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Key Considerations When Comparing California K-12 School Spending to Other States

Spending on K-12 schools is one of California's most important public investments. One way to evaluate this investment is to compare California's K-12 education spending to that in other states.¹ While such comparisons do not in themselves reflect whether California's K-12 spending is adequate to provide students a high-quality education, they are often used to assess the state's support for schools.

Several organizations survey state departments of education each year and publish K-12 spending figures. Depending on methodological choices made by these organizations and by others that interpret this published data, similar analyses – such as ranking California's K-12 spending per student relative to other states – can produce different results.

This *Issue Brief* examines different data sources that are used to evaluate California's level of K-12 spending, reviews the advantages and disadvantages of each, and explains why the amount that California is reported to spend per K-12 student, as well as its ranking relative to other states, varies depending on the source of this information and how it is interpreted.

Data Sources for Comparing California K-12 Education Spending to That in Other States

Currently, there are four major sources of national information on K-12 school spending: the National Education Association, the National Center for Education Statistics, the US Census Bureau, and the Education Week Research Center. Each of these data sources has relative advantages and disadvantages (see table on next page). For example, while several sources report *actual* K-12 school spending data, as opposed to *estimated* spending levels, these data are not timely. Due to these variations and the resulting trade-offs, each data source allows for different types of comparisons of California's K-12 education spending.² Specifically:

- **National Education Association (NEA) data allow for timely comparisons of California's K-12 spending to that in other states, but the NEA's current-year data reflect estimated, not actual, spending.** The NEA surveys state departments of education twice per year and publishes K-12 spending figures in an annual report. The NEA survey requests current school year estimates of K-12 spending that comes from federal, state, and local sources. Based on survey responses, the NEA either reports estimates provided by state departments of education or the NEA's own estimates of current-year spending.³ As many states do not provide this information, NEA data largely reflect current-year estimates made by the NEA. NEA figures allow for the most up-to-date

Data Sources for Comparing K-12 Education Spending Among States

	Where Do the Data Come From?	When Are the Data Reported?	How Timely Are the Data?	Are the Data Adjusted for Differences in States' Costs of Living?	What Funding Sources Are Included?
National Education Association (NEA)	State departments of education or NEA estimates	First quarter of each calendar year	Estimated expenditures for the current school year	No	Federal, state, and local
National Center for Education Statistics (NCES)	State departments of education	Annually, but with no consistent release date	Actual expenditures for the state fiscal year that ended roughly two years before	No	Federal, state, and local
US Census Bureau	State departments of education	Second quarter of each calendar year	Actual expenditures for the state fiscal year that ended roughly two years before	No	Federal, state, and local
Education Week	NCES*	January	Actual expenditures for the state fiscal year that ended more than two years before	Yes	Federal, state, and local

*Education Week has based its analysis on NCES data every year except 2015, when it used US Census Bureau data because NCES data were not available in a timely manner.

comparison of spending among states because they represent current-year estimates. However, the NEA's current-year data are not adjusted for differences in states' costs of living. Without this adjustment, it is difficult to meaningfully compare school spending in California – which has a relatively high cost of living – to that in other states.

- National Center for Education Statistics (NCES) data allow for comparisons of California's K-12 spending to that in other states, but NCES data are not timely.** The NCES publishes K-12 education spending data provided by state departments of education. Beginning each January, the NCES asks states to provide expenditures from federal, state, and local funds for the most recently completed fiscal year. The NCES then processes and verifies this data, which takes more than a year. Because the NCES does not publish state K-12 spending data until roughly two years after

the end of each state's fiscal year, comparisons based on NCES numbers are not as timely as those based on the NEA's *current-year* spending estimates. Similar to the NEA, the NCES does not adjust its data for differences in cost of living among states.

- US Census Bureau data allow for comparisons of California's K-12 spending to that in other states, but its data also are not timely.** The US Census Bureau annually surveys state departments of education and publishes K-12 education spending data. These data allow for comparisons of states' K-12 education spending that comes from federal, state, and local sources. Each January, the US Census Bureau begins data collection for the previous fiscal year, a process that lasts for over a year. Because the US Census Bureau does not publish state K-12 education spending data until roughly two years after the end of each state's fiscal year, comparisons based on US

Census Bureau numbers are not as timely as those based on NEA's *current-year* spending estimates. Similar to the NEA and the NCES, the US Census Bureau does not adjust its numbers for differences in cost of living among states.

