STATE SCHOOL FINANCE PROFILES

Profiles of the K-12 school finance systems of all 50 states and D.C.

2021-2022

ALBERT SHANKER INSTITUTE 1998-2023

UNIVERSITY OF MIAMI SCHOOL of EDUCATION & HUMAN DEVELOPMENT

RUTGERS Graduate School of Education

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Bruce D. Baker
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ABOUT THE AUTHORS

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Introduction to the profiles

School funding is both enormously important and extremely complicated. Large amounts of finance data are collected every year by districts, states, and the federal government. These data are used by scholars and organizations to produce volumes of reports and papers, which vary widely in terms of empirical rigor, and sometimes reach conflicting conclusions. This can be frustrating for policymakers, parents, educators, advocates, and other stakeholders.

The primary purpose of the **School Finance Indicators Database** (SFID) is to cut through this clutter. It is a collection of finance and resource allocation measures that are based on sophisticated and widely accepted methods, but also designed to be easy for non-researchers to understand and use. The full state database, as well as user-friendly documentation, online data visualizations, and other resources are freely available to the public at the SFID website: schoolfinancedata.org.

Each year, we publish a report summarizing key findings from the SFID. Although this report does present data from every state, it does not allow for the kind of convenient *state-specific* summary that many users desire. Moreover, while all of our state indicators data are available to the public, the fact remains that analyzing datasets, as well as compiling and contextualizing results from a variety of different measures, can be difficult and time-consuming. **These 51 one-page state profiles pull together a selection of key measures into one place and provide a succinct summary of each state's (and D.C.'s) public K-12 finance system.** They are published every year as an accompaniment to the annual report. Note that the individual state profiles compiled in this document can be downloaded as separate PDF files at the SFID website.

Characterizing complex state finance systems parsimoniously is a challenge. The State Indicators Database (SID), which is the primary product of the SFID, includes approximately 125 variables measuring revenue and spending at different levels (e.g., federal, state, local), resource allocation (e.g., staff ratios, teacher pay), and other topics. The indicators are statistically adjusted for factors, such as regional wage variation and poverty, to allow for better comparisons within and between states (many of the indicators are available over the past 25-30 years). Any attempt to include all or even most of these measures in a single profile would likely overwhelm many users. It is also unnecessary.

Instead, the profiles, like the annual report, focus on three "core" measures from the state database, which together offer an effective overview of the fairness and sufficiency of each state's finance system:

1. **Effort**: how much of a state's total resources or capacity are spent directly on public K-12 education;
2. **Statewide adequacy**: how many of states' students are in districts with resources sufficient to meet common outcome goals;
3. **Equal opportunity**: whether funding is more adequate for lower-poverty districts than for higher-poverty districts.

In the profiles, on both the front and back sides, we provide descriptions of each of these three measures, and we try to present the data clearly and in context. This includes, for example, comparisons of each state with the nation as a whole, and, where appropriate, trends over time. The profiles also include overall state scores.

On the back of each profile you can find more detailed information about the indicators and notes about how they are presented and might be interpreted. This back page also lists the names of SID variables used, should readers wish to download and analyze the data for themselves (note that some of the results in the profiles require use of the SFID's District Cost Database, which is also freely available to download on the SFID website). It is our hope that the profiles contribute to improving the quality and productivity of school finance debates and policymaking.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

ALABAMA

Summary: This 2021-22 profile of Alabama's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Alabama scores 26 out of 100,** which **ranks 39th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	AL	U.S.
Child (5-17yo) poverty rate (%)	20.6	15.5
Public school coverage (%)	82.6	85.1
Percent revenue from state sources	51.9	43.7
Total enrollment (U.S. rank)	748,274 (24)	

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).

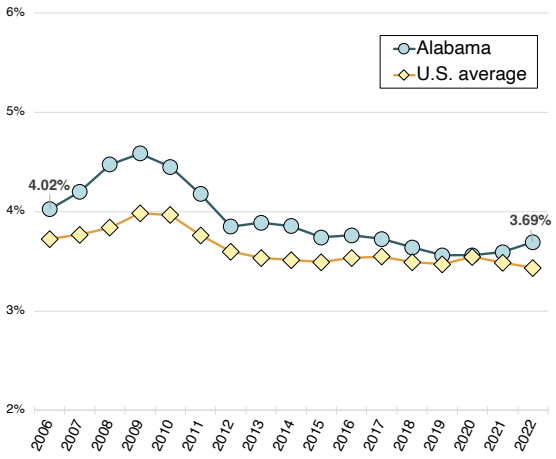
Rating **relative to other states** (high | medium | low):

AL is a medium effort state.

Fiscal effort summary	
Alabama effort	3.69%
U.S. average effort	3.43%

- AL spends 3.69 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.26 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**17** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- AL's 2022 effort level is 0.33 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #25 in the nation.

Net change by period (% pts.)		
Period	**AL**	**U.S.**
K-12 recession (2006-12)	-0.17	-0.13
Post-recession (2012-22)	-0.16	-0.16
Full period (2006-22)	-0.33	-0.29

- AL's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $6.10 billion (10.4 percent) higher.
- AL is a relatively low capacity state, with a GSP per capita ranked #48 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

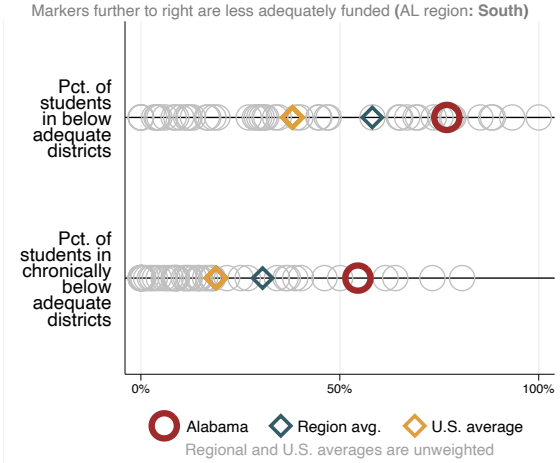
Statewide adequacy in AL is low.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	76.9% (#**41**)
Pct. of students in *chronically* below adequate districts (rank)	54.6% (#**44**)

- The typical AL student's district spends 30.0 pct. below adequate levels (rank #**46**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (AL region: **South**)

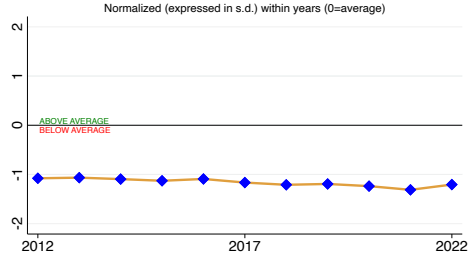


Statewide adequacy trend, 2012-22

- Spending in AL was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.128 s.d.

ALABAMA AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- AL's adequacy gap was ranked #45 in 2012 (#1 = most adequate) and #46 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

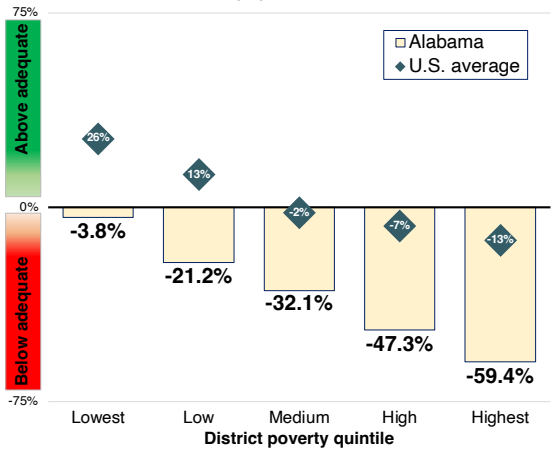
Rating **relative to other states** (high | medium | low):

Equal opportunity in AL is medium.

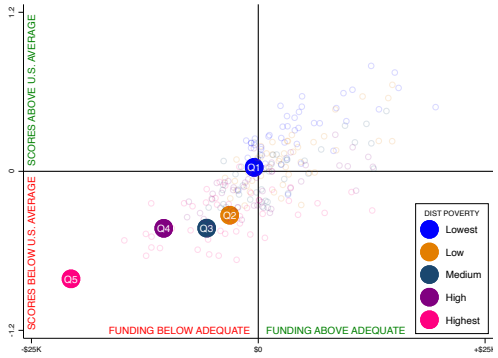
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	-11.0 %
B. High/highest poverty districts	-53.9 %
C. Opportunity gap (B minus A)	**-42.9** pts

- AL's opportunity gap of -42.9 points is ranked #**29** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- AL's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.84 s.d. below its lowest-poverty districts (blue dot).

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NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

General

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- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

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STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

ALASKA

OVERALL STATE SCORE NOT AVAILBLE

Summary: This 2021-22 profile of Alaska's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. We cannot calculate an overall state score for Alaska, as data are not available for one or more of the measures we use in calculating those overall scores (see below).

CONTEXTUAL STATS	AK	U.S.
Child (5-17yo) poverty rate (%)	11.9	15.5
Public school coverage (%)	82.2	85.1
Percent revenue from state sources	57.9	43.7
Total enrollment (U.S. rank)	129,944 (47)	

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).

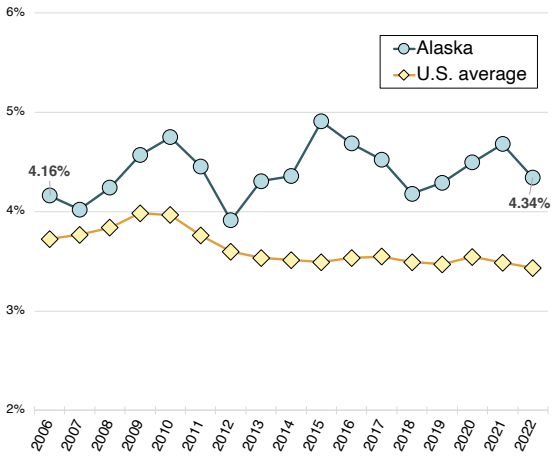
Rating **relative to other states** (high I medium I low):

AK is a high effort state.

Fiscal effort summary	
Alaska effort	4.34%
U.S. average effort	3.43%

- AK spends 4.34 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.91 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**3** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- AK's 2022 effort level is 0.18 pct. points higher than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #8 in the nation.

