

Hidden Education Funding Cuts

Colorado

Pension costs are consuming almost 20% more state education funding today than they were two decades ago

Teacher retirement systems across the country have seen costs rise over the past two decades, driven largely by growth in pension debt (known as unfunded liabilities). The costs of paying down these shortfalls in teacher pension funds have been steadily cutting into the spending on key education priorities. The effects are felt particularly hard in high-need districts which have fewer local resources to draw on to fill in the gaps when education costs rise, creating less funding for teacher salaries and programs aimed at improving academic and other outcomes.

However, this squeeze has not been felt uniformly across all states, as revenue and education spending experiences have varied. As a result, there are notable differences in the degrees of crowd out that pension debt costs have had on education spending when looking from state-to-state.

This profile provides detailed analysis for your state, supplementing the analysis highlighted in our primary research on [Hidden Education Funding Cuts](#) in America. The state profile examines three key elements:

- **State Education Spending:** the state's "own-source" K-12 spending for 2001-2018, both in the aggregate and on a per student basis. This excludes federal funding (which is typically not used to pay pension costs) and local revenues (which also vary as a funding source from state-to-state);
- **Pension Funding Status:** the pension system's unfunded actuarially accrued liabilities (UAAL) and actuarially determined employer contributions (ADEC) for 2001-2018; &
- **Education Crowd Out:** the shares of a state's own-source K-12 spending consumed for the pension contributions paid for 2001-2018.

For each element identified above analyses are from a state budgeting perspective, excluding both federal and local funding. We offer illustrations of trends over time, and a brief analysis of those trends. The last page includes a quick glossary of terms and link to the methodology for all of the data provided.

It is important to note that all charts provide figures adjusted for inflation except for displays of state own-source K-12 spending. This allows for a reference of how much of the increase in nominal education spending is just driven by inflation as opposed to the expansion of education budgets.

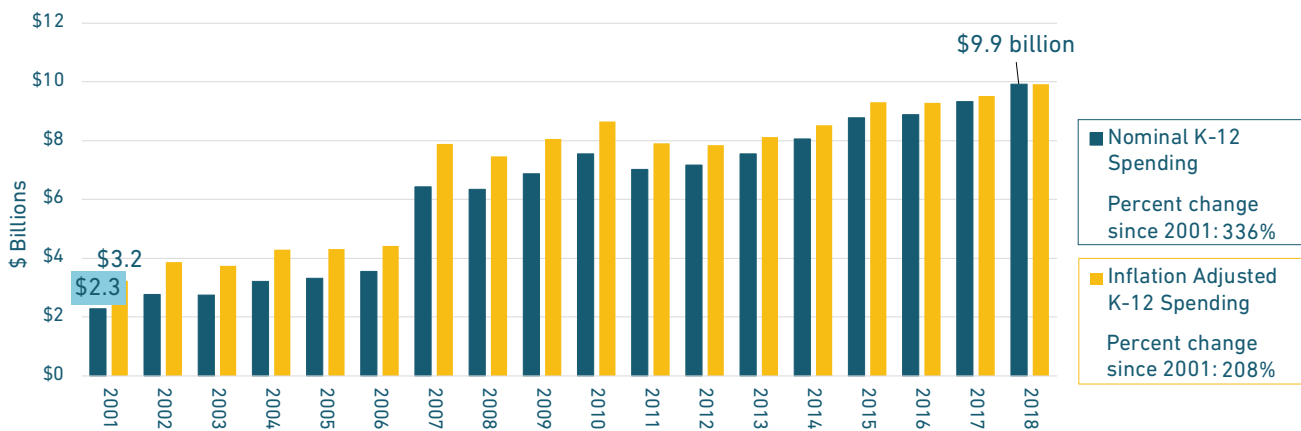
The Centennial State is home to more than 5.7 million citizens, and over 900,000 primary and secondary school students. In 2018, the state’s total expenditures exceeded \$39.8 billion — funds for schools, transportation, public safety, and other public services. Out of that spending, the state’s own-source expenditures — defined as all state funding that does not draw on federal or local revenue — totaled \$29.9 billion.

Colorado teachers are enrolled in a guaranteed income plan, known as a defined benefit pension, administered by the Schools Division of the Public Employees’ Retirement Association of Colorado (PERA Schools). PERA Schools manages retirement benefits for roughly 335,000 active and retired teachers. PERA also manages a separate defined benefit plan for Denver Public Schools that is not included in this analysis, in addition to pension plans covering state workers, municipal employees, and judges.