- Education Week adjusts education spending data for differences in states' cost of living – allowing for more meaningful comparisons among states – but this information is not timely.** Education Week annually publishes a report that analyzes the K-12 spending numbers from the NCES.⁴ Education Week's data also allow for comparisons of states' K-12 education spending that comes from federal, state, and local sources. Because Education Week adjusts for differences in states' costs of living, its analysis allows for a more meaningful comparison of education spending among states than do comparisons based upon unadjusted data. However, because Education Week's analysis relies on NCES figures, which reflect spending data that are roughly two years old, it is not as timely as NEA data, which reflect current-year spending estimates.

Why Do Comparisons of States' K-12 Spending Per Student Vary?

Comparisons of K-12 spending vary across sources because these sources report data from different years as well as define spending differently. Moreover, many organizations then choose from among these data sources to calculate states' K-12 spending per student and use the resulting calculations to make state-to-state comparisons.⁵ In addition to selecting an underlying data source, these organizations make other data choices in calculating K-12 spending per student figures. For example, organizations may include different categories of spending and/or different definitions of students to calculate K-12 spending per student. These choices lead to different results when comparing K-12 spending per student among states.

Comparisons Vary Based on the School Spending Categories Used

Calculations of states' K-12 spending per student are typically based on one of two definitions of expenditures: "total K-12 spending" or "current expenditures."⁶ Researchers generally use current expenditures to compare states' K-12 spending per student. This is because current expenditures, unlike total K-12 spending, *exclude* repayment of debt and spending on school construction, which tends to increase and decrease dramatically from year to year. State-to-state comparisons based on total K-12 spending per student do not accurately reflect the annual level of state support for schools' day-to-day operations.

Comparisons Vary Based on the Definitions of "Spending" and "Students"

While researchers typically use current expenditures to calculate K-12 spending per student, different data sources vary as to the types of spending they include in their definitions of current expenditures. This means that even similar analyses that use current expenditures to calculate K-12 spending per student can produce different results, depending on the source of these data.

In addition, calculation of K-12 spending per student depends on the method used to count students. For example, some organizations calculate K-12 spending per student using average daily attendance (ADA), while others use student enrollment (see text box). As a result, comparisons of states' K-12 spending per student can vary based upon the student count used. Comparisons that use ADA to calculate K-12 spending per student typically result in higher spending per student than those that use student enrollment because ADA tends to be lower than enrollment.

Comparisons That Adjust for Differences in States' Costs of Living Differ From Those That Do Not

Analyses of K-12 spending per student often include state rankings. However, most sources that rank states

Counting Students: Why Methodology Matters

Two methods are typically used to count public school students. Enrollment reflects all students who are registered in schools on a designated day in the fall of each school year regardless of whether they are absent on the day the count takes place. Average daily attendance (ADA) reflects the number of students that attend school each day, totaled for the year and then divided by the number of instructional days. ADA excludes students not present on a day school was in session, such as students with excused absences or students who have dropped out of school. As a result, enrollment usually is higher than ADA.

do not adjust K-12 spending per student based upon the differences in the cost of living in each state. When rankings do not account for states' cost of living, California's K-12 spending per student places higher relative to other states, whereas its ranking falls when differences in states' costs of living are factored in. For example, Education Week, which does report K-12 spending per student adjusted for differences in states' costs of living, typically shows California ranking lower than other analyses that do not make these adjustments. This lower ranking reflects the fact that education dollars – which primarily pay for staff salaries – tend not to stretch as far in higher-cost states.

Which Rankings Matter? Why Simply Comparing California's K-12 Spending Per Student to That in Other States Is Not as Useful as Other Measures

While ranking spending per student is a common way of comparing states' investment in K-12 schools, this approach can be misleading and provides an incomplete picture of state support for K-12 education. Most spending per student rankings, for

example, do not adjust for differences in states' costs of living. Analyses that do not make these adjustments rank California higher in terms of spending per student than is actually warranted. This is because schools in California – a relatively high-cost state – are able to provide fewer services for the same level of spending than schools in states with lower costs of living. For example, schools in states with lower costs of living tend to pay relatively lower salaries for personnel. Because schools in lower-cost states are generally able to spend fewer dollars for the same number of educators, they can afford to hire more staff and/or provide more services than California schools, which would need to spend more for the same number of staff and/or services.