Net change by period (% pts.)		
Period	**AK**	**U.S.**
K-12 recession (2006-12)	-0.25	-0.13
Post-recession (2012-22)	0.43	-0.16
Full period (2006-22)	0.18	-0.29

- AK's effort was lower than its 2006 level in 0 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $0.00 billion (0.0 percent) higher.
- AK is a relatively high capacity state, with a GSP per capita ranked #7 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

We do not publish statewide adequacy estimates for Alaska, due to the state's unique climate and geography, as well as its isolation from other labor markets.

Statewide adequacy trend, 2012-22

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

Equal opportunity cannot be calculated for Alaska (see above).

EO gaps by student outcome gaps

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- **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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

ARIZONA

Summary: This 2021-22 profile of Arizona's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Arizona scores 16 out of 100,** which **ranks 45th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	AZ	U.S.
Child (5-17yo) poverty rate (%)	14.9	15.5
Public school coverage (%)	88.2	85.1
Percent revenue from state sources	41.0	43.7
Total enrollment (U.S. rank)	1,133,284	(13)

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).

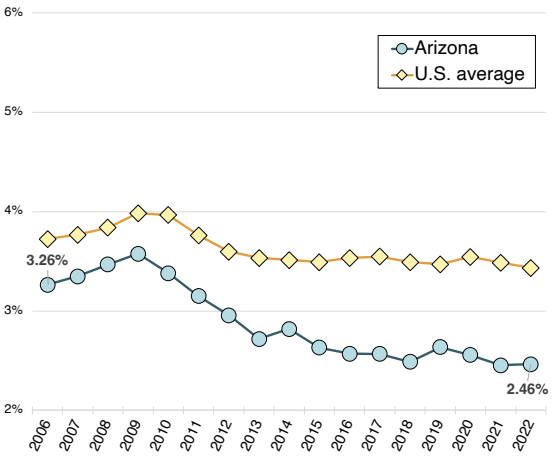
Rating **relative to other states** (high | medium | low):

AZ is a low effort state.

Fiscal effort summary	
Arizona effort	2.46%
U.S. average effort	3.43%

- AZ spends 2.46 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.97 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**49** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- AZ's 2022 effort level is 0.80 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #47 in the nation.

Net change by period (% pts.)		
Period	**AZ**	**U.S.**
K-12 recession (2006-12)	-0.31	-0.13
Post-recession (2012-22)	-0.49	-0.16
Full period (2006-22)	-0.80	-0.29

- AZ's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $18.89 billion (29.0 percent) higher.
- AZ is a relatively low capacity state, with a GSP per capita ranked #35 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

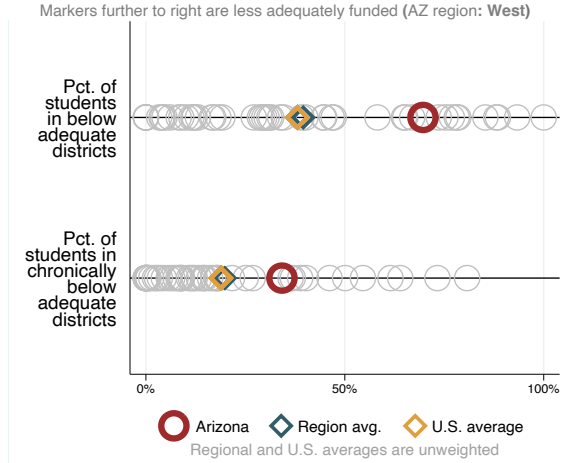
Statewide adequacy in AZ is low.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	69.7% (#**38**)
Pct. of students in *chronically* below adequate districts (rank)	34.0% (#**37**)

- The typical AZ student's district spends 17.3 pct. below adequate levels (rank #**40**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (AZ region: **West**)

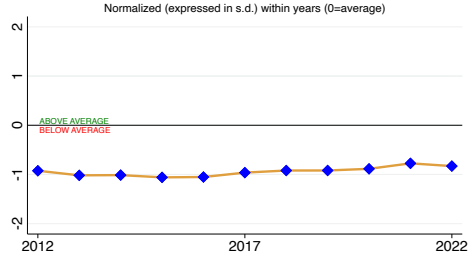


Statewide adequacy trend, 2012-22

- Spending in AZ was more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.095 s.d.

ARIZONA AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- AZ's adequacy gap was ranked #41 in 2012 (#1 = most adequate) and #40 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

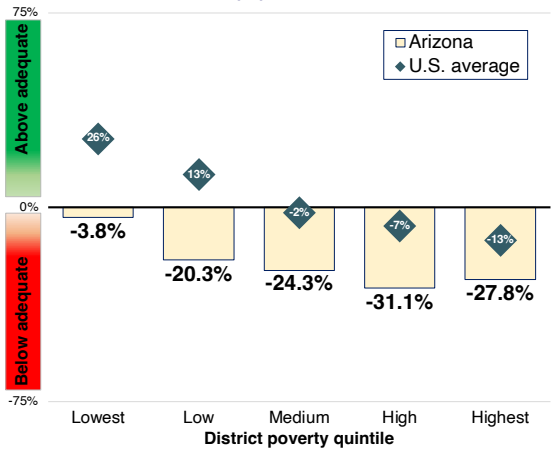
Rating **relative to other states** (high | medium | low):

Equal opportunity in AZ is high.

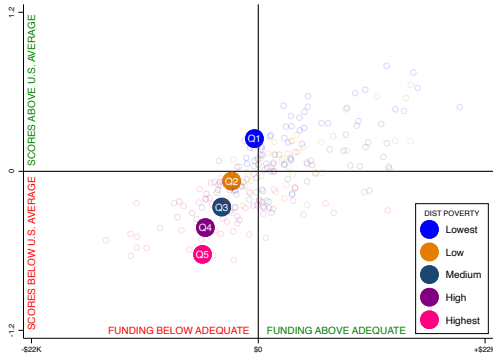
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	-10.3 %
B. High/highest poverty districts	-30.2 %
C. Opportunity gap (B minus A)	**-19.9** pts

- AZ's opportunity gap of -19.9 points is ranked #**5** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- AZ's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.87 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

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 **Albert Shanker Institute**, **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 SID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles:

- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
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Fiscal effort

SID variables used in this section: *effort*; *year*

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Equal opportunity

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STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

ARKANSAS

State score: **29**

Summary: This 2021-22 profile of Arkansas's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Arkansas scores 29 out of 100,** which **ranks 37th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	AR	U.S.
Child (5-17yo) poverty rate (%)	19.6	15.5
Public school coverage (%)	85.9	85.1
Percent revenue from state sources	67.0	43.7
Total enrollment (U.S. rank)	489,565 (32)	

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).

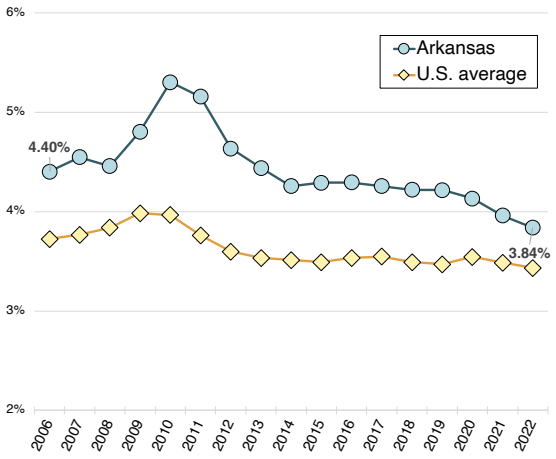
Rating **relative to other states** (high I medium I low):

AR is a high effort state.

Fiscal effort summary	
Arkansas effort	3.84%
U.S. average effort	3.43%

- AR spends 3.84 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.41 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**11** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- AR's 2022 effort level is 0.56 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #38 in the nation.

Net change by period (% pts.)		
Period	**AR**	**U.S.**
K-12 recession (2006-12)	0.23	-0.13
Post-recession (2012-22)	-0.80	-0.16
Full period (2006-22)	-0.56	-0.29

- AR's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $2.67 billion (7.0 percent) higher.
- AR is a relatively low capacity state, with a GSP per capita ranked #50 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high I medium I low):

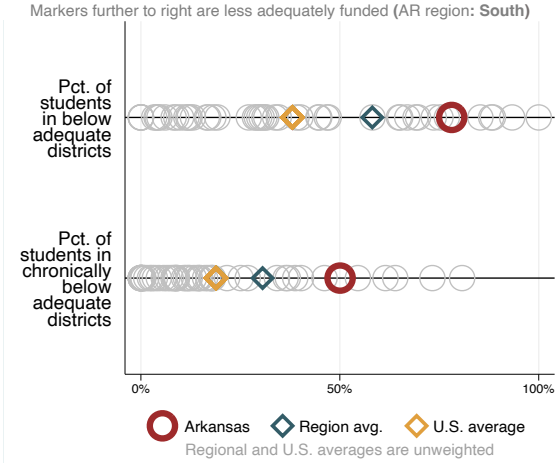
Statewide adequacy in AR is low.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	78.1% (#**42**)
Pct. of students in *chronically* below adequate districts (rank)	49.0% (#**43**)

- The typical AR student's district spends 25.7 pct. below adequate levels (rank #**45**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (AR region: **South**)

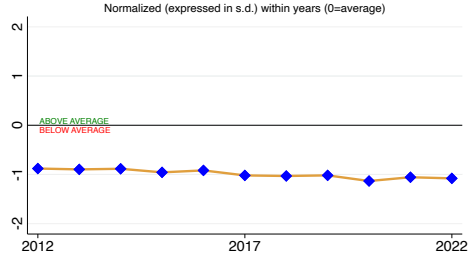


Statewide adequacy trend, 2012-22

- Spending in AR was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.200 s.d.

ARKANSAS AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- AR's adequacy gap was ranked #40 in 2012 (#1 = most adequate) and #45 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

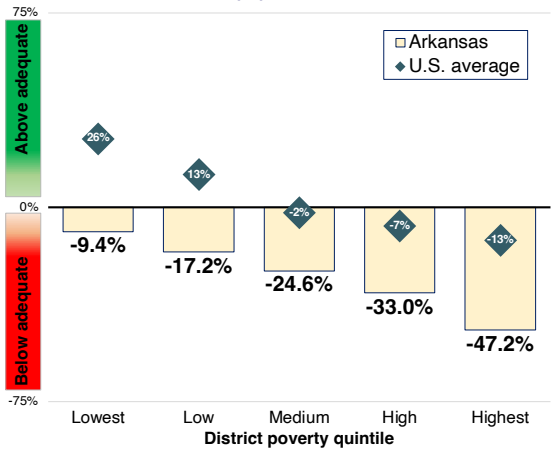
Rating **relative to other states** (high I medium I low):

Equal opportunity in AR is medium.