EDUCATION SPENDING

In 2018, Colorado’s state distributed K–12 expenditures totaled \$10.5 billion. Out of that total, \$9.9 billion came from state own-source funding while the remaining \$595 million was from federal grants and other education programs. (Local sources provided additional funding.)

Figure CO1: Colorado’s state spending on education has increased significantly both in nominal dollars and after accounting for inflation.



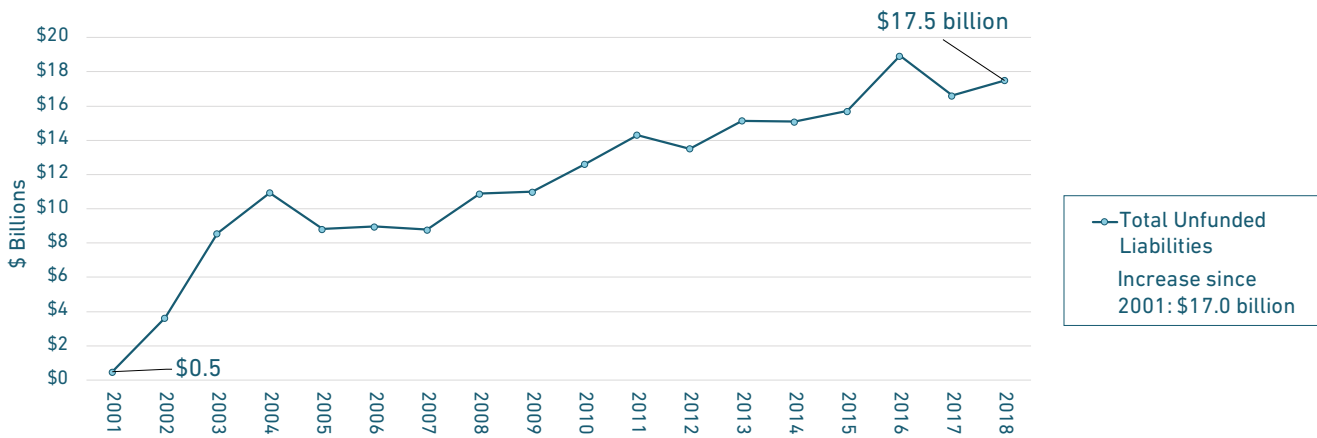
State Own-Source K–12 Spending, 2001–2018

As Figure CO1 illustrates, state spending on primary and secondary education in Colorado has increased significantly since 2001 — growing by \$7.6 billion in nominal dollars. After adjusting for inflation, spending still increased significantly since 2001 — growing by \$6.7 billion. On a dollars per student basis growth was slightly slower but still considerable — increasing 148.2% since 2001 from \$4,381 to \$10,875 (inflation adjusted).

PENSION FUNDING STATUS

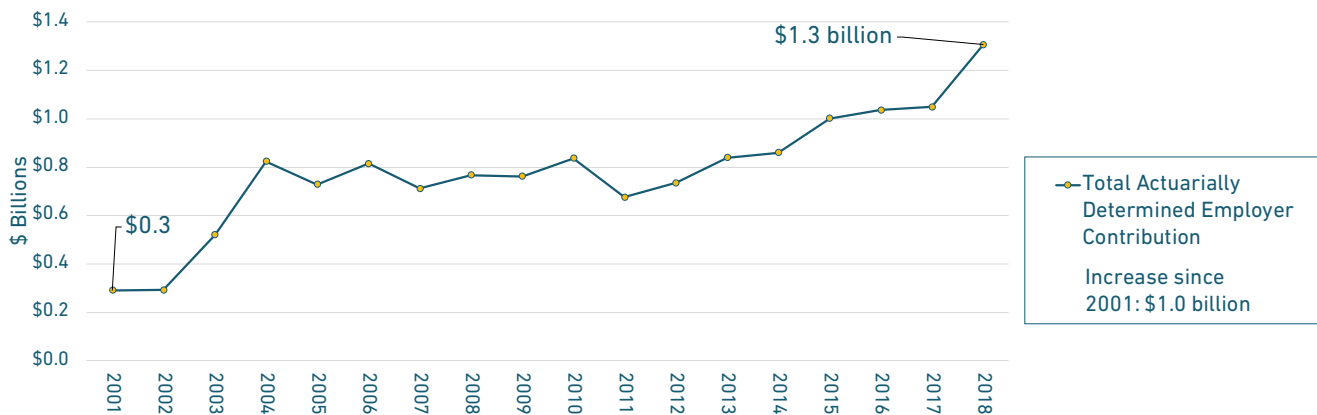
In 2001, PERA Schools was nearly fully funded with only \$483 million in pension debt. However, over the past 17 years a combination of underperforming investments coupled with changing demographics have caused the unfunded liability for PERA Schools to explode — reaching \$17.5 billion in 2018. Figure CO2 shows the change in the unfunded liabilities and Figure CO3 illustrates the change in what state actuaries have recommended as contributions from government employers.

