

How has Alaska's K-12 education spending changed? Trends from 2017-2023 Matthew Berman & Dayna Jean DeFeo

Education funding in Alaska, as in most states, is one of the largest allocations in the state operating budget. In 2022, K-12 schools in Alaska spent \$20,191 per student for current operations, which was 29% more than the national average of \$15,633. However, many things are more expensive in Alaska than they are in other parts of the nation, and this is also true for operating schools. After adjusting Alaska's spending for its higher relative costs, we find that Alaska's perpupil current expenditures fall below the national average by 15%. In the five years between 2017 and 2022 (the first year we conducted this analysis and the most recent year with full data available, respectively), per pupil current spending in other US states increased by 26%, whereas Alaska's spending increased by only 13%.¹

Where does school funding come from?

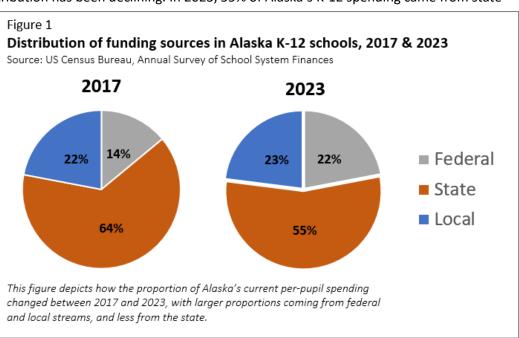
Funding for K-12 schools includes education investments from state, federal, and local sources. The largest portion of Alaska state spending is determined by the *School Foundation Formula*, which starts with the base student allocation (BSA). The BSA is a fixed per student amount that is set annually by the legislature. The foundation formula then adjusts the BSA account for different costs associated with delivering education, including:

- School size because smaller schools cost more to operate at the per-pupil level
- **District cost factor** because some Alaska communities have higher costs of living and operating costs than others
- Special programs like special education, vocational education, and correspondence programs because these
 programs operate differently from other instructional activities, and have different operating costs

In addition to the funding determined by the foundation formula, the state pays all the costs of pupil transportation.

Although the state pays for more than half of school spending in Alaska, not all education funding comes from the state, and the state's proportional contribution has been declining. In 2023, 55% of Alaska's K-12 spending came from state

general funds, 22% came from federal streams, and 23% came from local contributions. In 2017, 64% of Alaska's funding came from the state, indicating that over the past 6 years, federal and local revenues have increased by more than state contributions (see Figure 1). The 2023 spending also included some residual funds from increased federal investments during the COVID pandemic, meaning that the federal proportion of spending should decrease in 2024 when these funds are no longer available.



¹ Figures represent school (academic) years, which are the same as Alaska's fiscal years. Figures and tables for 2017, 2022, and 2023 reflect school years 2016-17 2021-22, and 2022-2023 respectively.

Proportionally, Alaska has larger state and federal contributions and lower local contributions than the average US state. One reason why the percentage of local contributions is relatively low is that 11 percent of Alaska K-12 students live in rural areas that do not collect local property taxes that can be used to support schools. Schools in these areas are run by one of the state's 19 Regional Education Attendance Areas (REAAs). Meanwhile, Alaska permits boroughs and cities with a significant tax base – such as Anchorage, the North Slope Borough, and Valdez – to contribute more than the required equivalent of 2.65 mils (0.265%) of taxable property value (up to a point), but limits the local contribution to avoid losing federal funds.²

How much does Alaska spend on public education, and how does that compare to other states?

In 2022, Alaska's average per pupil spending was \$20,191 (US Census Bureau, 2025) which is 27% higher than the national average of \$15,633. At the time of this report, 41 states, including Alaska, had reported 2023 spending. Alaska's 2023 per-pupil spending was \$20,340; however, we cannot calculate how Alaska "measured up" to the national average without data from all states. Thus, in this analysis, when we compare to national averages, we use 2022 data. To give the most up-to-date information, we also compare Alaska to the average of the 41 states with available 2023 data.

