance on key resource indicators, including less access to early childhood education, non-competitive wages for teachers, and higher teacher-to-pupil ratios.”<sup>71</sup>

Wisconsin ranks 15<sup>th</sup> out of 50 states in the 2016 report card and receives a “C” grade.<sup>72</sup> A complete list of the rankings for 2016 is available online. In particular, several of the states profiled in this report – Minnesota, Ohio, and New Jersey – were among the states that were given the highest fairness ratings.

In the 2012 fiscal year, the most recent year for which data was available, state governments distributed 45 percent of their total funding to public K-12 education in the United States, representing a total amount of approximately \$269 billion.<sup>73</sup> The percentage of state funding for public education also ranges greatly among the states profiled in this report, from 64.1 percent of the total school budget in Minnesota to 39.5 percent of the total school budget in New Jersey. In states that provide smaller percentages of funding to public schools, the difference is largely made up through local funding. Figure 2.1 below reviews the sources of funding for schools in the four states profiled, as well as in Wisconsin and the United States overall.

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<sup>69</sup> Baker et al., *Op. cit.*, p. 3.

<sup>70</sup> *Ibid.*, p. 5.

<sup>71</sup> *Ibid.*, p. 1.

<sup>72</sup> *Ibid.*, p. 5.

<sup>73</sup> Cornman, S.Q. “Revenues and Expenditures for Public Elementary and Secondary Education: School Year 2012-13 (Fiscal Year 2013).” National Center for Education Statistics, January 2016. p. C-2.  
<http://nces.ed.gov/pubs2015/2015301.pdf>

**Figure 2.1: Source of Revenues for Public Elementary and Secondary Schools, FY 2012**

STATE OR JURISDICTION	LOCAL (%)	STATE (%)	FEDERAL (%)
<b>United States</b>	<b>44.8</b>	<b>45.0</b>	<b>10.2</b>
Wisconsin	47.1	44.2	8.8
Minnesota	28.6	64.1	7.3
Ohio	46.2	44.3	9.6
Michigan	32.1	57.1	10.8
New Jersey	55.1	39.5	5.4

Source: National Center for Education Statistics<sup>74</sup>

Note: Information for all 50 states and additional jurisdictions within the United States can be found in the original source. For this report, sources of revenue were only included for Wisconsin, the U.S., and states profiled.

## MINNESOTA

In Minnesota, school districts receive approximately 65 percent of their funding from the state, 29 percent from local property taxes, and 6 percent from the federal government.<sup>75</sup> State funding comprises the general education revenue for each district determined by a funding formula as well as financial aids to equalize spending. For the 2015-2016 school year, each school district’s general education revenue covered the following funding categories:<sup>76</sup>

- Basic revenue;
- Extended time revenue;
- Declining pupil revenue;
- Local optional revenue;
- Compensatory revenue;
- English learner (EL) revenue;
- Gifted and talented revenue;
- Operating sparsity revenue;
- Small schools revenue;
- Transportation sparsity revenue;
- Operating capital revenue;
- Equity revenue; and
- Transition revenue.

<sup>74</sup> Ibid., pp. C2–C3.

<sup>75</sup> Magan, C. “Minnesota School Districts Win a Funding Breakthrough.” Twin Cities, May 14, 2015. <http://www.twincities.com/2015/05/14/minnesota-school-districts-win-a-funding-breakthrough/>

<sup>76</sup> “Minnesota School Finance: A Guide for Legislators.” Minnesota House of Representatives, December 2015. p. 2. <http://www.house.leg.state.mn.us/hrd/pubs/mnschfin.pdf>

## AVERAGE FUNDING PER PUPIL

Basic education revenue for each district equals the product of the formula allowance and the number of pupils served by the district for the school year. In the 2015-16 school year, schools in Minnesota received a formula allowance of \$5,948 per pupil, and in the 2016-17 school year, schools will receive a formula allowance of \$6,067 per pupil.<sup>77</sup> The state addresses funding disparities from property taxes through a uniform statewide limit on the property tax rate for schools and through an “equalizing factor,” as explained below.<sup>78</sup>

**Equalizing Factor:** The maximum amount of adjusted net tax capacity per pupil unit a district may have without going “off the formula” - that is, becoming disqualified from receiving that specific education aid. A district receives no education aid for that formula when the amount raised by the tax rate times its adjusted tax capacity exceeds its revenue (i.e., number of pupil units times the formula allowance). The equalizing factor is computed by dividing the formula allowance by the tax rate. Many school funding program formulas have a statutorily fixed equalizing factor.<sup>79</sup>