Figure CO2: PERA Schools’ pension debt has exploded since 2001.



PERA Schools Unfunded Liabilities (Actuarial Value), 2001–2018

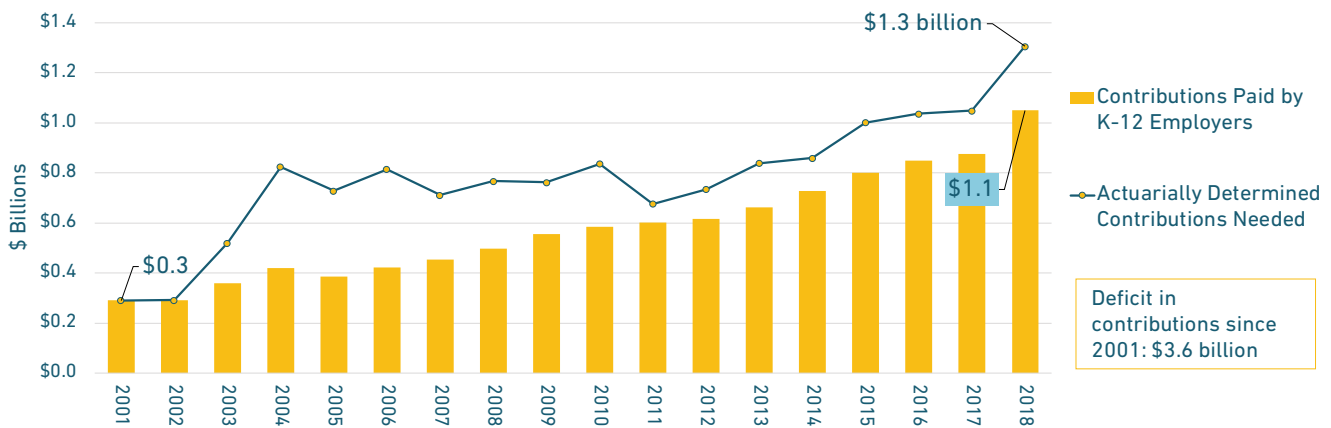
Figure CO3: To address growing pension debt the amount actuaries recommend the state should contribute to PERA Schools has nearly quadrupled.



PERA Schools Actuarially Determined Employer Contributions, 2001–2018

There are a number of states across the country that do not always ensure that the ADEC is paid in full to the pension fund each year. Unfortunately, Colorado is one of those states, failing to pay the full pension bill each year since 2003, shown in Figure CO4. As a result, the actual contributions paid into PERA Schools using education funds have been less than if the ADEC trend displayed in Figure CO3 was paid in full, but the actual contributions paid to PERA Schools have still more than tripled from \$291.3 million in 2001 to \$1.1 billion in 2018.

Figure CO4: Colorado has not paid its full actuarial bill to PERA Schools since 2003, shorting the plan by \$3.6 billion.