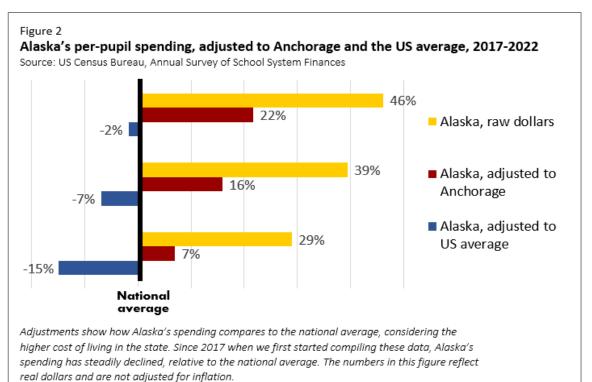
Spending adjustments: Alaska to Anchorage

Within Alaska, costs differ significantly between communities, so the first step of our analysis adjusts Alaska's education spending to account for the higher costs that districts face relative to Anchorage. To do this, we used the district cost factor (DCF) that the Foundation Formula uses to adjust funds for school districts. We calculated an average district cost factor, weighted by the adjusted enrollment, and used that average cost factor – about 120 percent of Anchorage – to calculate an Anchorage-adjusted average per pupil 2022 spending of \$16,784. This figure is 7% more per pupil than the national average.

Spending adjustments: Anchorage to US average

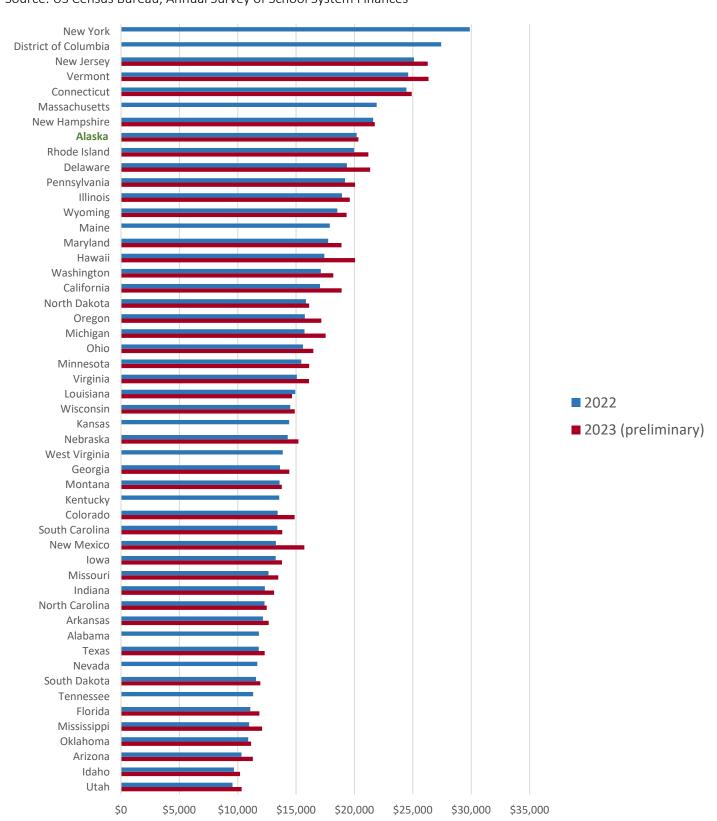
Even after adjusting Alaska communities to Anchorage, we still cannot directly compare to the national average, because Anchorage's cost of living is higher than most other communities in the US. To adjust for these differences, we

applied the most widely used cost of living index (COLI), published by the Council for Community and Economic Research (C2ER), to our statewide calculations. This index placed Anchorage at 124% of the average US community in 2022. Adjusted nationally, Alaska's 2022 per-pupil spending was \$13,247, or 15% below the national average. Table 1 reports the spending adjustments, and Figure 2 compares the percentage differences.



² Alaska Statute 14.17, State Aid to Public Schools; Alaska Department of Education and Early Development (2024). <u>Public School Funding Program Overview 2024</u>. https://education.alaska.gov/SchoolFinance/pdf/ADA%20Funding%20Program%20Overview%20205_eff1-2024.pdf.