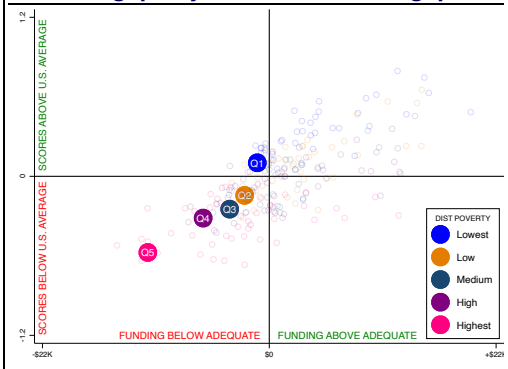
Average (enr-weighted) funding gaps by poverty (Red=below adequate I Green=above adequate)	
A. Low/lowest poverty districts	-12.1 %
B. High/highest poverty districts	-41.3 %
C. Opportunity gap (B minus A)	**-29.3** pts

- AR's opportunity gap of -29.3 points is ranked #**18** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- AR's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.68 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

General

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Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

CALIFORNIA

State score: **39**

Summary: This 2021-22 profile of California's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **California scores 39 out of 100,** which **ranks 28th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	CA	U.S.
Child (5-17yo) poverty rate (%)	14.8	15.5
Public school coverage (%)	88.2	85.1
Percent revenue from state sources	52.7	43.7
Total enrollment (U.S. rank)	5,959,858 (1)	

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).

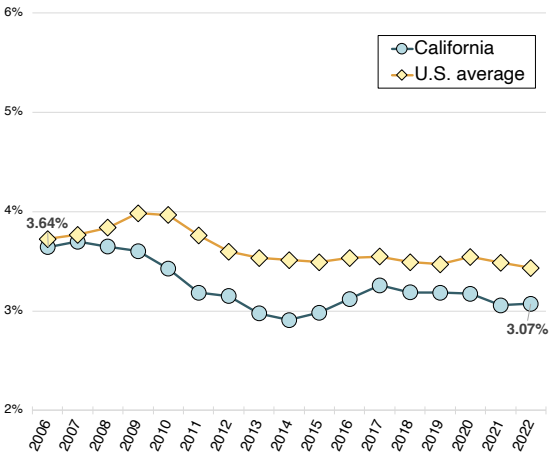
Rating **relative to other states** (high I medium I low):

CA is a low effort state.

Fiscal effort summary	
California effort	3.07%
U.S. average effort	3.43%

- CA spends 3.07 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.36 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**35** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- CA's 2022 effort level is 0.57 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #39 in the nation.

Net change by period (% pts.)		
Period	**CA**	**U.S.**
K-12 recession (2006-12)	-0.49	-0.13
Post-recession (2012-22)	-0.08	-0.16
Full period (2006-22)	-0.57	-0.29

- CA's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $103.00 billion (15.7 percent) higher.
- CA is a relatively high capacity state, with a GSP per capita ranked #5 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high I medium I low):

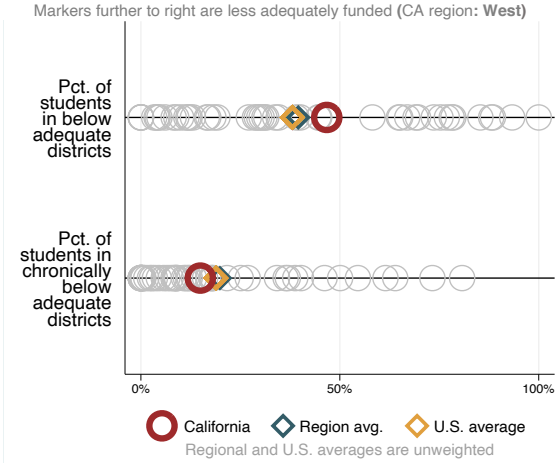
Statewide adequacy in CA is medium.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	46.7% (#**31**)
Pct. of students in *chronically* below adequate districts (rank)	14.7% (#**28**)

- The typical CA student's district spends 1.4 pct. below adequate levels (rank #**29**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (CA region: **West**)

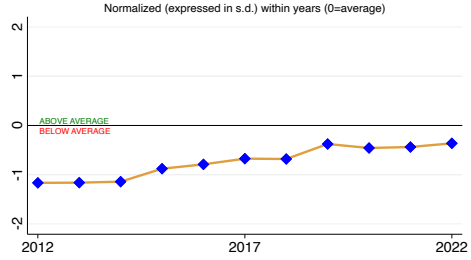


Statewide adequacy trend, 2012-22

- Spending in CA was substantially more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.803 s.d.

CALIFORNIA AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- CA's adequacy gap was ranked #47 in 2012 (#1 = most adequate) and #29 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

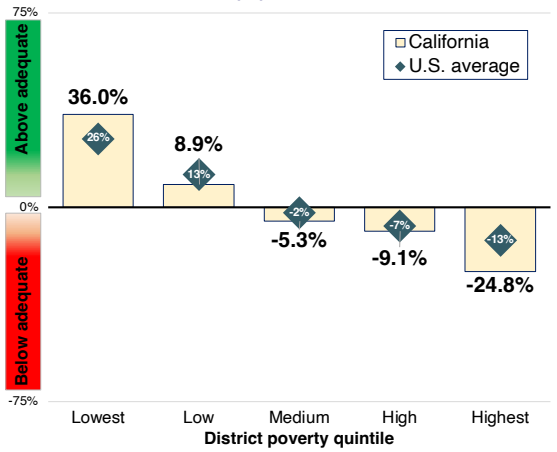
Rating **relative to other states** (high I medium I low):

Equal opportunity in CA is medium.

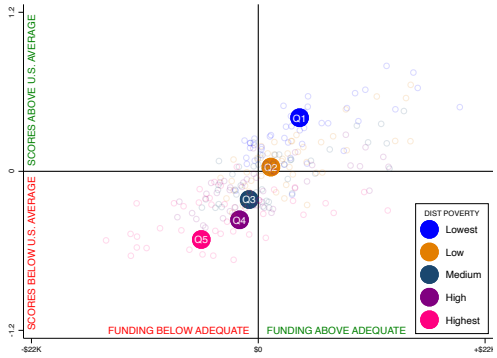
Average (enr-weighted) funding gaps by poverty (Red=below adequate I Green=above adequate)	
A. Low/lowest poverty districts	20.1 %
B. High/highest poverty districts	-13.3 %
C. Opportunity gap (B minus A)	**-33.5** pts

- CA's opportunity gap of -33.5 points is ranked #**20** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



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Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

COLORADO

Summary: This 2021-22 profile of Colorado's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Colorado scores 40 out of 100,** which **ranks 27th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	CO	U.S.
Child (5-17yo) poverty rate (%)	10.7	15.5
Public school coverage (%)	87.2	85.1
Percent revenue from state sources	38.7	43.7
Total enrollment (U.S. rank)	880,597 (20)	

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).

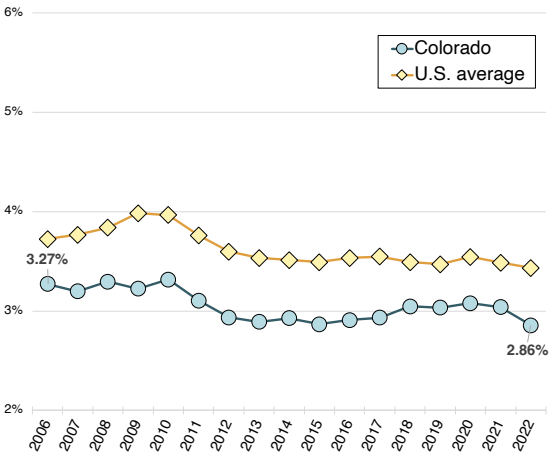
Rating **relative to other states** (high I medium I low):

CO is a low effort state.

Fiscal effort summary	
Colorado effort	2.86%
U.S. average effort	3.43%

- CO spends 2.86 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.58 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**41** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- CO's 2022 effort level is 0.42 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #28 in the nation.

Net change by period (% pts.)		
Period	**CO**	**U.S.**
K-12 recession (2006-12)	-0.34	-0.13
Post-recession (2012-22)	-0.08	-0.16
Full period (2006-22)	-0.42	-0.29

- CO's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $7.76 billion (9.6 percent) higher.
- CO is a relatively high capacity state, with a GSP per capita ranked #10 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high I medium I low):

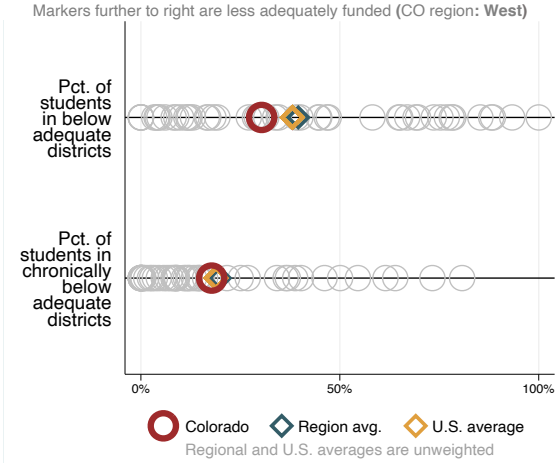
Statewide adequacy in CO is medium.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	30.4% (#**22**)
Pct. of students in *chronically* below adequate districts (rank)	17.8% (#**32**)

- The typical CO student's district spends 6.1 pct. above adequate levels (rank #**25**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (CO region: **West**)

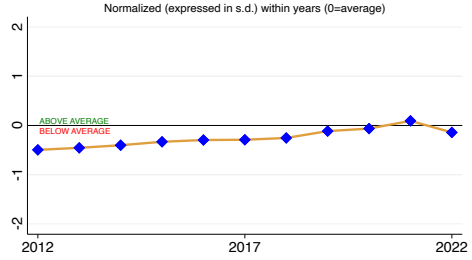


Statewide adequacy trend, 2012-22

- Spending in CO was substantially more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.354 s.d.