For the 2015-2016 school year, the equalizing factor increased per-pupil spending by 6 percent, on average.<sup>80</sup>

## OHIO

Multiple organizations, including the Education Law Center in New Jersey and the Center for American Progress, have recognized Ohio’s progressive education funding strategies as exemplary. The 2016 National Report Card from the Education Law Center identified Ohio as one of the most progressive states for directing funding towards low-poverty districts.<sup>81</sup> In addition, a 2012 report by the Center for American progress appraised Ohio’s performance in directing state funding to high-need districts while maintaining funding in low-poverty districts. The details of Ohio’s funding for public schools between 2007 and 2009 are shown in Figure 2.2 below.<sup>82</sup> Notably, the districts receiving the highest proportion of state funding – including state general, special, and other funding – are districts in the highest quintile of poverty.

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<sup>77</sup> Ibid., p. 18.

<sup>78</sup> Ibid., p. 2.

<sup>79</sup> Content taken verbatim from: Ibid., p. 8.

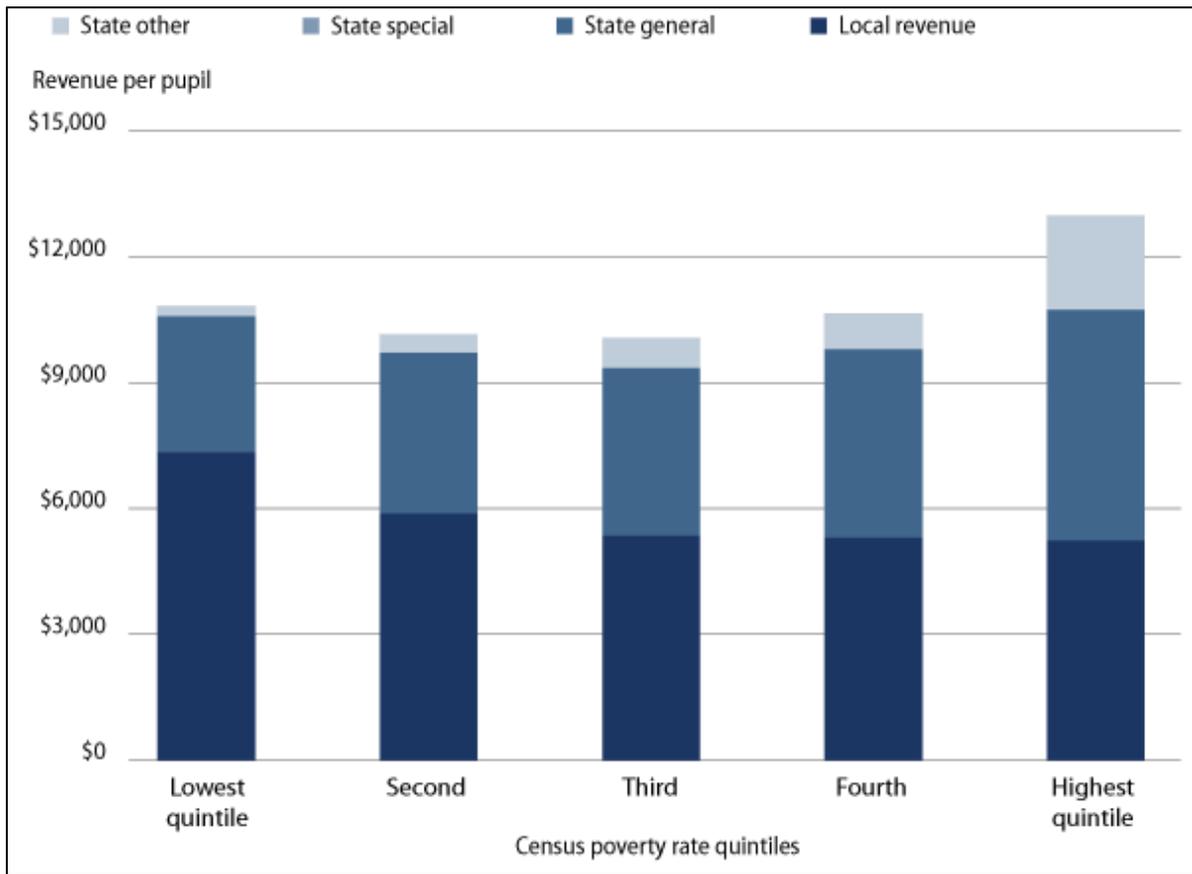
<sup>80</sup> Calculated from: “Revenue Disparity Report.” Minnesota Department of Education, 2015.