Figure 3 Average current spending per student, 2022 & 2023 Source: US Census Bureau, Annual Survey of School System Finances



In 2022, Alaska ranked 8th in the nation for unadjusted per-pupil current spending on education. At the time of this report, 41 states had reported 2023 figures. In 2023, Rhode Island and Delaware moved ahead of Alaska, which means that Alaska's 2023 ranking will likely be 10th highest in per-pupil current spending, before adjusting for relative costs.

What do we know about 2023?

At the time of this analysis, Alaska and 40 other states had reported 2023 spending. We cannot calculate a national average without data for all states; however, we can compare Alaska's spending over time to the states for which we have data. Figure 3 lists states in their rank order of 2022 spending, and depicts 2023 data for states that have reported it.

Table 1 Alaska's per-pupil spending between 2017 and 2023, adjusted to state and national indices

	2017	2019	2022	2023
US average	\$12,201	\$13,187	\$15,633	
Alaska	\$17,838	\$18,394	\$20,191	\$20,340
Alaska, adjusted to Anchorage	\$14,853	\$15,290	\$16,784	\$16,893
Alaska, adjusted to US average	\$11,997	\$12,281	\$13,247	\$13,657

Within Alaska, costs differ significantly between communities, so our analysis first adjusted Alaska's education spending using the School Foundation Formula's geographic cost differential to calculate an Anchorage-adjusted average per-pupil spending. Then we applied the Council for Community and Economic Research (C2ER) cost of living index (COLI) to adjust for higher Anchorage living costs.

Where does the money go?

Figure 4 shows how Alaska school districts allocated spending among expense categories in 2022. Salaries and wages account for the highest proportion of Alaska's current education spending. That's true for other states, too, but while Alaska spent 45.5% of current spending on wages in 2022, the national average was 54.0%. Spending on salaries in Figure 4 includes all salaries, but instructional salaries (teachers and in-class supports) comprise the lion's share of those dollars. Prior work from ISER (Berman & DeFeo, 2024a) and the Alaska Department of Labor (Warren, 2023) noted that Alaska teacher salaries are not competitive, relative to national averages.

Alaska spent a larger percentage (27.1%) on employee benefits, compared to a national average of 23.4%. Alaska's benefit packages (i.e., the types of benefits provided to teachers as part of their contracts) differ between districts, but generally cover the same categories of expenditures as other US states (Bel Hadj Amor et al., 2023). The largest cost in employee benefit packages is healthcare coverage. While the proportion of healthcare premiums paid by employees versus the school districts varies considerably in Alaska (Berman & DeFeo, 2024b), Alaska has the highest per capita healthcare costs in the US (Passini et al., 2018; Kopriva, 2023) which negatively affects all sectors of the state economy. While the challenge of high healthcare costs is not unique to education, in a fixed budget scenario these costs put downward pressure on wages.

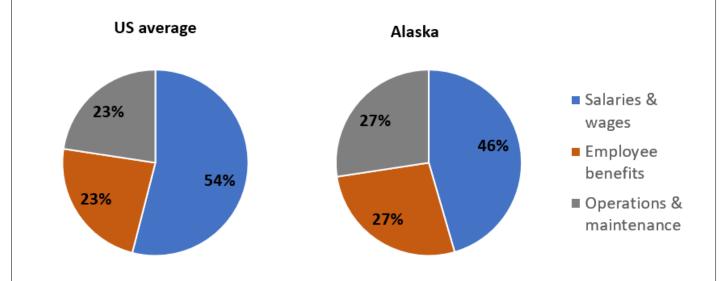
Alaska also spends a higher proportion of its per-pupil dollars on operations and maintenance; much of this can be attributed to higher energy costs required to operate Alaska's schools. Rural schools in particular face higher fuel costs and are not eligible to participate in the Power Cost Equalization (PCE) program that reduces electricity rates for rural households (Alaska Energy Authority, 2017). In addition to current per-pupil revenues and spending (which is the focus of this analysis and represented in figure 4), it is important to note that schools benefit from additional spending on capital outlays and bond debt reimbursements, which are mostly applied to building new facilities or renovating old ones. In recent years, Alaska has spent less per student on facilities than the national average, \$1,858 in Alaska compared to a national average of \$2,309 in 2022,3 despite having higher building costs. When we look at total expenditures in 2022 – that is, including spending on facilities – Alaska ranked 8th relative to other states. However, by 2023 at least four more states - Delaware, Rhode Island, Illinois, and Pennsylvania - had moved ahead of Alaska in total spending per student.