COLORADO AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- CO's adequacy gap was ranked #30 in 2012 (#1 = most adequate) and #25 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

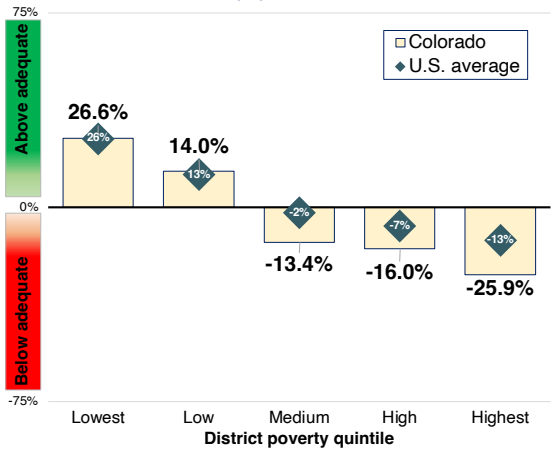
Rating **relative to other states** (high I medium I low):

Equal opportunity in CO is medium.

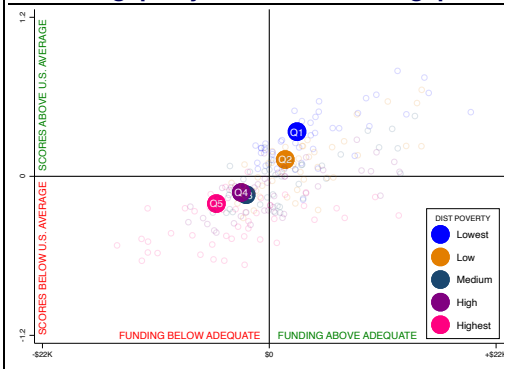
Average (enr-weighted) funding gaps by poverty (Red=below adequate I Green=above adequate)	
A. Low/lowest poverty districts	23.2 %
B. High/highest poverty districts	-18.2 %
C. Opportunity gap (B minus A)	**-41.3** pts

- CO's opportunity gap of -41.3 points is ranked #**27** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- CO's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.54 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

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 **Albert Shanker Institute**, **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 SID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles:

- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

CONNECTICUT

Summary: This 2021-22 profile of Connecticut's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Connecticut scores 71 out of 100,** which **ranks 8th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	CT	U.S.
Child (5-17yo) poverty rate (%)	11.6	15.5
Public school coverage (%)	88.4	85.1
Percent revenue from state sources	35.5	43.7
Total enrollment (U.S. rank)	509,748 (31)	

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).

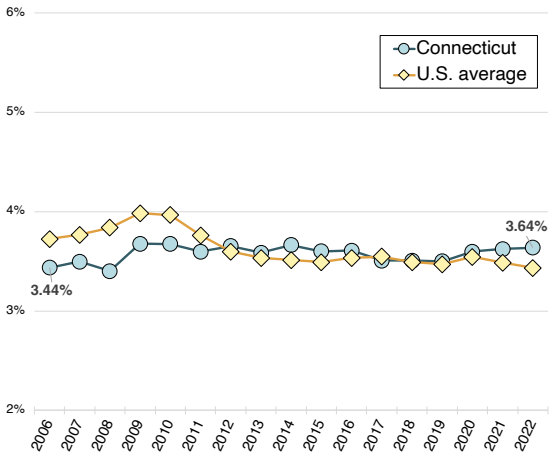
Rating **relative to other states** (high | medium | low):

CT is a medium effort state.

Fiscal effort summary	
Connecticut effort	3.64%
U.S. average effort	3.43%

- CT spends 3.64 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.20 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**19** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- CT's 2022 effort level is 0.20 pct. points higher than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #7 in the nation.

Net change by period (% pts.)		
Period	**CT**	**U.S.**
K-12 recession (2006-12)	0.22	-0.13
Post-recession (2012-22)	-0.02	-0.16
Full period (2006-22)	0.20	-0.29

- CT's effort was lower than its 2006 level in 0 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $0.00 billion (0.0 percent) higher.
- CT is a relatively high capacity state, with a GSP per capita ranked #8 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

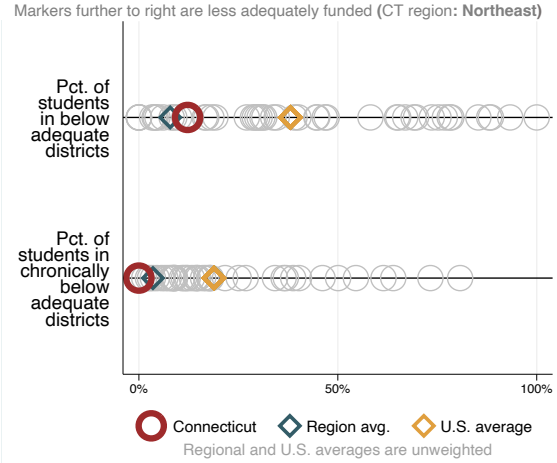
Statewide adequacy in CT is high.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	12.2% (#**12**)
Pct. of students in *chronically* below adequate districts (rank)	0.0% (#**1**)

- The typical CT student's district spends 73.2 pct. above adequate levels (rank #**5**).

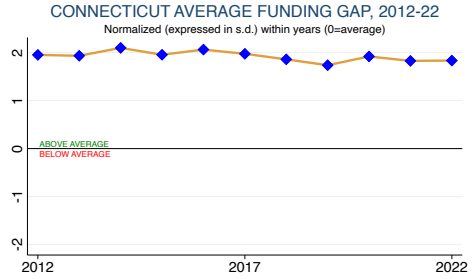
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (CT region: **Northeast**)



Statewide adequacy trend, 2012-22

- Spending in CT was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.118 s.d.



- CT's adequacy gap was ranked #4 in 2012 (#1 = most adequate) and #5 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

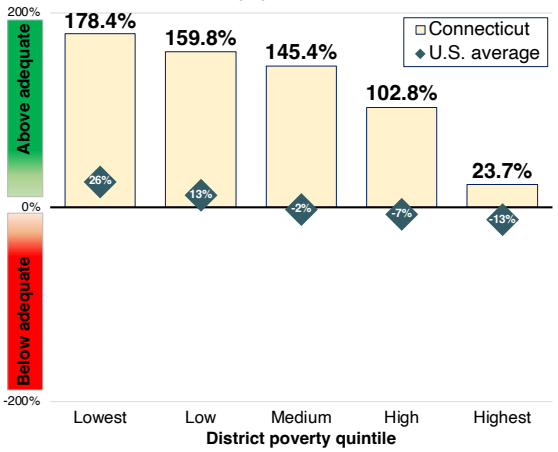
Rating **relative to other states** (high | medium | low):

Equal opportunity in CT is low.

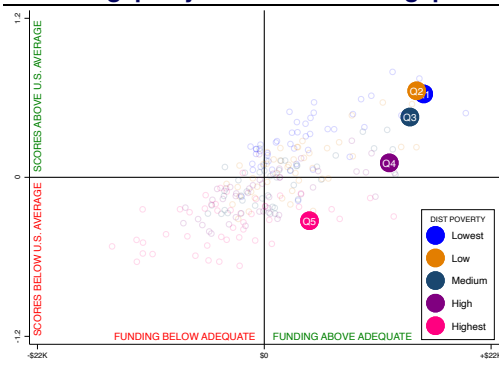
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	169.9 %
B. High/highest poverty districts	32.9 %
C. Opportunity gap (B minus A)	-137.0 pts

- CT's opportunity gap of -137.0 points is ranked #**47** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- CT's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.96 s.d. below its lowest-poverty districts (blue dot).

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State School Finance Profiles 2021-22 (publ. 2025)

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Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

DELAWARE

Summary: This 2021-22 profile of Delaware's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Delaware scores 64 out of 100,** which **ranks 14th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	DE	U.S.
Child (5-17yo) poverty rate (%)	13.5	15.5
Public school coverage (%)	86.0	85.1
Percent revenue from state sources	56.0	43.7
Total enrollment (U.S. rank)	139,935 (45)	

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).

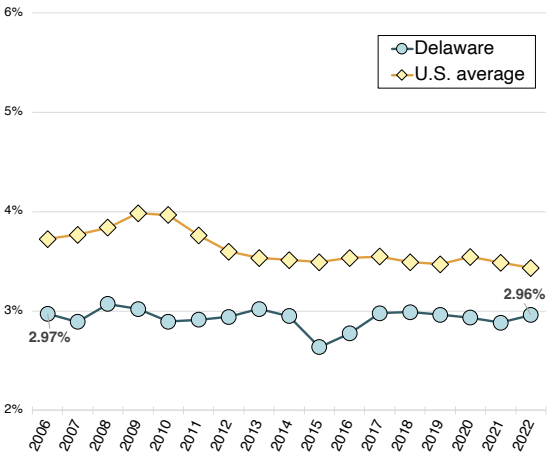
Rating **relative to other states** (high | medium | low):

DE is a low effort state.

Fiscal effort summary	
Delaware effort	2.96%
U.S. average effort	3.43%

- DE spends 2.96 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.48 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**38** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- DE's 2022 effort level is 0.01 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #10 in the nation.

Net change by period (% pts.)		
Period	**DE**	**U.S.**
K-12 recession (2006-12)	-0.03	-0.13
Post-recession (2012-22)	0.02	-0.16
Full period (2006-22)	-0.01	-0.29

- DE's effort was lower than its 2006 level in 5 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $0.26 billion (1.7 percent) higher.
- DE is a relatively high capacity state, with a GSP per capita ranked #9 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

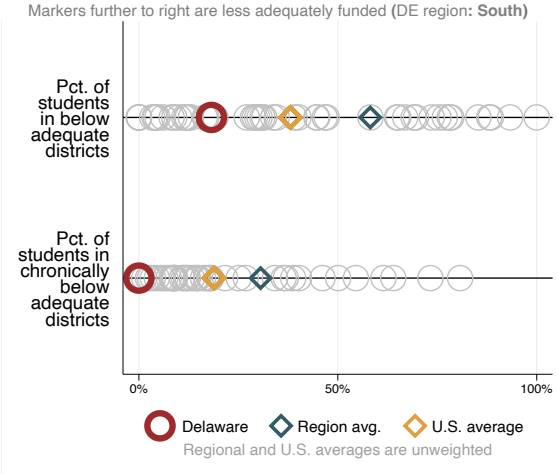
Statewide adequacy in DE is high.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	18.2% (#**16**)
Pct. of students in *chronically* below adequate districts (rank)	0.0% (#**1**)

- The typical DE student's district spends 21.3 pct. above adequate levels (rank #**12**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (DE region: **South**)

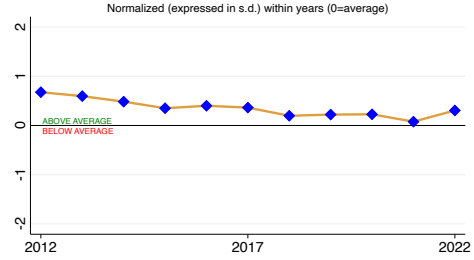


Statewide adequacy trend, 2012-22

- Spending in DE was substantially less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.371 s.d.