[http://w20.education.state.mn.us/ibi\\_apps/WFServlet?IBIF\\_ex=mdea\\_ddl\\_driver&TOPICID=44&NoCache=10.33](http://w20.education.state.mn.us/ibi_apps/WFServlet?IBIF_ex=mdea_ddl_driver&TOPICID=44&NoCache=10.33)

<sup>81</sup> Baker et al., Op. cit., p. 6.

<sup>82</sup> Baker and Corcoran, Op. cit.

**Figure 2.2: Ohio State Averages in Public School Funding, 2007-2009**



Source: Center for American Progress<sup>83</sup>

In the 2012 fiscal year, the lowest-spending district in Ohio spent a total of \$2,697 per pupil, while the highest-spending district spent a total of \$113,524 per pupil. On average, Ohio districts received \$10,140 per pupil in state-provided funding in 2012.<sup>84</sup>

### FUNDING FORMULAS

Ohio considers multiple factors in its foundation funding formula, including the following:<sup>85</sup>

- Student Population and Demographics:** Ohio bases its funding upon districts' Average Daily Membership (i.e., daily attendance) as well as the number of students with differing needs, including special education students and high-poverty students.

<sup>83</sup> Ibid.

<sup>84</sup> "Expenditure & Revenue Data." Ohio Department of Education. <http://education.ohio.gov/Topics/Finance-and-Funding/Finance-Related-Data/Expenditure-and-Revenue/Expenditure-Revenue-Data>

<sup>85</sup> Bullets adapted from Kasich, J.R. and T.S. Keen. "Primary and Secondary Education: FY 2016-2017 Ohio School Foundation Funding Formula Stimulation Fact Sheet." Ohio Department of Education. p. 4. [http://www.ohioacte.org/Resources/Documents/Legislative/FY2016-17\\_Ohio\\_School\\_FoundationFundingFormulaSimulationFactSheet.pdf](http://www.ohioacte.org/Resources/Documents/Legislative/FY2016-17_Ohio_School_FoundationFundingFormulaSimulationFactSheet.pdf)

- **Property Valuation:** Local property valuation affects district funding.
- **Income:** This calculation estimates districts' capacities to raise local revenues and increases district funding for districts less able to do so.
- **Transitional Aid:** This guarantees that no districts' reduction in aid exceeds more than 1 percent of their total state and local resources. This guarantee protects districts from major fluctuations in state-provided aid.

For the 2016-2017 school year, the Governor of Ohio proposed a budget including \$700 million in additional school foundation funding. The budget proposal emphasized Ohio's "continued focus on directing state support to the districts with less capacity to meet their own needs."<sup>86</sup> In addition to maintaining equitable funding practices, Ohio proposed to increase funding for K-3 students, special education, as well as career and technical education.<sup>87</sup> While the budget proposal would provide additional funding to districts with low property values and low-income students, the proposal threatened the state funding available for districts with higher property values. For example, Hudson City School District expects a potential reduction in state funding of \$1.7 million in 2016, roughly 28 percent of its state-provided funding for the year.<sup>88</sup>

## SOURCES OF SCHOOL FUNDING

In the 2015 fiscal year, Ohio spent more money on public education than in any prior years. The Ohio Department of Education noted that the funding for FY 2015 exceeded that of FY 2010 by \$322.5 million (3.4 percent.)<sup>89</sup> In the 2015 fiscal year, the majority of funding available for Ohio public schools came from the state General Revenue Fund (GRF), followed by property tax relief funds and funding from the Ohio state lottery.<sup>90</sup> District funding is "based on a formula that takes into account the student enrollment and the property wealth of the district."<sup>91</sup> Figure 2.3 below provides an overview of the main sources of primary and secondary school funding in Ohio for fiscal years 2013-2017.

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<sup>86</sup> Ibid., p. 1.

<sup>87</sup> Ibid.

