

Starting from the Bottom: First Steps to Improve School Funding in Arizona

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Abstract

The Arizona school funding system is in urgent need of reform, ranking at the bottom of the states for every measure of adequacy and equity. To remedy the current situation, two short-term actions can be implemented immediately: (1) increase school funding for all students, and (2) target additional funding to districts serving students in poverty. These short-term improvements can set the stage for an overhaul of the entire funding formula.

Acknowledgments

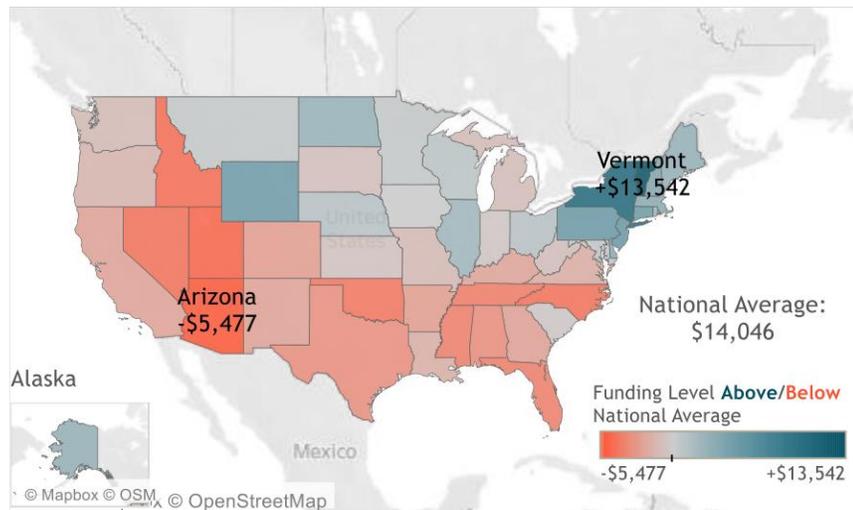
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Introduction

Arizona's school funding system ranks at the very bottom of the nation. The state earns very low marks on *Making the Grade 2019*, a report that evaluates states on funding level, funding distribution, and funding effort. Arizona ranks last in the nation on funding level, earning an F, providing \$5,477 less per pupil than the national average after adjusting for regional cost differences. On top of an extremely low average funding level, the state does not provide high-poverty districts with additional funds to support the needs of their most disadvantaged students, earning a C in funding distribution. Arizona is also last in the nation with another F in funding effort. The state invests only 2.5% of its wealth, as measured by the gross domestic product of its economy, in K-12 public education.¹

Figure 1: District Per Pupil Funding by State Relative to National Average



Source: *Making the Grade 2019: How Fair is School Funding in Your State?*

Without question, Arizona's school funding system is in urgent need of reform. Without substantial increases in overall funding levels, and additional funding targeted to meet the needs of low-income students, the stark deficits in essential education resources in the state's public schools—including teacher shortages—will continue.² There are two short-term actions that can begin to address this crisis: (1) increase school funding for all students, and (2) target additional funding to districts serving students in poverty. These short-term improvements can set the stage for a longer-term overhaul of the entire funding formula.

Increase Funding Level for All Students

All Arizona school districts and students would benefit from a much-needed increase in the total amount of state revenue dedicated to public education. Arizona's Education Progress Meter demonstrates some of the state's compelling needs. Only 22% of preschool aged children are enrolled in quality early learning settings. By third grade, just 46% of students test proficient or highly proficient on the Arizona English Language Arts test, and 41% of 8th graders pass the math test. Arizona ranks near the bottom of states with only 55% of high school students continuing education after graduation. This is more concerning when considering that only 78% of high school students graduate in four years, and 13% of 16-24 year-olds are not attending high school, postsecondary education, or working at all.³

Arizona also has a severe teacher shortage. Recent estimates show that about 21% of teacher vacancies across the state will remain unfilled in the 2019-20 school year, and almost half the vacancies are filled by teachers who are not properly certified.⁴ Arizona teachers, on average, earn only 62% of what non-teachers with similar education, age, and hours worked earn in the state.⁵ To attract and retain qualified teachers, Arizona must offer more competitive wages.

Addressing Arizona's chronic teacher shortage and improving student outcomes will require increasing the base level of funding per pupil in the state funding formula. This funding increase can be targeted to critical resource needs, including high-quality preschool, qualified teachers, and sufficient support staff, such as social workers, counselors and nurses. The Arizona Auditor General notes that districts that spend more on instruction tend to have higher performance levels, but the state's instructional spending percentage has declined 4.6% since its peak in 2004.⁶ Boosting base funding levels will strengthen the foundational level of resources to enable every student to have a meaningful opportunity to succeed in school.