³Calculated from total spending minus current spending, divided by enrollment used for current spending per pupil. Data source: US Census Bureau, Annual Survey of School System Finances.

Figure 4

Percentage of current spending, 2022

Source: US Census Bureau Annual Survey of School System Finances



Relative to other states, Alaska spends proportionally more on employee benefits and operations, and less on salaries and wages.

How does inflation affect education spending?

Inflation represents a general increase in the prices of

goods and services over time, and as prices increase, dollars have less buying power. We

measure inflation using the Consumer Price Index (CPI), which tracks changes in prices of a "market basket" of goods and services. The items in the basket do not change over time, but their costs do. Nationally, the CPI increased by 18.6% between 2017 and 2022, and Anchorage's change in CPI was similar at 17.1%. Table 2 shows that, while inflation increased by 18.6% between 2017 and 2022 and the US average per pupil spending increased by 26%, Alaska's spending increased by only 14%. The CPI increased by 4.1% between 2022 and 2023. While the average spending increase since 2022 in the 41 states that had reported their 2023 per-pupil spending those states was 5.7%, Alaska's increase in the same one-year

Table 2
Changes in per pupil current spending during three periods of
analysis, compared to the US Consumer Price Index (CPI)

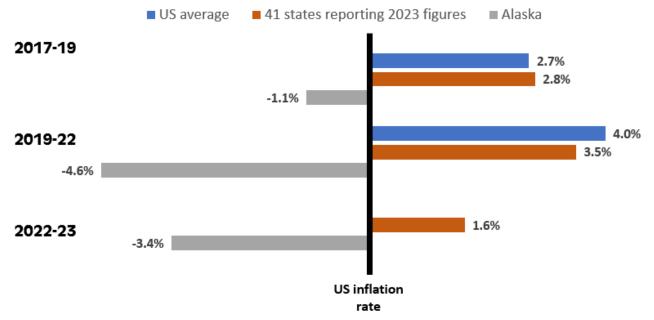
Change in per pupil spending	2017- 2019	2019- 2022	2022- 2023
US average	6.9%	18.4%	
41 states reporting 2023 figures	7.0%	17.9%	5.7%
Alaska	3.1%	9.8%	0.7%
US CPI	4.2%	14.4%	4.1%

Alaska increased its per-pupil spending by 12.8% between 2017 and 2022; but the US inflation rate in that same time period was 18.6%. Between 2022 and 2023, the inflation rate was 4.1% but Alaska's current per-pupil spending increased by only 0.7%.

timeframe was only 0.7%. Figure 5 depicts how spending in Alaska and other states differed from inflation rates in the same time period. It shows that since 2017, Alaska spending has lagged inflation, while other states' spending exceeded it.

Figure 5 Changes in per pupil spending relative to inflation in the same time period

Source: US Census Bureau Annual Survey of School System Finances



This chart reflects changes in spending relative to inflation. Positive percentages indicate spending increased by more than inflation, and negative percentages indicate spending did not keep up with the rate of inflation. While other states, on average, invested in education at a rate higher than inflation, Alaska's per-pupil spending increases have been less than inflation in the same time period.

Implications & opportunities

After adjustments to account for higher costs of operating schools in Alaska, Alaska's per-pupil education spending has fallen below the national average since at least 2017, and has slipped further behind each year since then. Although the state has increased its spending, those increases have been less than inflation; meanwhile other states have, on average, increased investments by more than inflation. With the phase-out of special federal COVID relief funds, the state will face pressure to make up the difference.

Higher costs for fuel and electricity, higher healthcare costs, and cost of living differentials significantly affect Alaska schools – particularly in remote, rural communities – but are beyond the control of school districts. As state support lags behind inflation, school districts are left with few options to cut besides instructional expenditures. Education finance decisions must therefore consider the tradeoffs involved with fixed and flexible costs in district budgets, noting that while the most flexibility lies in instructional expenditures, these are simultaneously the most critical component to achieving education outcomes.