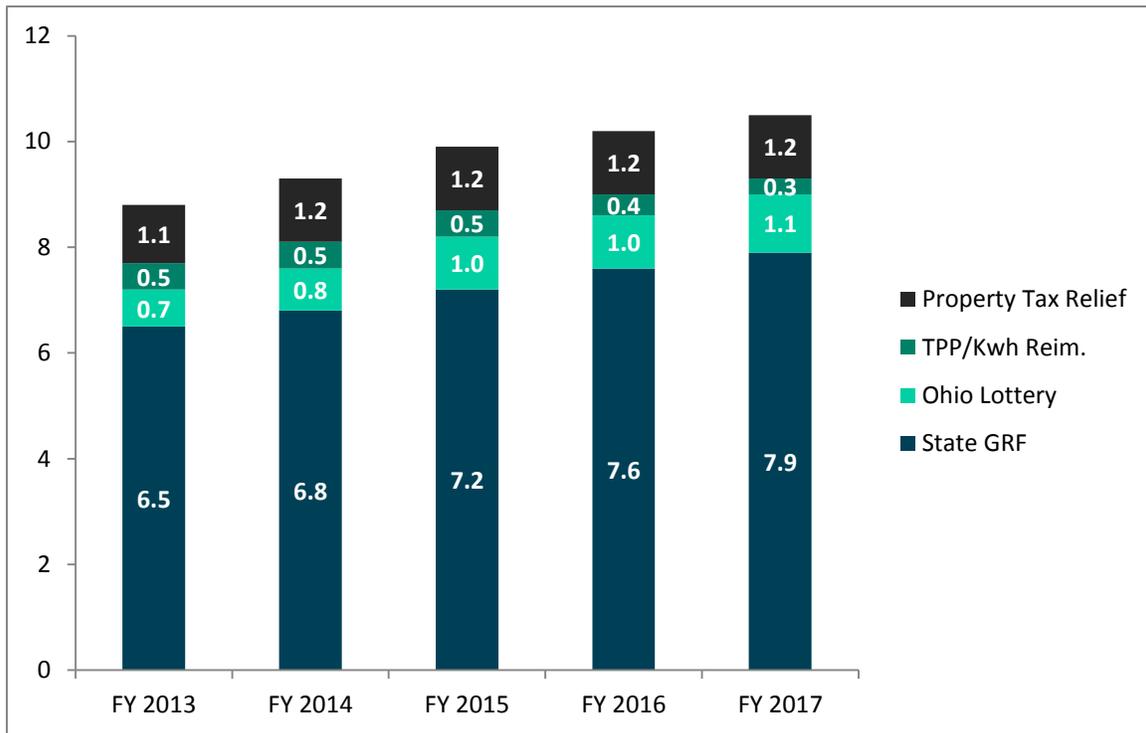
<sup>88</sup> "Ohio Gov. John Kasich's School Funding Plan Is a Puzzle That the Legislature Must Solve: Editorial." cleveland.com, February 10, 2015. [http://www.cleveland.com/opinion/index.ssf/2015/02/ohio\\_gov\\_john\\_kasichs\\_school\\_f.html](http://www.cleveland.com/opinion/index.ssf/2015/02/ohio_gov_john_kasichs_school_f.html)

<sup>89</sup> "Overview of School Funding." Ohio Department of Education. <http://education.ohio.gov/Topics/Finance-and-Funding/Overview-of-School-Funding>

<sup>90</sup> Ibid.

<sup>91</sup> Ibid.

**Figure 2.3: Primary and Secondary School Funding, FY 2013-2017 (In Billions)**



Source: Ohio Department of Education<sup>92</sup>

## MICHIGAN

In the 2015 budget, Michigan allocated between an additional \$83 and \$111 per pupil in education funding as a move designed to provide more funding to under-funded districts. This increased the minimum per-pupil state funding to \$7,187 and basic per-pupil funding to \$8,132.<sup>93</sup> In the 2014-2015 school year, the lowest-funded school district in Michigan received \$7,251 per pupil in state funding, while the highest-funded district received \$11,934 per pupil. For the same academic year, the majority of Michigan districts (84 percent) received \$7,251 per pupil. Ten percent of the districts received between \$7,251 and \$8,099 per pupil, and 6 percent received over \$8,099 per pupil.<sup>94</sup>

## SOURCES OF SCHOOL FUNDING

In March 1994, Michigan passed Proposal A to shift the main source of public school funding from local taxes to the state. The intent of the shift is to create a larger school funding pool

<sup>92</sup> Ibid.