For more information about Arizona's school funding formula, read the accompanying report: [Arizona School Equalization Formula Primer](#)

Funding for Student Poverty

Arizona is one of just eight states that does not account for student poverty in its school funding formula.⁷ The state provides similar levels of funding to low-poverty and high-poverty school districts. Yet additional funding for low-income students is vital to provide them with the education resources and opportunities they need to achieve.⁸ Funds specifically designated for these students are necessary to support research-proven programs and practices, such as high quality early childhood education, additional instructional supports, and the hiring of high-quality teachers.⁹ Additional funding is even more important for districts and schools serving high concentrations of students in poverty.¹⁰

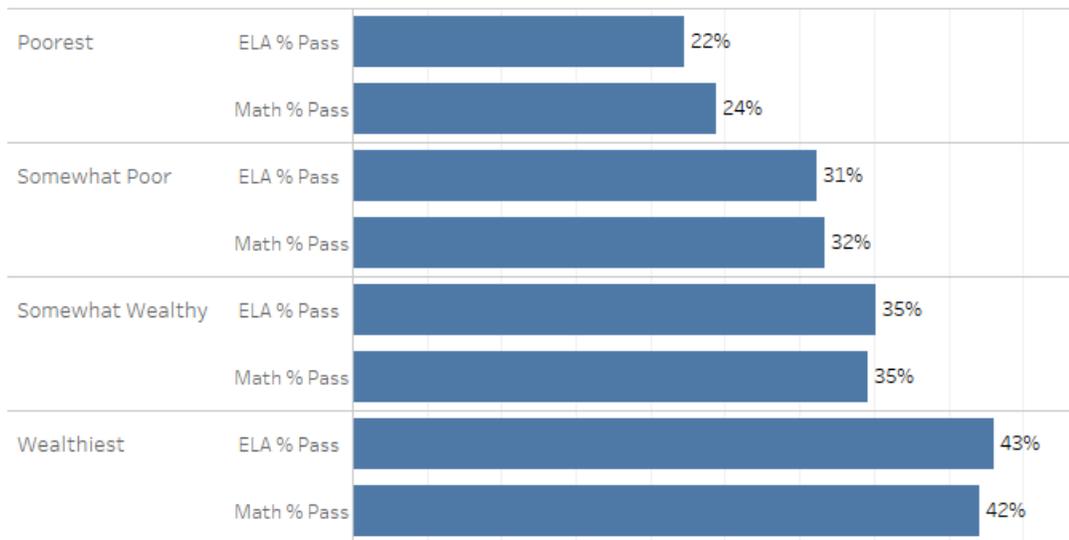
Arizona's highest poverty districts have the lowest proficiency levels in Math and English Language Arts (ELA) in the state. As Figure 2 shows, less than one in four students in these districts tests proficient in either subject.

While students in poverty need more funding and resources, in Arizona, they receive less. Figure 3 shows per pupil allocations based on the Arizona Equalization Formula for the 2018-19 school year. The poorest districts receive the lowest amount of funding through the funding formula, though the variation is slight. The wealthiest districts average \$5,562 per pupil, while the poorest districts average \$5,382 per pupil.¹¹

Along with an increase in base per pupil funding, the state funding formula requires reform to add increased funding for at-risk students in the form of an opportunity weight based on student poverty. This reform – similar to what is found in many state formulas – would increase the funding amount by a certain percentage, or “weight,” for each student in poverty. For example, a weight of 0.5 would increase the funding level for each student in poverty by 50% or \$2,004.79 (half of the 2018-19 base per pupil amount of \$4009.57). The current Arizona school funding formula includes weights based on student

grade level, English language learner status, and disability status, so an opportunity weight could be easily included. This change to the formula would not only provide additional funding for high-poverty districts, but it would also provide more funding to any district with students in poverty.