DELAWARE AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- DE's adequacy gap was ranked #11 in 2012 (#1 = most adequate) and #12 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

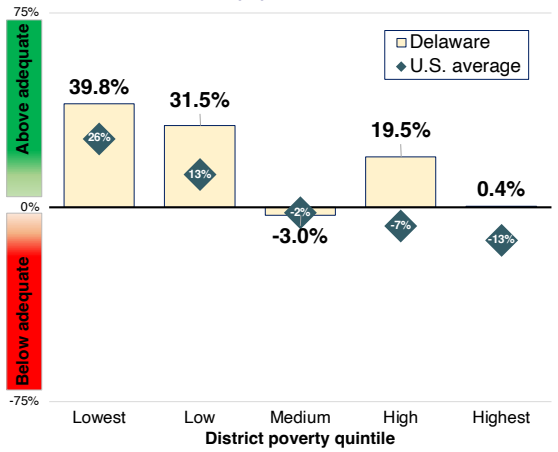
Rating **relative to other states** (high | medium | low):

Equal opportunity in DE is high.

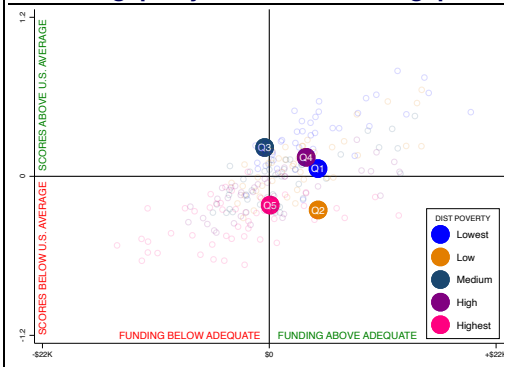
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	34.5 %
B. High/highest poverty districts	13.4 %
C. Opportunity gap (B minus A)	-21.2 pts

- DE's opportunity gap of -21.2 points is ranked #**7** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- DE's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.28 s.d. below its lowest-poverty districts (blue dot).

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Equal opportunity

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- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

DISTRICT OF COLUMBIA

OVERALL STATE SCORE NOT AVAILBLE

Summary: This 2021-22 profile of District of Columbia's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. We cannot calculate an overall state score for the District of Columbia, as data are not available for one or more of the measures we use in calculating those overall scores (see below).

CONTEXTUAL STATS	DC	U.S.
Child (5-17yo) poverty rate (%)	20.4	15.5
Public school coverage (%)	76.5	85.1
Percent revenue from state sources	n/a	43.7
Total enrollment (U.S. rank)	88,908 (50)	

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).

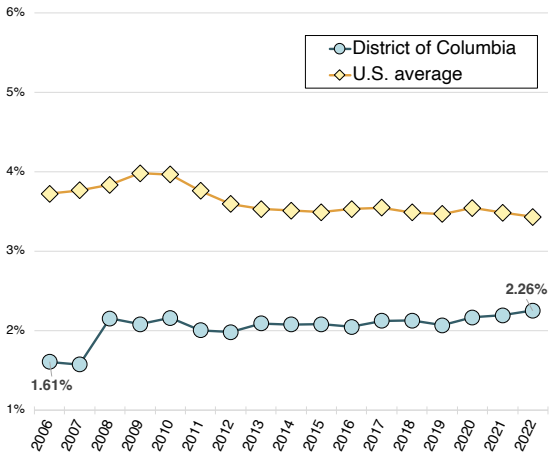
Rating **relative to other states** (high I medium I low):

DC is a low effort state.

Fiscal effort summary	
District of Columbia effort	2.26%
U.S. average effort	3.43%

- DC spends 2.26 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 1.18 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**50** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- DC's 2022 effort level is 0.65 pct. points higher than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #1 in the nation.

Net change by period (% pts.)		
Period	**DC**	**U.S.**
K-12 recession (2006-12)	0.37	-0.13
Post-recession (2012-22)	0.27	-0.16
Full period (2006-22)	0.65	-0.29

- DC's effort was lower than its 2006 level in 0 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $0.00 billion (0.0 percent) higher.
- DC is a relatively high capacity state, with a GSP per capita ranked #1 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high I medium I low):

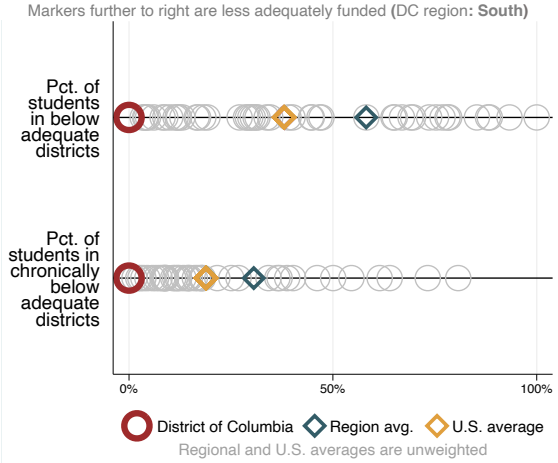
Statewide adequacy in DC is high.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	0.0% (#**1**)
Pct. of students in *chronically* below adequate districts (rank)	0.0% (#**1**)

- The typical DC student's district spends 14.0 pct. above adequate levels (rank #**18**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (DC region: **South**)

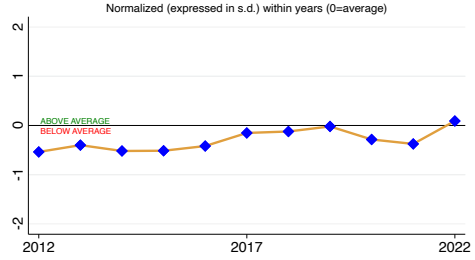


Statewide adequacy trend, 2012-22

- Spending in DC was substantially more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.629 s.d.

DISTRICT OF COLUMBIA AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



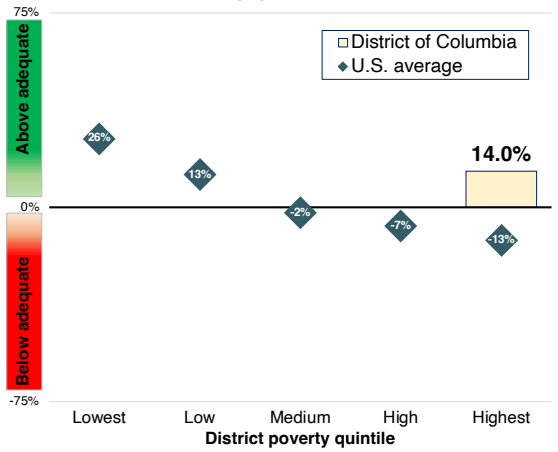
- DC's adequacy gap was ranked #31 in 2012 (#1 = most adequate) and #18 in 2022.

EQUAL OPPORTUNITY

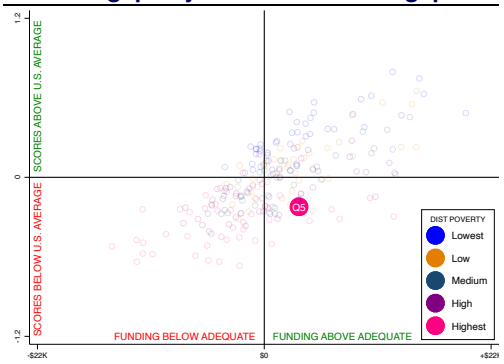
Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

An equal opportunity gap cannot be calculated for D.C., as it consists of a single government-run school district.

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



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NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

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 **Albert Shanker Institute**, **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 SID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles:

- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

FLORIDA

Summary: This 2021-22 profile of Florida's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Florida scores 11 out of 100,** which **ranks 47th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	FL	U.S.
Child (5-17yo) poverty rate (%)	16.1	15.5
Public school coverage (%)	82.4	85.1
Percent revenue from state sources	32.3	43.7
Total enrollment (U.S. rank)	2,833,186 (3)	

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).

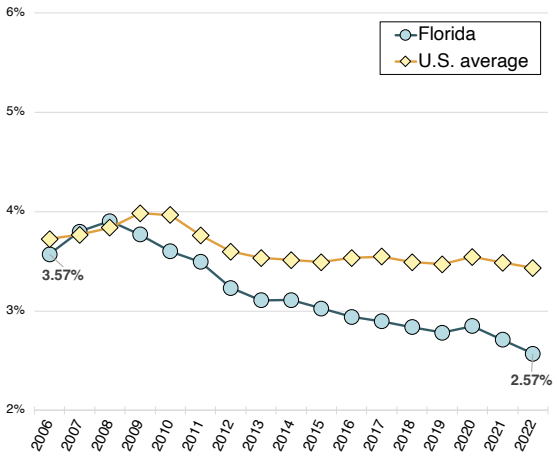
Rating **relative to other states** (high | medium | low):

FL is a low effort state.

Fiscal effort summary	
Florida effort	2.57%
U.S. average effort	3.43%

- FL spends 2.57 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.86 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**48** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- FL's 2022 effort level is 1.00 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #50 in the nation.