<sup>93</sup> "Executive Budget: Fiscal Years 2015 and 2016." State of Michigan, February 5, 2014. p. B-65. [https://www.michigan.gov/documents/budget/A\\_446646\\_7.pdf](https://www.michigan.gov/documents/budget/A_446646_7.pdf)

<sup>94</sup> Summers, K. "Overview of K-12 School Aid." Senate Fiscal Agency, November 2014. p. 4. [http://www.senate.michigan.gov/sfa/Departments/DataCharts/Dck12\\_SchoolFundingComprehensive.pdf](http://www.senate.michigan.gov/sfa/Departments/DataCharts/Dck12_SchoolFundingComprehensive.pdf)

and equalize district funding throughout the state.<sup>95</sup> The state-local funding mix shifted from approximately 69 percent local taxes and 31 percent state funding to 20 percent local taxes and 80 percent state funding.<sup>96</sup> Currently, a significant source for school funding in Michigan comes from the state education tax and sales tax – which, after Proposal A, are raised from 4 to 6 cents per dollar.<sup>97</sup> Since passing Proposal A, the gap between districts’ per-pupil funding has significantly narrowed. The gap between the highest-funded and lowest-funded districts was reduced to \$4,683 in 2014 from \$7,532 in 1994.<sup>98</sup>

As of 2012, 57 percent of Michigan public school funding came from the state and 32 percent came from local taxes.<sup>99</sup> In Michigan, **three taxes – state education tax, income tax, and sales tax – fund the majority of the state’s school aid fund.**<sup>100</sup> In a 2015 report to the Michigan State Senate, legislators estimated that approximately \$12.2 billion of school funding would be sourced from state-levied taxes in the 2015-2016 fiscal year. Of that total, approximately \$5.7 billion would come from the state sales tax, \$2.6 billion from income tax, and \$1.9 billion from the state education tax (see details in Figure 2.4).<sup>101</sup>

**Figure 2.4: Estimated Revenues for Public Schools, May 2015**

FUND SOURCE	ESTIMATED FUNDING AMOUNTS (FY 2015-2016)
<b>Total</b>	<b>\$12,242,900,000</b>
Sales tax	\$5,690,800,000
Use tax	\$497,500,000
Tobacco tax	\$341,600,000
State education tax	\$1,861,900,000
Real estate transfer tax	\$268,400,000
Industrial facilities tax	\$37,600,000
Income tax	\$2,561,900,000
Lottery	\$791,000,000
Casino tax	\$112,700,000
Other	\$79,500,000

Source: Michigan State Senate<sup>102</sup>

<sup>95</sup> Kaffer, N. “What You Need to Know about School Funding in Michigan.” Detroit Free Press, November 17, 2014. <http://www.freep.com/story/opinion/columnists/nancy-kaffer/2014/11/17/school-funding-michigan-education/19171581/>

<sup>96</sup> Summers, K. “The Basics of School Funding.” Michigan State Senate, July 2015. p. 9. [http://www.senate.michigan.gov/sfa/departments/datacharts/dck12\\_schoolfundingbasics.pdf](http://www.senate.michigan.gov/sfa/departments/datacharts/dck12_schoolfundingbasics.pdf)

<sup>97</sup> Staff. “A Look at How We Fund Schools in Michigan.” Michigan Radio, April 30, 2014. <http://michiganradio.org/post/look-how-we-fund-schools-michigan>

<sup>98</sup> [1] White, R. “Different Levels of Differential Funding: Implications for Educational.” Michigan State University College of Education, November 26, 2014. <http://edwp.educ.msu.edu/green-and-write/2014/different-levels-of-differential-funding-implications-for-educational-equity/> [2] Summers, “Overview of K-12 School Aid,” Op. cit., p. 4. [3] Summers-Coty, K. “School Aid Funding Formula: Further Closing of the School Aid Equity Gap.” Senate Fiscal Agency, December 2007. p. 1. <http://www.senate.michigan.gov/sfa/Publications/Notes/2007Notes/NotesNovDec07ksc.pdf>

<sup>99</sup> Cornman, Op. cit., pp. C2–C3.

<sup>100</sup> Summers, “Overview of K-12 School Aid,” Op. cit., p. 4.

<sup>101</sup> Summers, “The Basics of School Funding,” Op. cit., p. 7.

<sup>102</sup> Ibid.

## NEW JERSEY

Multiple organizations have highlighted New Jersey's progressive school funding practices. In 2016, the Education Law Center ranked New Jersey as the fifth most progressive education funding distributor in the country. In addition, the Center for American Progress identified New Jersey as an exemplary state for equitable school funding in a 2012 report.<sup>103</sup> Moreover, the New America Foundation recognized New Jersey's funding formula as one of the most progressive formulas in the country, as high-poverty districts receive significantly more funding (30 percent more) in New Jersey compared to low-poverty districts.<sup>104</sup>

New Jersey has a long history of providing equitable school funding to school districts. In 1981, the Education Law Center, a nonprofit education advocacy group within the state, filed a lawsuit, *Abbott v. Burke*, against the State of New Jersey, alleging that the state provided urban students with an inadequate amount of public education funding. The New Jersey Supreme Court ruled in favor of the Education Law Center and found that the Quality Education Act (the 1975 law in question) unconstitutional, as it failed to provide students throughout the state with equal funding.<sup>105</sup>