Figure 2: Arizona District ELA and Math Proficiency Rates by Poverty Level



Source: Arizona Auditor General’s Office Arizona School District Spending FY 2017

Figure 3: Arizona District Per Pupil Funding by Poverty Level



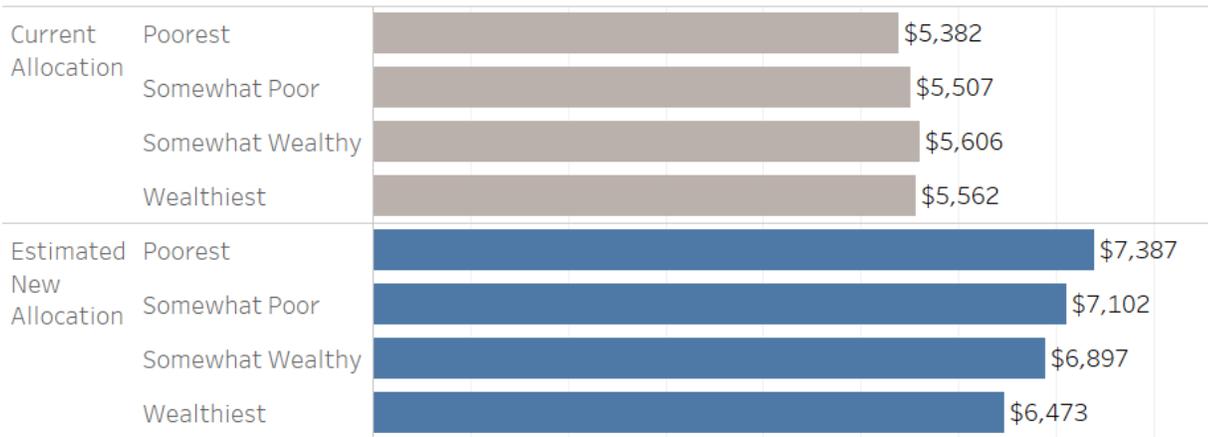
Source: Arizona Department of Education Base Support Level Calculation Tables, FY 2019; District Poverty Rates based on Arizona Auditor General’s Office Arizona School District Spending FY 2017

Modeling Funding Distributions

For demonstration purposes, we calculate the cost and district impact of applying: (1) a 10% increase to the base per pupil amount, and (2) an opportunity weight of 0.5 to the current formula.¹² These modest increases would boost Arizona’s equalization formula allocations by \$1.1 billion, from \$4.86 to \$5.96 billion, with \$550 million targeted to increased funding for students in poverty through an opportunity weight, and \$541 million from an increase to the base per pupil funding amount. Every district across the state would benefit from these reforms. For example, as seen in Figure 4, even the wealthiest districts with less than 15% of students in poverty would gain an average of \$911 per pupil, while the poorest districts with 35% or more students in poverty would gain an additional \$2,005 per pupil.

Use these [Online Interactive Tools](#) to estimate the cost and impact of changes to Arizona’s school funding formula for each school district.

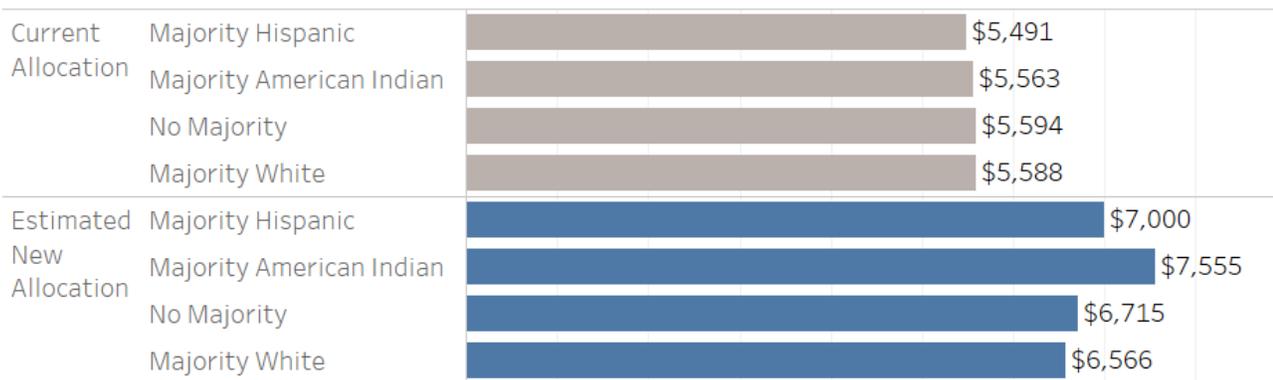
Figure 4: Arizona District Per Pupil Funding by Poverty Level, Current Funding and Estimate with Opportunity Weight and Increased Base Funding



Source: Arizona Department of Education Base Support Level Calculation Tables, FY 2019; District Poverty Rates based on Arizona Auditor General’s Office Arizona School District Spending FY 2017

Figures 5 and 6 show how these proposed school funding reforms would impact current per pupil allocations by race and assessment proficiency rates. Figure 5 shows current and estimated per pupil allocations by district race composition. Although the proposed change to the formula adds an opportunity weight based on poverty (not based on student race/ethnicity), the strong correlation between district poverty and race composition in Arizona means that districts that are majority American Indian and majority Hispanic would see the greatest per pupil increase.