Alaska hires teachers in a national market, so to recruit and retain a workforce of good teachers, the state needs to offer competitive salaries. If Alaska teacher salaries do not keep up with national trends, the state's existing retention and turnover challenges will be exacerbated, especially in remote and high-poverty schools that have the greatest difficulty recruiting and retaining teachers (Berman & DeFeo, 2024b; DeFeo et al., 2018; DeFeo & Tran, 2019).

How much Alaska should spend is a question of education inputs, rather than dollars. Though we have put per-pupil spending into national context, we are not able to answer the question of how much Alaska should spend on education. Our analysis does not make a connection between student achievement and funding. There is an opportunity for evidence-based analyses that can help Alaska determine the inputs to the education system that are needed for the state to meets its education outcomes.

References

- Alaska Energy Authority. (2017). Power cost equalization. Retrieved from http://www.akenergyauthority.org/Programs/PCE
- Bel Hadj Amor, H., Corey, S. & DeFeo, D. J. (2023, May). *Negotiated success: Contractual benefits that enhance recruitment and retention.* Report prepared for the Alaska Department of Education and Early Development's Teacher Recruitment and Retention task force.
- Berman, M., & DeFeo, D. J. (2024a). *Are Alaska teacher salaries competitive?* Anchorage, AK: Institute of Social and Economic Research.
- Berman, M., & DeFeo, D. J. (2024b). Equitable compensation to attract and retain qualified teachers in high-need Alaska public schools. *Educational Policy*, *38*(5), 1139-1175.
- DeFeo, D. J., & Tran, T. C. (2019). Recruiting, hiring, and training Alaska's rural teachers: How superintendents practice place-conscious leadership. *Journal of Research in Rural Education*.
- DeFeo, D.J., Hirshberg, D., & Hill, L. (2018). It's more than just dollars: Problematizing salary as the sole mechanism for recruiting and retaining teachers in rural Alaska. *Alaska Native Studies Journal 4*(1).
- Kopriva, M. (2023). *Alaska health care spending report*. University of Alaska Anchorage Institute of Social and Economic Research.
- Passini, J., Frazier, R., & Guettabi, M. (2018). *Trends in Alaska's Health-Care Spending*. (Report No. 1343). University of Alaska Anchorage Institute of Social and Economic Research.
- US Census Bureau. (2025). *Annual survey of school system finances*. Retrieved from https://www.census.gov/programs-surveys/school-finances.html
- Warren, J. (2023). Teachers' shrinking wage advantage: Alaska used to pay the most, but now we're tenth. *Alaska Economic Trends*, 12, 14-17.

Earlier versions of this analysis are available here:

- Berman, M., & DeFeo, D. J. (2022). *How much does Alaska spend on K-12 education? (2022 update).* (Report No. 1857). Institute of Social and Economic Research. http://hdl.handle.net/11122/12960
- DeFeo, D. J., Berman, M., Hill, A., & Hirshberg, D. (2019). *How much does Alaska spend on K-12 education?* (Report No. 1766). Institute of Social and Economic Research. http://hdl.handle.net/11122/14664

About the authors

The authors of this report are solely responsible for its analysis and findings, which do not represent the Institute of Social and Economic Research, the University of Alaska Anchorage, or research sponsors.

The authors would like to thank the Senate Education Committee and the House Education Committee of the Alaska State Legislature and for the opportunity to present these preliminary analyses in testimony.

MATTHEW BERMAN, *Professor of Economics*. Matthew has been on ISER's faculty since 1981. His research includes studies of economic organization, political economy, and social change, especially in Alaska and Arctic communities. A current focus of his research is measuring indicators of community adaptive capacity, well-being, and resilience. His recent publications examine, among other things, the effects of universal basic income. He teaches UAA economics and interdisciplinary social science courses.

DAYNA JEAN DEFEO, Research Associate Professor of Education Policy and Director of the Center for Alaska Education Policy Research. Dayna has worked at ISER's Center for Alaska Education Policy Research since 2014 and became the director in 2017. Her current research interests include college and postsecondary transitions, particularly in the career and technical fields and for underrepresented populations; teacher turnover, supply, and demand; STEM education; and representation and equity in the curriculum and institutional systems.