New Jersey schools are largely funded through local revenues, which make up 55.1 percent of their total funding. The remainder of school funding is made up by state funding (39.5 percent) and federal funding (5.4 percent).<sup>106</sup> However, predominately low-income schools receive comparatively more funding from the state compared to schools with lower poverty rates, as Figure 2.5 below illustrates. Low-poverty schools (i.e., schools with the lowest census poverty rates) receive the majority of their funding from local revenue sources, while schools with the highest poverty rates receive the majority of their funding from a variety of state sources.<sup>107</sup>

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<sup>103</sup> [1] Baker et al., Op. cit., p. 5. [2] Baker and Corcoran, Op. cit.

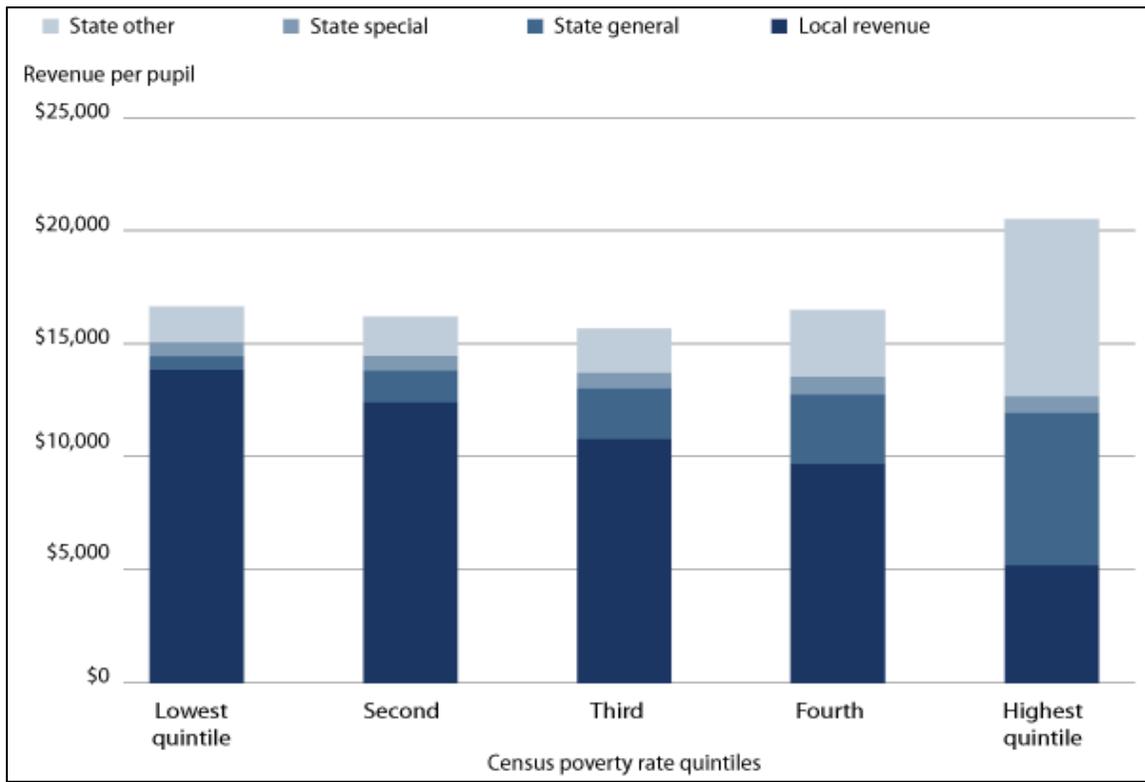
<sup>104</sup> "Equitable Funding: Which States Are Leading the Way?" EdCentral, January 15, 2016. <http://www.edcentral.org/equitable-funding-states/>

<sup>105</sup> "History of Funding Equity." State of New Jersey Department of Education. <http://www.state.nj.us/education/archive/abbotts/chrono/>

<sup>106</sup> Cornman, Op. cit., pp. C2–C3.

<sup>107</sup> Baker and Corcoran, Op. cit.