Figure 5: Arizona District Per Pupil Funding by Race Composition, Current Funding and Estimate with Opportunity Weight and Increased Base Funding



Source: Arizona Department of Education Base Support Level Calculation Tables, FY 2019; District Race Composition based on Arizona Department of Education Enrollment Files, 2017-18 and National Center for Educational Statistics CCD Data 2017-18

Figure 6 shows average funding by districts’ overall proficiency on the English Language Arts assessment. Given the relationship between poverty and proficiency rates described above, districts with the lowest proportion of students attaining proficiency stand to receive the highest per pupil increase.

Figure 6: Arizona District Per Pupil Funding by ELA Proficiency Rates, Current Funding and Estimate with Opportunity Weight and Increased Base Funding

Current Allocation	Less than 25% Proficient	\$5,607
	>25-35% Proficient	\$5,485
	35-50% Proficient	\$5,610
	Majority Proficient	\$5,522
Estimated New Allocation	Less than 25% Proficient	\$7,314
	>25-35% Proficient	\$6,930
	35-50% Proficient	\$6,810
	Majority Proficient	\$6,382

Source: Arizona Department of Education Base Support Level Calculation Tables, FY 2019; Arizona Auditor General’s Office Arizona School District Spending FY 2017

Impact of Reforms on Resource Equity

How might the proposed funding reforms improve resources in Arizona school districts? To answer this question, we modeled investing the recommended funding increases in school staffing by:

1. Increasing the overall number of teachers;
2. Increasing teacher salaries; and/or
3. Adding or increasing the number of school counselors.

All three investments could have strong positive impacts on students, depending on the way in which additional staff or salary increases are used to improve learning. In other words, more teachers would have the most powerful impact if they were qualified and effective. The addition of school counselors would be valuable if they were given enough time, resources and support to improve student well-being and school culture and climate.

Interactive charts, available [here](#), demonstrate, at the district level, what these staffing changes would cost. We estimate a cost of \$75,000 per district per new teacher or new school counselor. This is based on the average teacher salary in Arizona of \$50,000, plus benefits and costs to hire and train staff.

As an example of the potential statewide impact of this change, an additional 14,500 teachers and counselors could be hired with the funding increase. This would mean an increase of approximately eight new teachers and two new counselors in every school. This would increase overall teaching staff by 20% and more than double the number of counselors in each school. Alternatively, the additional funding could be used to hire five new teachers and one new counselor per school, or more than 8,100 new teachers and counselors could be hired along with a 15% salary increase for all teachers.

Figure 7: State Funding Scenario 1, 8 new teachers per school, 2 new counselors per school

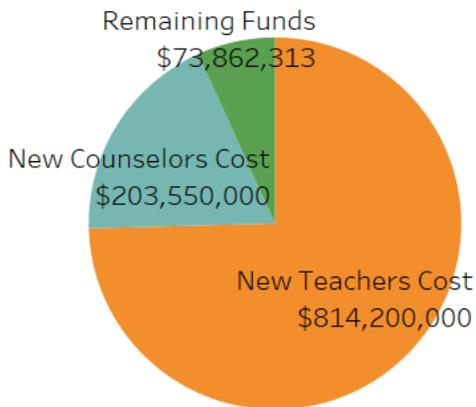
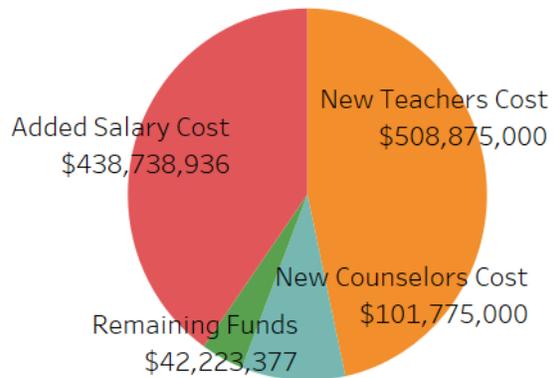


Figure 8: State Funding Scenario 2, 5 new teachers and 1 new counselor per school, 15% teacher salary increase