Net change by period (% pts.)		
Period	**FL**	**U.S.**
K-12 recession (2006-12)	-0.34	-0.13
Post-recession (2012-22)	-0.66	-0.16
Full period (2006-22)	-1.00	-0.29

- FL's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $60.92 billion (28.3 percent) higher.
- FL is a relatively low capacity state, with a GSP per capita ranked #37 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

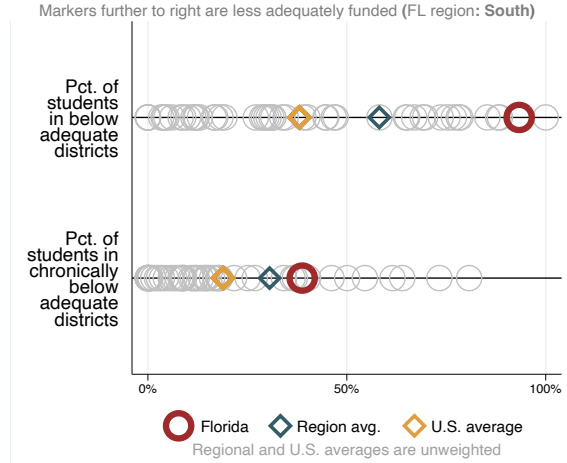
Statewide adequacy in FL is low.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	93.3% (**#47**)
Pct. of students in *chronically* below adequate districts (rank)	38.8% (**#40**)

- The typical FL student's district spends 19.9 pct. below adequate levels (rank #**42**).

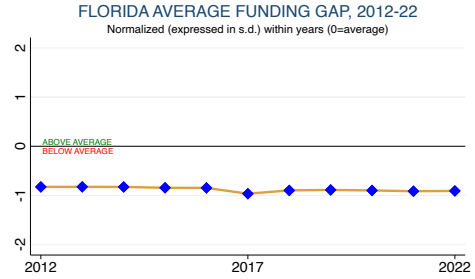
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (FL region: **South**)



Statewide adequacy trend, 2012-22

- Spending in FL was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.081 s.d.



- FL's adequacy gap was ranked #36 in 2012 (#1 = most adequate) and #42 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

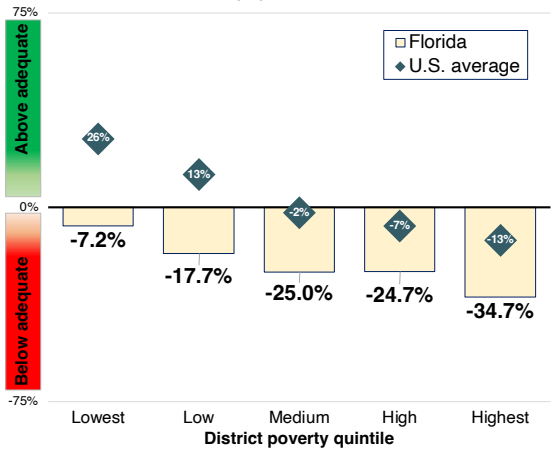
Rating **relative to other states** (high | medium | low):

Equal opportunity in FL is high.

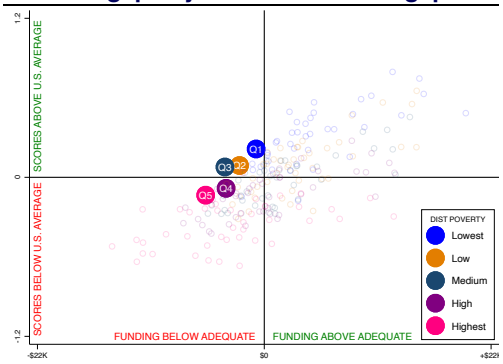
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	-14.5 %
B. High/highest poverty districts	-27.4 %
C. Opportunity gap (B minus A)	**-12.9** pts

- FL's opportunity gap of -12.9 points is ranked #**2** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- FL's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.35 s.d. below its lowest-poverty districts (blue dot).

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NOTES ON DATA AND MEASURES

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  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

GEORGIA

State score: **32**

Summary: This 2021-22 profile of Georgia's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Georgia scores 32 out of 100,** which **ranks 35th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	GA	U.S.
Child (5-17yo) poverty rate (%)	16.3	15.5
Public school coverage (%)	86.2	85.1
Percent revenue from state sources	39.7	43.7
Total enrollment (U.S. rank)	1,740,875 (6)	

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).

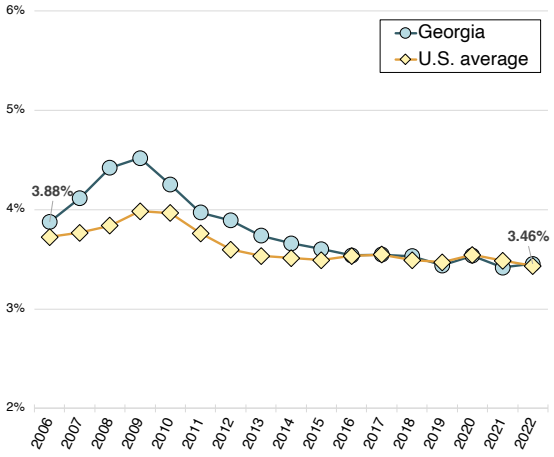
Rating **relative to other states** (high | medium | low):

GA is a medium effort state.

Fiscal effort summary	
Georgia effort	3.46%
U.S. average effort	3.43%

- GA spends 3.46 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.02 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**28** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- GA's 2022 effort level is 0.42 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #29 in the nation.

Net change by period (% pts.)		
Period	**GA**	**U.S.**
K-12 recession (2006-12)	0.02	-0.13
Post-recession (2012-22)	-0.44	-0.16
Full period (2006-22)	-0.42	-0.29

- GA's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $16.73 billion (11.0 percent) higher.
- GA is a relatively medium capacity state, with a GSP per capita ranked #28 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

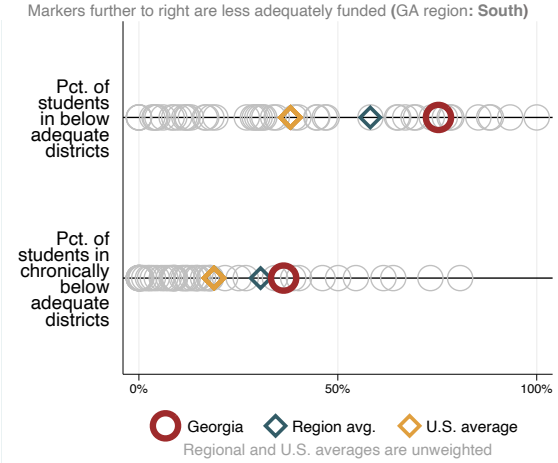
Statewide adequacy in GA is low.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	75.3% (**#40**)
Pct. of students in *chronically* below adequate districts (rank)	36.2% (**#38**)

- The typical GA student's district spends 18.0 pct. below adequate levels (rank #**41**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (GA region: **South**)

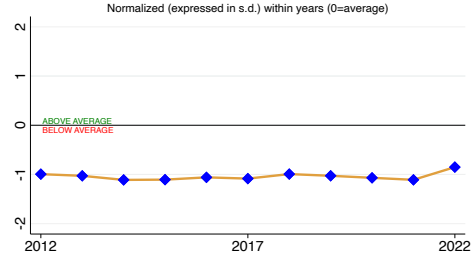


Statewide adequacy trend, 2012-22

- Spending in GA was more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.143 s.d.

GEORGIA AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- GA's adequacy gap was ranked #44 in 2012 (#1 = most adequate) and #41 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

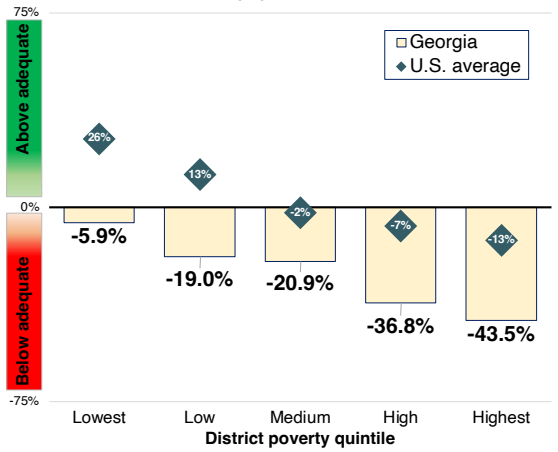
Rating **relative to other states** (high | medium | low):

Equal opportunity in GA is medium.

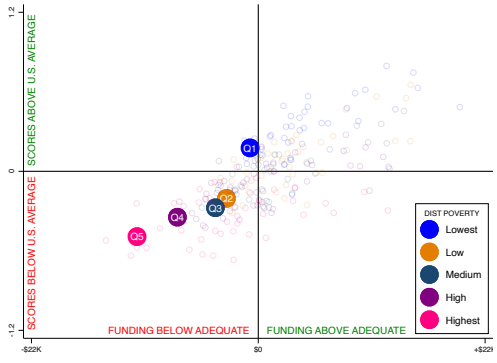
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	-10.2 %
B. High/highest poverty districts	-39.4 %
C. Opportunity gap (B minus A)	**-29.2** pts

- GA's opportunity gap of -29.2 points is ranked #**17** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- GA's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.67 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

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 **Albert Shanker Institute**, **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 SID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles:

- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
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Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
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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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

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Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

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STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

HAWAII

OVERALL STATE SCORE NOT AVAILBLE

Summary: This 2021-22 profile of Hawaii's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. We cannot calculate an overall state score for Hawaii, as data are not available for one or more of the measures we use in calculating those overall scores (see below).

CONTEXTUAL STATS	HI	U.S.
Child (5-17yo) poverty rate (%)	11.6	15.5
Public school coverage (%)	76.1	85.1
Percent revenue from state sources	84.7	43.7
Total enrollment (U.S. rank)	173,178 (41)	

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).

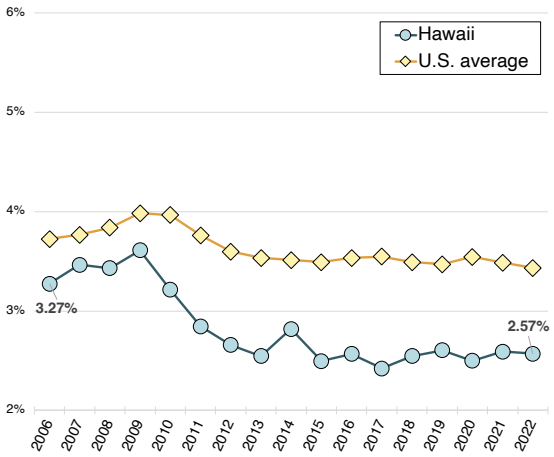
Rating **relative to other states** (high I medium I low):

HI is a low effort state.