**Figure 2.5: New Jersey State Averages in Public School Funding, 2007-2009**



Source: Center for American Progress<sup>108</sup>

### AVERAGE FUNDING PER PUPIL

According to the U.S. Census Bureau, New Jersey spent, on average, \$17,572 per pupil in 2013.<sup>109</sup> According to the Educational Adequacy Report by the New Jersey Department of Education, \$11,009 per pupil is the base-spending amount for elementary school students beginning in 2017. This amount represents a nearly \$2,000 increase from the mandated base spending amount of \$9,649 per pupil in 2009. The New Jersey Department of Education attributed this increase to inflation and teacher salary increases.<sup>110</sup>

However, despite these changes, some school districts in New Jersey remain under-funded., The New Jersey Department of Education estimates that some schools are under-funded by over \$1 billion, or about 13.1 percent of the total budget, in the 2015-2016 school year.<sup>111</sup>

<sup>108</sup> Ibid.

<sup>109</sup> "Per Pupil Spending Varies Heavily Across the United States." U.S. Census Bureau, June 2, 2015. <https://www.census.gov/newsroom/press-releases/2015/cb15-98.html>

<sup>110</sup> "Educational Adequacy Report 2017." New Jersey Department of Education. pp. 3-4. <http://www.nj.gov/education/stateaid/1617/EAR2017.pdf>

<sup>111</sup> Clark, A. "N.J. Schools: Find out How Underfunded Your District Is." NJ.com, May 11, 2015. [http://www.nj.com/education/2015/05/nj\\_school\\_aid\\_is\\_your\\_district\\_underfunded.html](http://www.nj.com/education/2015/05/nj_school_aid_is_your_district_underfunded.html)

## FUNDING FORMULA

New Jersey uses a Geographic Cost Adjustment (GCA) formula to determine the cost differences across different districts. The formula creates an adequacy budget for each district, accounting for the mean salaries of teachers and average costs for other resources.<sup>112</sup> The GCA formula uses survey data from the U.S. Census Bureau to determine the formula index, and according to the New Jersey Department of Education:<sup>113</sup>

This index finds the salary differences within like occupations between counties in New Jersey, based upon place of work. Accounting is also made for variation in age, gender, race, education level, and time worked. Finally, the index was adjusted to account for the portion of the adequacy model's base cost that is subject to variation between counties and normalized for enrollment. Since this analysis demonstrates differences in wages, the Department applied the index to the portion of the adequacy budget for teacher salaries, which accounts for about 40% of the base cost. Excluded from these cost variations are medical and other benefits, as well as supplies and other non-salary resources that are included in the adequacy model.

In addition, New Jersey considers multiple factors such as grade levels, county vocational districts, at-risk students, bilingual students, and the combination of bilingual and at-risk students when allocating funding to individual districts.<sup>114</sup>

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<sup>112</sup> "Geographic Cost Adjustment (GCA) Update FY2014." New Jersey Office of School Finance, 2014. p. 1.  
<http://www.nj.gov/education/finance/gca2014.pdf>

<sup>113</sup> Ibid.

<sup>114</sup> "Educational Adequacy Report 2017," Op. cit.

## APPENDIX A: STATE FUNDING FORMULAS

Figure A.1: State Formula Factors to Calculate and Distribute Public School Funding

State	Formula Factors for Calculating and Distributing Basic Education Funding									
	Accurate Student Count	Weight for Low-Income Students	Weight for Students with a Disability	Weight for ELL Students	Per Student Base Cost	District Poverty Factor	District Cost of Living Factor	District Tax Effort Factor	Small District Factor	Adequacy Target Calculated
Alabama	X							X		
Alaska	X	X	X	X	X				X	
Arizona	X		X	X	X				X	
Arkansas	X				X			X		X
California	X							X		
Colorado	X	X		X	X		X		X	
Connecticut	X	X		X	X	X				
Delaware								X		
Florida	X		X	X	X	X	X		X	
Georgia	X		X	X	X				X	
Hawaii	X	X	X	X	X					
Idaho	X		X						X	
Illinois	X	X			X	X				
Indiana	X	X			X	X		X	X	
Iowa	X	X	X	X	X			X		
Kansas	X	X		X	X	X			X	
Kentucky	X	X	X	X	X			X		
Louisiana	X	X	X	X	X			X	X	
Maine	X	X	X	X	X		X	X	X	X
Maryland	X	X	X	X	X	X	X	X		
Massachusetts	X	X	X	X	X		X			X
Michigan	X				X					
Minnesota	X	X		X	X			X	X	
Mississippi	X	X			X					
Missouri	X	X	X	X	X		X		X	X
Montana	X	X	X		X			X		
Nebraska	X	X	X	X				X	X	
Nevada	X					X		X	X	
New Hampshire	X	X	X	X	X			X		
New Jersey	X	X		X	X	X	X			X
New Mexico	X	X	X	X	X			X	X	
New York	X	X	X	X	X	X	X	X		
North Carolina										
North Dakota	X				X			X	X	
Ohio	X									
Oklahoma	X	X	X	X	X				X	
Oregon	X	X	X	X	X			X	X	X
<b>Pennsylvania*</b>										
Rhode Island	X	X			X	X		X		X
South Carolina	X		X		X			X		
South Dakota	X				X			X	X	
Tennessee	X						X	X		X
Texas	X	X	X	X	X	X	X	X	X	X
Utah	X	X	X		X			X	X	
Vermont	X	X		X	X	X			X	
Virginia	X	X	X	X	X	X	X	X	X	X
Washington	X	X	X	X	X				X	
West Virginia	X				X			X	X	
Wisconsin	X							X	X	
Wyoming	X						X	X	X	X