Conclusion: Bringing Arizona Up from the Bottom

Arizona ranks at the bottom of the nation on key measures of adequate and fair funding for public education. Yet the state has the economic capacity to boost investment in K-12 public education. The state’s fiscal effort to fund its public schools has consistently lagged far below that of other states. In fact, Arizona makes the least effort to fund its schools of all 50 states, with just 2.52% of state wealth (GDP) devoted to K-12 education funding. This is 1.27% below the national average.¹³ To put that in perspective, if Arizona increased its effort to match the national average rate of 3.79% of GDP, it would generate an additional \$3.8 billion in state and local revenue for schools. While increasing base per pupil funding and adding an opportunity weight requires new state revenue, there is a measurable return on that investment in the form of more students graduating from high school prepared for college and career.¹⁴

The steps outlined in this report are intended to provide immediate assistance to the many Arizona district administrators, teachers and staff – and, of course, students – who are currently working and learning in under-resourced schools. In addition to these short-term measures, Arizona lawmakers must also launch a concerted effort to overhaul the state’s outmoded school funding system. Such comprehensive reform is necessary to achieve a more fundamental objective: putting in place a funding formula directly linked to the cost of delivering Arizona’s curriculum content and performance standards for all students.

To start this process, we recommend the Legislature commission an independent, expert study to identify the specific staff, programs and services needed to ensure all students a meaningful opportunity to achieve the state’s standards and to determine the cost of those essential resources. The study must also determine the specific resources and programs (and their cost) that students in poverty, English language learners, students with disabilities, and other vulnerable student populations require for the opportunity to learn. A well-designed formula, implemented with strong accountability standards to ensure that the money is well spent, will improve educational outcomes and strengthen Arizona’s economy.¹⁵

ENDNOTES

¹Farrie, D., Kim, R., and Sciarra, D. (2019). *Making the Grade: How Fair is School Funding? A Guide for Advocates and Policymakers*. Newark NJ: Education Law Center. Retrieved from <https://edlawcenter.org/research/making-the-grade/>

² Elizondo, L. and Wing J. (2019). *Severe Teacher Shortage in Arizona Continues*. AZEDNEWS. Retrieved from <https://azednews.com/severe-teacher-shortage-in-arizona-continues-2/>.

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⁸ Jackson, C.K., Johnson, R.C., Persico, C. (2015). *The Effects of School Spending on Educational and Economic Outcomes: Evidence from School Finance Reform*. Retrieved from <https://www.nber.org/papers/w20847>

⁹ Baker, B. (July 2018). *How Money Matters for Schools*. Retrieved from <https://learningpolicyinstitute.org/product/how-money-matters-brief>

¹⁰ Lafortune, J., Rothstein, J., Whitmore Schanzenbach, D. (July 2016). *School Finance Reform and the Distribution of Student Achievement*. Retrieved from <https://www.nber.org/papers/w22011>

¹¹ In this report, district poverty is based on U.S. Census Small Area Income Poverty Estimates (SAIPE). The levels were determined based on district poverty means and standard deviations as (1) poorest – poverty greater than 35%; (2) somewhat poor – poverty between 25 and 35%; (3) somewhat wealthy – poverty between 15 and 25%; and (4) wealthiest – poverty less than 15%.

¹² The opportunity weight of 0.5 is calculated by taking 50% of the base per pupil rate of \$4,009.57, or \$2,004.79. This amount is then added to the funding for students in poverty. State funding formulas have typically used free/reduced lunch (FRL) eligibility to identify students for poverty weights. This is becoming increasingly difficult as more schools and districts utilize the Community Eligibility Provision to provide free lunch to all students, regardless of individual eligibility. Because the measure of poverty with SAIPE calculations is more restrictive than in FRL, an adjustment factor is necessary to expand the pool of students eligible for the weight. SAIPE child poverty estimates are multiplied by a factor of 1.6 to approximate FRL.

¹³ Farrie, D., Kim, R., and Sciarra, D. (2019). *Making the Grade: How Fair is School Funding? A Guide for Advocates and Policymakers*. Newark NJ: Education Law Center.

¹⁴ Berger, N. and Fisher, P. (2013). *A Well-Educated Workforce is Key to State Prosperity*. Economic Policy Institute. Retrieved from: <https://www.epi.org/publication/states-education-productivity-growth-foundations/>

¹⁵ Hinojosa, D. (2018). *Essential building blocks for state school finance systems and promising state practices*. Palo Alto, CA: Learning Policy Institute. Retrieved from <https://learningpolicyinstitute.org/product/state-school-finance-systems-report>; Education Law Center (2014). *Linking standards to resources: New Jersey's school funding reform act of 2008*. Newark NJ: Education Law Center. Retrieved from <https://edlawcenter.org/assets/files/pdfs/publications/SFRA-LinkingStandardsToResources.pdf>