Fiscal effort summary	
Hawaii effort	2.57%
U.S. average effort	3.43%

- HI spends 2.57 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.86 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**47** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- HI's 2022 effort level is 0.70 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #44 in the nation.

Net change by period (% pts.)		
Period	**HI**	**U.S.**
K-12 recession (2006-12)	-0.62	-0.13
Post-recession (2012-22)	-0.09	-0.16
Full period (2006-22)	-0.70	-0.29

- HI's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $4.55 billion (28.7 percent) higher.
- HI is a relatively medium capacity state, with a GSP per capita ranked #27 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

We do not publish statewide adequacy estimates for Hawaii, as the state consists of a single government-run school district isolated from other labor markets.

Statewide adequacy trend, 2012-22

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

Equal opportunity cannot be calculated for Hawaii (see above).

EO gaps by student outcome gaps

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

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State School Finance Profiles 2021-22 (publ. 2025)

General

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- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
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- The total number of states assigned rankings varies slightly by measure (as indicated), as not all measures are available in all states.
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  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

IDAHO

Summary: This 2021-22 profile of Idaho's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Idaho scores 19 out of 100,** which **ranks 42nd out of the 47 states** with possible ratings.

CONTEXTUAL STATS	ID	U.S.
Child (5-17yo) poverty rate (%)	11.3	15.5
Public school coverage (%)	86.4	85.1
Percent revenue from state sources	58.6	43.7
Total enrollment (U.S. rank)	314,258 (38)	

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).

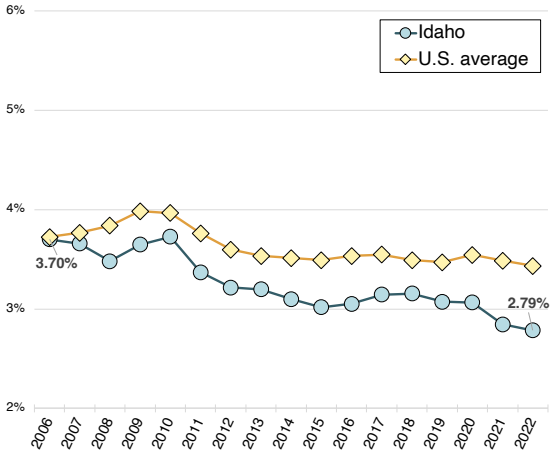
Rating **relative to other states** (high | medium | low):

ID is a low effort state.

Fiscal effort summary	
Idaho effort	2.79%
U.S. average effort	3.43%

- ID spends 2.79 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.65 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**43** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- ID's 2022 effort level is 0.92 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #48 in the nation.

Net change by period (% pts.)		
Period	**ID**	**U.S.**
K-12 recession (2006-12)	-0.49	-0.13
Post-recession (2012-22)	-0.43	-0.16
Full period (2006-22)	-0.92	-0.29

- ID's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $4.06 billion (23.4 percent) higher.
- ID is a relatively low capacity state, with a GSP per capita ranked #46 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

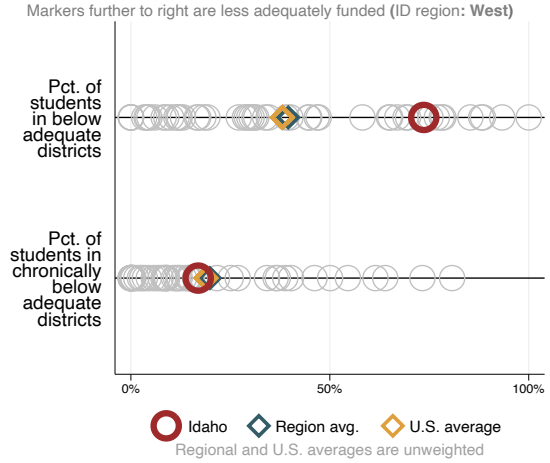
Statewide adequacy in ID is low.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	73.6% (#**39**)
Pct. of students in *chronically* below adequate districts (rank)	16.3% (#**30**)

- The typical ID student's district spends 8.8 pct. below adequate levels (rank #**35**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (ID region: **West**)

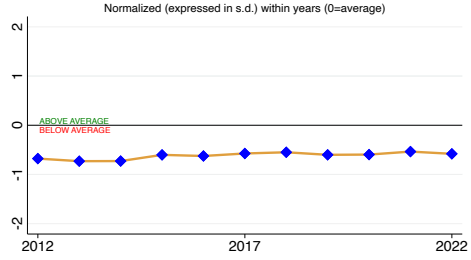


Statewide adequacy trend, 2012-22

- Spending in ID was more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.097 s.d.

IDAHO AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- ID's adequacy gap was ranked #34 in 2012 (#1 = most adequate) and #35 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

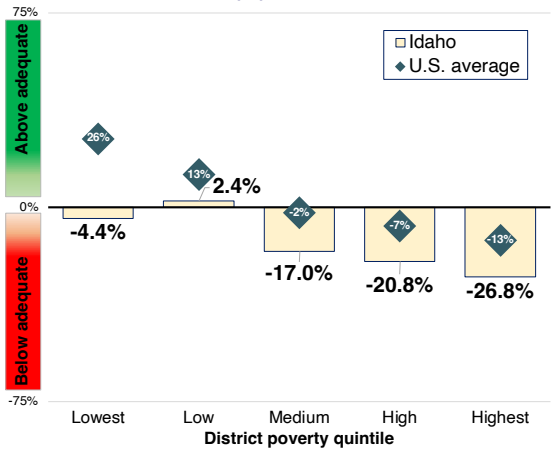
Rating **relative to other states** (high | medium | low):

Equal opportunity in ID is high.

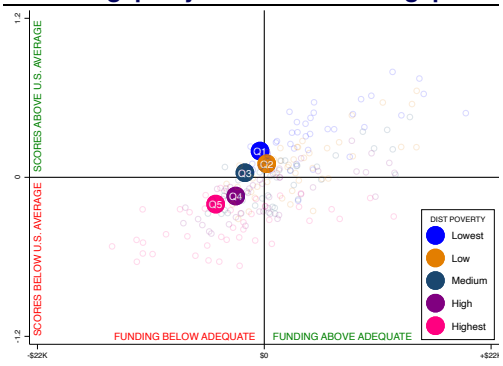
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	-1.1 %
B. High/highest poverty districts	-22.9 %
C. Opportunity gap (B minus A)	**-21.8** pts

- ID's opportunity gap of -21.8 points is ranked #**8** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- ID's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.40 s.d. below its lowest-poverty districts (blue dot).

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Statewide adequacy

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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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

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Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

ILLINOIS

Summary: This 2021-22 profile of Illinois's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Illinois scores 61 out of 100,** which **ranks 16th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	IL	U.S.
Child (5-17yo) poverty rate (%)	15.1	15.5
Public school coverage (%)	84.9	85.1
Percent revenue from state sources	39.9	43.7
Total enrollment (U.S. rank)	1,868,482 (5)	

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).

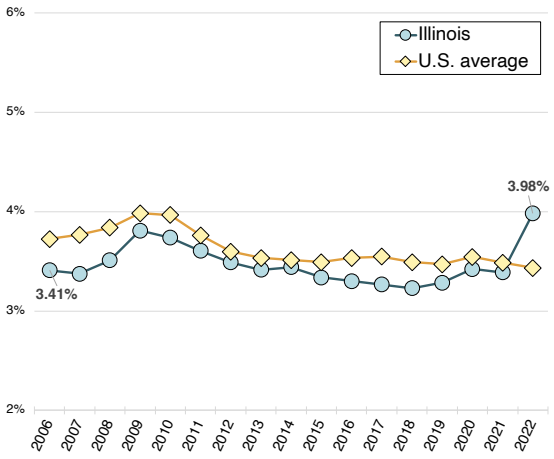
Rating **relative to other states** (high I medium I low):

IL is a high effort state.

Fiscal effort summary	
Illinois effort	3.98%
U.S. average effort	3.43%

- IL spends 3.98 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.55 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**9** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- IL's 2022 effort level is 0.57 pct. points higher than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #3 in the nation.

Net change by period (% pts.)		
Period	**IL**	**U.S.**
K-12 recession (2006-12)	0.08	-0.13
Post-recession (2012-22)	0.50	-0.16
Full period (2006-22)	0.57	-0.29

- IL's effort was lower than its 2006 level in 5 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $4.86 billion (2.3 percent) higher.
- IL is a relatively high capacity state, with a GSP per capita ranked #13 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high I medium I low):

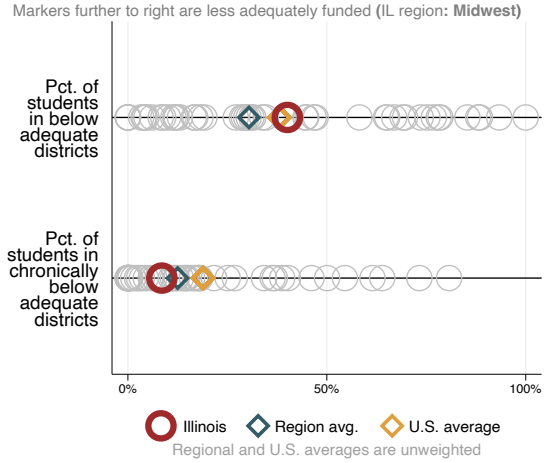
Statewide adequacy in IL is medium.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	40.1% (#**28**)
Pct. of students in *chronically* below adequate districts (rank)	8.5% (#**17**)

- The typical IL student's district spends 14.8 pct. above adequate levels (rank #**16**).

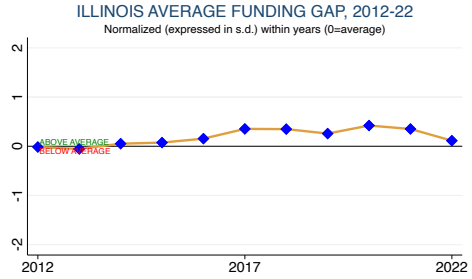
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (IL region: **Midwest**)



Statewide adequacy trend, 2012-22

- Spending in IL was more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.129 s.d.



