**COLORADO**

**Summary:** This 2019-20 profile of Colorado’s public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures (see back), Colorado scores 43 out of 100, which ranks 30th out of the 48 states with possible ratings.

**FISCAL EFFORT**

Fiscal effort is a measure of how much states devote to their schools as a share of their economic capacity (i.e., ability to raise revenue). Effort is calculated by dividing direct state and local K-12 expenditures in each state by its gross state product (GSP).

<table>
<thead>
<tr>
<th>CO</th>
<th>U.S.</th>
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<tbody>
<tr>
<td>Colorado effort</td>
<td>3.15%</td>
</tr>
<tr>
<td>U.S. average</td>
<td>3.61%</td>
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- CO is a low effort state.
- In FY 2020, CO spent 3.15 percent of its economic capacity (GSP) on its K-12 public schools.
- This was 0.45 percentage points lower than the unweighted national average of 3.61 percent.
- CO’s effort level ranks #40 in the nation (out of 50).

**STATEWIDE ADEQUACY**

Statewide adequacy compares actual per-pupil (PP) spending in each state to district-level cost model estimates of the amount required to achieve the modest goal of U.S. average test scores. The graphs to the right indicate the percentage of students in districts where spending is below adequate and the funding gap (% above/below) in the typical student’s district. The graphs include regional and national averages.

- Overall adequacy in CO is relatively moderate.
- By the modest standard of U.S. average scores, 34.0 percent of CO students attend inadequately funded districts, which ranks #26 in the nation (out of 48).
- The typical CO student’s district spends 5.3 percent above adequate levels, which ranks #29 in the nation.

**EQUAL OPPORTUNITY**

Equal opportunity is the comparison of adequacy between each state’s higher- and lower-poverty districts. The graph to the right presents adequate funding gaps by district poverty quintile (the blue diamonds are U.S. averages). The difference (in pct. points) between the lowest- and highest-poverty groups is a state’s “opportunity gap.”

- Educational opportunity in CO is highly unequal.
- Spending in CO’s highest-poverty districts is 18.4 percent ($2,489 PP) below the estimated adequate level, compared with 28.1 percent ($2,456 PP) above adequate in the state’s most affluent districts.
- This opportunity gap of -46.5 percentage points is ranked #22 in the nation (out of 48).

**Adequacy by district poverty**

- CO’s opportunity gap contributes to a student outcome gap: the state’s highest-poverty districts (pink dot) score 0.53 s.d. below its lowest-poverty districts (blue dot).
NOTES ON DATA AND MEASURES
State School Finance Profiles 2019-20 (publ. 2022)

General
The data in this state profile are from the School Finance Indicators Database (SFID), a collection of public K-12 school finance and resource allocation indicators published annually by researchers from the Florida State University, University of Miami School of Education and Human Development, and Rutgers University Graduate School of Education. The primary product of the SFID is the State Indicators Database (SID), a state-level dataset containing roughly 125 variables. This profile focuses on three types of measures included in the SID: fiscal effort, statewide adequacy, and equal opportunity. The full SFID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well as other SFID datasets, tool and report user guides and reports, are freely available to download at schoolfinancedata.org. The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- **The years in this profile refer to the spring semester of the school year (e.g., 2020 is 2019-20).**
- **Estimates may differ slightly from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.**
- **Due to rounding, some figures may differ slightly from users’ manual calculations of the estimates on the front side.**
- **The total number of states assigned rankings varies slightly by measure, as not all measures are available in all states.**
- **Overall state scores:** The overall scores reported at the top of the profile provide a very simple summary of states’ combined “performance” on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states’ school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of “good” or “bad”), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.

Fiscal effort
Fiscal effort indicates how much of a state’s total economic capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state’s economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it might contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but provide an equivalent amount of resources (due to their greater ability).

- **U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-20 due to data irregularities), so as to keep a consistent set of states across all years.**
- **In the first bullet of the left panel, we characterize each state’s effort level as low, medium, or high by sorting states into these roughly equal groups using terciles. Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies. Note also that 2006 is the first year in which we can make confidence statements, as our effort indicators, as calculated GSP-based efforts, as a category of outcomes and cost factors such as regional wage variation, district size, and student characteristics. Note that this model and the data it uses are necessarily imperfect, and estimates should be viewed with appropriate caution. For more information about the NECM, see the SFID user’s guide. Some of the estimates presented in this section of the profile can be calculated using SID variables, whereas others (e.g., the district-by-district estimates in the right panel) require the use of SFID data.**

Statewide adequacy
Adequacy is typically defined as the extent to which the amount of funding for schools is sufficient for students to reach a minimum/acceptable level of educational outcomes. Our adequacy estimates compare each district’s actual spending levels to estimates from cost models of how much that district would have to spend in order to achieve national average test scores (i.e., “required” or “adequate” spending). We express statewide adequacy in terms of either: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the adequacy gap (percentage difference between actual and estimated adequate spending) for the typical student in each state. All these estimates are from the National Education Cost Model (NECM), which is part of the SFID. The NECM calculates required spending based on the relationship between outcomes and costs factors such as regional wage variation, district size, and student characteristics. Note that this model and the data it uses are necessarily imperfect, and estimates should be viewed with appropriate caution. For more information about the NECM, see the SID user’s guide. Some of the estimates presented in this section of the profile can be calculated using SID variables, whereas others (e.g., the district-by-district estimates in the right panel) require the use of SFID data.**

Equal opportunity
Equal educational opportunity is achieved in a given state when none of that state’s districts are substantially further above or below adequate spending levels than are other districts. In the SFID, we measure equal opportunity (EO) with the same NECM estimates used for statewide adequacy (see above), but in this case by comparing adequacy gaps (percentage difference between actual and estimated adequate spending) between the highest- and lowest-poverty districts in each state. That is, each state’s “opportunity gap” is the difference (in percentage points) between these two groups (district poverty groups are defined in terms of quintiles—e.g., the 20 percent highest-poverty districts compared with the 20 percent lowest-poverty districts in each state). Note that EO is conceptually independent of “adequacy,” e.g., a hypothetical state in which all districts are below adequate funding levels might still exhibit EO, so long as high- and low-poverty districts are inadequate by roughly the same proportions, whereas highly unequal opportunity might exist in a state in which funding is universally adequate, if high-poverty districts are more adequately funded than low-poverty districts.

- **EO estimates are not available for Vermont and Hawaii (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).**
- **In the first bullet of the left panel, we characterize each state’s EO as follows: very unequal (EO gap greater than -75 points); highly unequal (EO gap between -30 and -75 points); moderately unequal (-30 and -5 points); and slightly unequal (up to 5 points).**
- **The center panel figure presents adequate funding gaps for all five quintiles in each state (although opportunity gaps as we define them for the purposes of this profile use only the highest- and lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (blue diamonds) estimates in the graph are average differences between actual and required spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined by state, and so the U.S. averages (blue diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.

- **In the present right panel figures, by district poverty quintile, adequacy (difference between actual and required spending) expressed in dollars per pupil (horizontal axis) by average student testing outcomes expressed as the difference from the national average in standard deviations (vertical axis). The other markers (circles) in the plot are other states’ district poverty groups (color coded in the same manner, but with more transparent markers to allow for clear viewing of this state’s markers).** The difference in student outcomes at the highest- (Q5) and lowest-poverty (Q1) estimate is presented in the first bullet, below the plot, and can be interpreted as a poverty-based student achievement gap in this state.