Actuarially Determined Employer Contribution Compared to Actual Contributions Paid to PERA Schools, 2001–2018

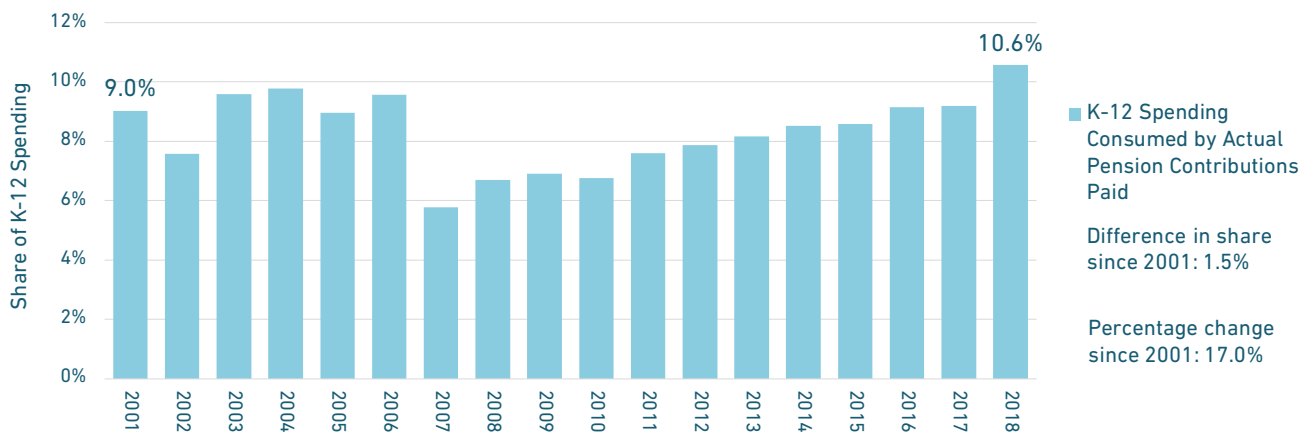
Paying the full required pension bill each year is the bare minimum for ensuring a pension system is fully funded. Best practice would be for Colorado to adopt a policy of ensuring the ADEC is paid every year. An alternative approach was adopted in 2018, with the Colorado legislature creating automatic employer and employee contribution rate increases each year (in addition to COLA reductions for retirees) until the actual contributions are equal to the ADEC. There is a maximum increase in these contributions, meaning there is no guarantee that actual payments will be equal to the ADEC, but this is a good step in the direction of improving PERA funding policy.

However, from the perspective of education funding, any increase in pension costs will be viewed negatively if it is shrinking the dollars available for teacher salaries and serving kids. For example, if the ADEC had been paid every year without some adjustment to expand Colorado’s education funding, then the state could have suffered an even larger hidden cut than we show in the final chart on the next page.

PENSION COSTS CROWDING OUT K-12 SPENDING

The growing costs of funding PERA Schools have soaked up an increasing share of Colorado’s education spending. This is especially important for teachers, as the growth in PERA Schools’ costs outpaced the growth in state own-source K-12 spending. In fact, PERA Schools’ contributions reported as a share of K-12 spending increased from 9% in 2001 to 10.6% in 2018.

Figure CO5: The hidden cut to Colorado’s state education funding is serious. PERA Schools’ contributions are growing even faster than the state’s significant increases to K-12 funding.



Actual Pension Costs as a Share of State Own-Source K-12 Spending, 2001-2018

State K-12 spending on education has increased considerably since 2001 in response to the state’s growing population. However, pension costs for the PERA Schools have been growing rapidly too, as previously shown in Figure CO4. In fact, as Figure CO5 shows, the increase in these costs has been even faster than the significant growth in state K-12 funding. Had the state not increased education spending at such a high rate, the hidden cut would have been considerably worse.

A primary reason why pension costs have increased is the failure by Colorado to meet its PERA Schools funding commitments and pay the full ADEC each year. But even the actual amounts paid have grown faster than the state’s own-source education spending. Unless there is a change that reduces PERA Schools’ costs and/or adjusts the state’s education funding to fully account for pension contributions, Colorado’s education funding will continue to suffer this hidden cut in dollars intended for serving the state’s children.

An even more concrete way to understand how changes in pension debt and pension costs have influenced education resources is to think about them relative to total student enrollment. Table CO1 shows the UAAL and actual pension contributions on a per student basis compared against state education spending. Breaking the numbers down this way shows that there has been considerable growth in per student spending by the state. Student enrollment has increased by roughly 200,000 students since 2001 and the state’s commitment to improving education spending is on display; however, pension costs are also growing. While Colorado spent roughly \$6,500 more per student in 2018 than 2001, the pension costs have nearly quadrupled, cutting into that increase.

Table CO1: State education spending per student has increased significantly since 2001, but pension debt and contributions are also growing quickly.