\*Pennsylvania's funding formula is now obsolete. 24 P.S. § 25-2502.50 and 24 P.S. § 25-2502.51. Act 61's accountability provisions have been repealed, and the funding formula is now annually superseded by an undetermined budgeting process for each school year.

Source: Education Law Center<sup>115</sup>

<sup>115</sup> "Funding, Formulas, and Fairness: What Pennsylvania Can Learn from Other States' Education Funding Formulas," Op. cit., p. 11.

## APPENDIX B: STATE FUNDING DISTRIBUTION

Figure B.1: State Funding Distribution, FY 2013

STATE	FUNDING LEVEL AT 0% POVERTY	FUNDING LEVEL AT 30% POVERTY	FAIRNESS RATIO
Delaware	\$8,764	\$15,896	181%
Minnesota	\$9,298	\$12,343	133%
Utah	\$5,373	\$6,814	127%
Ohio	\$8,661	\$10,978	127%
New Jersey	\$13,311	\$16,555	124%
South Dakota	\$7,171	\$8,735	122%
Tennessee	\$6,189	\$7,075	114%
Massachusetts	\$12,406	\$14,095	114%
Indiana	\$9,199	\$10,384	113%
North Carolina	\$6,065	\$6,803	112%
Nebraska	\$9,345	\$10,210	109%
Georgia	\$7,439	\$8,008	109%
Colorado	\$7,770	\$8,364	108%
Connecticut	\$14,205	\$15,239	107%
Wisconsin	\$9,781	\$10,449	107%
New Mexico	\$7,767	\$8,227	106%
Oklahoma	\$6,491	\$6,807	105%
Florida	\$6,881	\$7,111	103%
Louisiana	\$8,574	\$8,827	103%
Montana	\$8,366	\$8,595	103%
Kentucky	\$8,130	\$8,317	102%
California	\$7,261	\$7,392	102%
Oregon	\$8,055	\$8,127	101%
Arkansas	\$8,270	\$8,286	100%
Arizona	\$6,423	\$6,396	100%
Mississippi	\$6,776	\$6,731	99%
Washington	\$8,738	\$8,672	99%
Michigan	\$9,257	\$9,151	99%
Kansas	\$9,580	\$9,344	98%
Maryland	\$12,079	\$11,754	97%
Rhode Island	\$12,832	\$12,412	97%
Texas	\$7,640	\$7,289	95%
South Carolina	\$9,376	\$8,927	95%
New York	\$17,284	\$16,454	95%
West Virginia	\$10,173	\$9,500	93%
Pennsylvania	\$13,192	\$12,308	93%
Iowa	\$10,582	\$9,776	92%
New Hampshire	\$12,637	\$11,570	92%
Virginia	\$9,361	\$8,450	90%
Alabama	\$8,213	\$7,411	90%
Wyoming	\$15,709	\$13,723	87%
Idaho	\$6,359	\$5,462	86%
Vermont	\$14,508	\$12,067	83%

STATE	FUNDING LEVEL AT 0% POVERTY	FUNDING LEVEL AT 30% POVERTY	FAIRNESS RATIO
<b>Missouri</b>	\$9,736	\$8,090	83%
<b>Maine</b>	\$12,561	\$10,429	82%
<b>Illinois</b>	\$11,774	\$9,694	82%
<b>North Dakota</b>	\$10,935	\$8,444	77%
<b>Nevada</b>	\$9,025	\$6,438	71%

Source: Education Law Center<sup>116</sup>

Note: "Fairness Ratio" is calculated as the amount of funding high-poverty districts receive relative to the amount of funding low-poverty districts receive.

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<sup>116</sup> Baker et al., Op. cit., p. 5.

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Arlington, VA 22203

P 202.559.0500 F 866.808.6585

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