Another reason to view K-12 spending rankings with some caution has to do with the relative nature of state rankings in general. Specifically, even if California's K-12 spending per student were to go unchanged for a certain number of years, its ranking could actually improve if other states were to *reduce* their spending during the same period. In other words, California's ranking relative to other states would rise even though no additional dollars were actually flowing to its schools.

An alternative, and more useful, approach for comparing California's K-12 spending to that in other states is to measure this spending relative to each state's capacity to support its schools. Calculating K-12 education spending as a share of each state's economy, as reflected by the personal income received by residents of each state, avoids the shortcomings of measures that do not adjust for differences in the cost of living among states. Moreover, comparing K-12 spending based upon the financial resources available in each state to support schools and other public systems and services provides a more meaningful comparison of school spending in California to that in the rest of the US.

Another way to assess state support for schools is to compare California's number of students per teacher and the number of students per school staff to that in other states. California has ranked last in the nation in the number of K-12 students per teacher for at least the last several years, and the state ranked among

the bottom five states in the number of students per counselor, librarian, and administrator in 2012-13, the most recent year for which data are available.⁷

Reaching a Common Understanding of School Spending

There is little question that comparisons of California's K-12 spending to that in other states will continue to be used to assess the support provided to students and schools. State rankings also will be a part of this discussion. However, differences among K-12 spending figures and rankings often lead to confusion about why these measures vary. This confusion

distracts attention from the critical question of how to ensure California schools have adequate resources as well as other important policy debates.

Rather than focusing on any particular data source or ranking, this *Issue Brief* has sought to explain the differences among K-12 spending data sources and why rankings of California's education spending vary. Moving beyond the debate over which spending measures to use, and reaching a common understanding of California's school spending, could provide the basis for an informed, robust discussion of what resources schools need in order to provide a high-quality education for all California students.

Jonathan Kaplan prepared this *Issue Brief*. The California Budget & Policy Center was established in 1995 to provide Californians with a source of timely, objective, and accessible expertise on state fiscal and economic policy issues. The Budget Center engages in independent fiscal and policy analysis and public education with the goal of improving public policies affecting the economic and social well-being of low- and middle-income Californians. General operating support for the Budget Center is provided by foundation grants, subscriptions, and individual contributions. Please visit the Budget Center's website at calbudgetcenter.org.

END NOTES

- 1 This *Issue Brief* uses the terms "state K-12 spending," "state K-12 education spending," and "state K-12 spending per student" to refer to the spending of all public school districts aggregated statewide.
- 2 Another source for California's K-12 education spending data is the state's Department of Finance (DOF). As part of the Governor's annual budget proposal each January, DOF provides current-year school funding estimates. Therefore, DOF data reflect the annual amount of funding that California's K-12 schools receive. In contrast, data sources that compare K-12 education spending among states report the annual amount that schools within each state spend. Partially as a result of this difference, DOF data cannot be used to compare K-12 education spending to that in other states. However, K-12 spending figures reported by DOF allow for useful comparisons of the level of state support for California's schools over time.
- 3 If a state department of education does not provide current-year spending estimates in response to the NEA survey, the NEA estimates – using regression analysis – current-year spending for that state based on numerical data from prior years. In the most recent NEA report, 12 states provided estimates of current-year spending data for the 2014-15 school year.
- 4 Education Week has based its analysis on NCES data every year except 2015, when it used US Census Bureau data because NCES data were not available in a timely manner.
- 5 State-to-state comparisons of K-12 education resources often focus on school expenditures as opposed to the revenue received by schools. This is because spending figures more accurately reflect the level of instruction and support services provided to K-12 students in a given year. For example, schools may not spend all of the dollars they receive each year. Moreover, some revenue data sources also include proceeds from the sale of bonds and, therefore, may not accurately reflect the annual level of funding available to support services for students.
- 6 Current expenditures include school spending on books, supplies, and staff salaries and benefits, but do not necessarily reflect spending for the current school year.
- 7 The number of K-12 students per teacher reflects NEA estimates and the number of K-12 students per staff reflects NCES data.