Year	Total State K–12 Spending Per Student	Per Student Share of Pension Debt	Pension Debt as % of Per Student Spending	Employer Pension Cost Per Student	Per Student Spending Minus Pension Cost
2001	\$4,381	\$656	15.0%	\$396	\$3,985
2002	\$5,174	\$4,852	93.8%	\$392	\$4,783
2003	\$4,934	\$11,276	228.5%	\$473	\$4,461
2004	\$5,570	\$14,193	254.8%	\$545	\$5,025
2005	\$5,512	\$11,262	204.3%	\$494	\$5,018
2006	\$5,576	\$11,292	202.5%	\$533	\$5,042
2007	\$9,830	\$10,950	111.4%	\$568	\$9,262
2008	\$9,114	\$13,296	145.9%	\$610	\$8,504
2009	\$9,686	\$13,198	136.3%	\$669	\$9,018
2010	\$10,256	\$14,945	145.7%	\$694	\$9,561
2011	\$9,265	\$16,759	180.9%	\$705	\$8,560
2012	\$9,090	\$15,642	172.1%	\$715	\$8,375
2013	\$9,265	\$17,266	186.4%	\$756	\$8,509
2014	\$9,600	\$16,977	176.8%	\$818	\$8,782
2015	\$10,364	\$17,465	168.5%	\$890	\$9,475
2016	\$10,276	\$20,912	203.5%	\$940	\$9,336
2017	\$10,465	\$18,247	174.4%	\$962	\$9,503
2018	\$10,875	\$19,161	176.2%	\$1,150	\$9,725

Notes: Values are inflation adjusted dollars spent per student to allow for comparison of spending over time. Figures reflect the K–12 employer portion of liabilities and employer contributions.

Per Student Share of PERA Schools Unfunded Liabilities and Actual K–12 Employer Contributions, 2001–2018

ABOUT THIS PROJECT

The growing cost of unfunded pension promises is having direct and immediate influence on the ability of local school districts to serve children. To show how hidden education funding cuts work, we built a dataset of state-level K–12 education spending and combined it with contribution rate data for state pension plans where teachers are participants. Merging these two data types shows how the rate of change in teacher pension costs is growing much faster than education budgets nationally.

To review data at the national level, visit Equable.org/hiddenfundingcuts and check out: “[Hidden Education Funding Cuts: How Growing Teacher Pension Debt Payments Are Eating into K–12 Education Budgets.](#)” To learn more about our data and how we calculate a state’s hidden education funding cut, check out the methodology.

However, the hidden funding cuts to education have not been felt uniformly across all states, as revenue and education spending experiences have varied. For some states, slow growth in K–12 spending has combined with the explosion in pension debt to create a significant threat, potentially crowding other items out of the education budget. In California, for example, a report by Pivot Learning found that rising pension contributions, driven by efforts to repay pension debt, have led to deferred maintenance of schools, larger class sizes, reduction or elimination of after-school programs, and a reduction in educational equity.

But, for other states, K–12 spending itself has grown significantly, even after accounting for inflation, and this has offset part of, or most of, the state’s increase in pension costs (though in these cases, it is likely that policymakers were not increasing K–12 spending simply to offset the growth in pension costs). And a few states have even managed to buck the trend entirely. While this profile details the experience of an individual state, we encourage you to explore the profiles of other states to see how their trends compare. A collection of profiles for all 50 states and Washington, DC can be found [here](#).

ABOUT THE AUTHORS

Jonathan Moody is vice president of Equable Institute, where Anthony Randazzo is executive director. Moody has worked on state fiscal policy since 2014 including time as research officer at the Pew Charitable Trusts. Randazzo has worked with over a dozen states on retirement system improvements, and formerly was managing director of the Pension Integrity Project.

QUICK GLOSSARY

Actuarially Determined Employer Contributions (ADEC): This is the money that actuaries calculate should be paid each year by the state and local employers to cover pension benefits earned plus to pay down any pension debt (after accounting for any employee contributions).

Unfunded Liability (UAAL): This is the shortfall in money that a pension fund should have on hand to pay all future promised benefits. Think of this as pension debt owed to retirement systems to pay promised pension benefits. In technical terms, this refers to the Unfunded Actuarially Accrued Liability.

Own-Source K–12 Spending: This is the money spent on primary education using state resources only, excluding any federal funding, local resources, or expenditures on higher education.