- IL's adequacy gap was ranked #22 in 2012 (#1 = most adequate) and #16 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

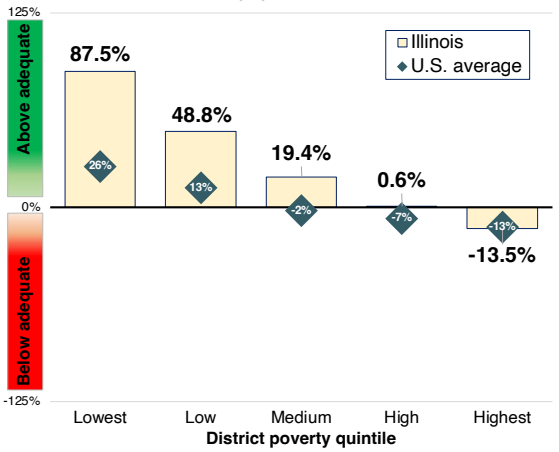
Rating **relative to other states** (high I medium I low):

Equal opportunity in IL is low.

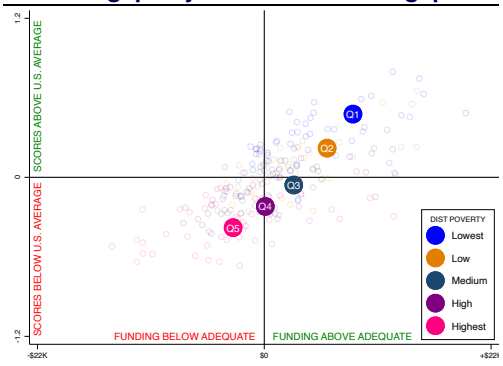
Average (enr-weighted) funding gaps by poverty (Red=below adequate I Green=above adequate)	
A. Low/lowest poverty districts	70.6 %
B. High/highest poverty districts	-10.6 %
C. Opportunity gap (B minus A)	**-81.2** pts

- IL's opportunity gap of -81.2 points is ranked #**41** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- IL's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.86 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

General

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- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

INDIANA

Summary: This 2021-22 profile of Indiana's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Indiana scores 35 out of 100,** which **ranks 31st out of the 47 states** with possible ratings.

CONTEXTUAL STATS	IN	U.S.
Child (5-17yo) poverty rate (%)	14.2	15.5
Public school coverage (%)	83.4	85.1
Percent revenue from state sources	57.5	43.7
Total enrollment (U.S. rank)	1,036,625 (15)	

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).

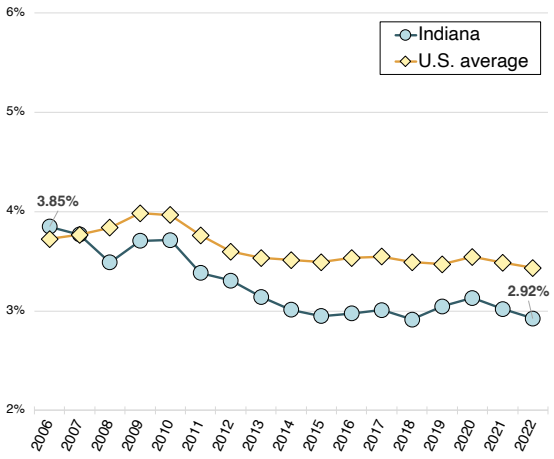
Rating **relative to other states** (high | medium | low):

IN is a low effort state.

Fiscal effort summary	
Indiana effort	2.92%
U.S. average effort	3.43%

- IN spends 2.92 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.51 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**39** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- IN's 2022 effort level is 0.93 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #49 in the nation.

Net change by period (% pts.)		
Period	**IN**	**U.S.**
K-12 recession (2006-12)	-0.54	-0.13
Post-recession (2012-22)	-0.38	-0.16
Full period (2006-22)	-0.93	-0.29

- IN's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $22.50 billion (28.3 percent) higher.
- IN is a relatively medium capacity state, with a GSP per capita ranked #30 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

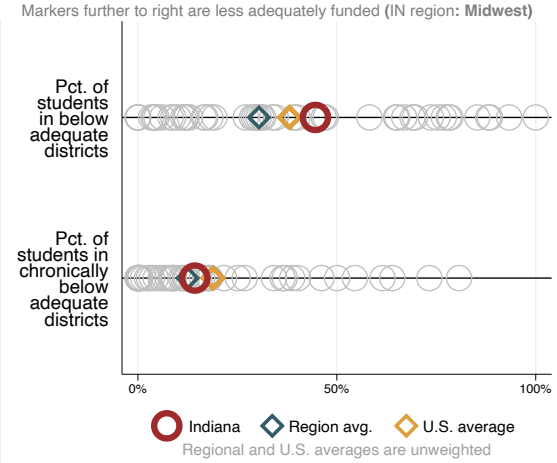
Statewide adequacy in IN is medium.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	44.6% (#**29**)
Pct. of students in *chronically* below adequate districts (rank)	13.6% (#**26**)

- The typical IN student's district spends 1.4 pct. below adequate levels (rank #**28**).

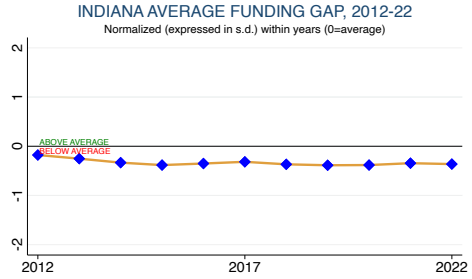
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (IN region: **Midwest**)



Statewide adequacy trend, 2012-22

- Spending in IN was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.185 s.d.



- IN's adequacy gap was ranked #25 in 2012 (#1 = most adequate) and #28 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

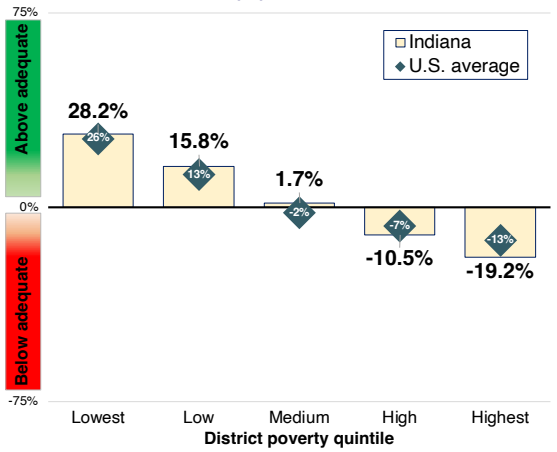
Rating **relative to other states** (high | medium | low):

Equal opportunity in IN is medium.

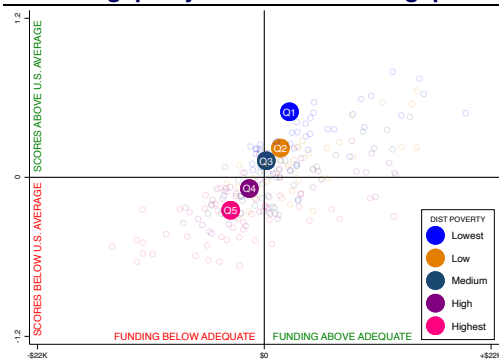
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	24.0 %
B. High/highest poverty districts	-16.3 %
C. Opportunity gap (B minus A)	-40.3 pts

- IN's opportunity gap of -40.3 points is ranked #**25** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- IN's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.74 s.d. below its lowest-poverty districts (blue dot).

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  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

IOWA

Summary: This 2021-22 profile of Iowa's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Iowa scores 60 out of 100,** which **ranks 17th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	IA	U.S.
Child (5-17yo) poverty rate (%)	11.3	15.5
Public school coverage (%)	88.4	85.1
Percent revenue from state sources	49.8	43.7
Total enrollment (U.S. rank)	510,661 (30)	

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).

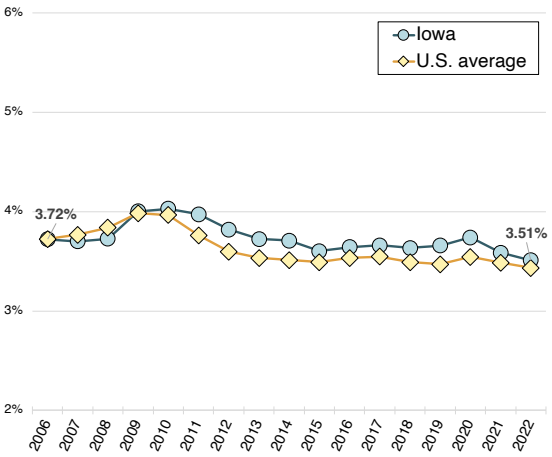
Rating **relative to other states** (high | medium | low):

IA is a medium effort state.

Fiscal effort summary	
Iowa effort	3.51%
U.S. average effort	3.43%

- IA spends 3.51 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.08 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**25** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- IA's 2022 effort level is 0.21 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #19 in the nation.

Net change by period (% pts.)		
Period	**IA**	**U.S.**
K-12 recession (2006-12)	0.10	-0.13
Post-recession (2012-22)	-0.31	-0.16
Full period (2006-22)	-0.21	-0.29

- IA's effort was lower than its 2006 level in 6 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $1.32 billion (2.6 percent) higher.
- IA is a relatively medium capacity state, with a GSP per capita ranked #22 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

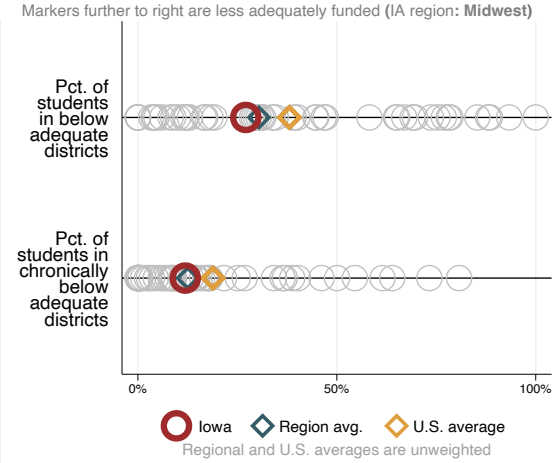
Statewide adequacy in IA is medium.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	27.1% (#**18**)
Pct. of students in *chronically* below adequate districts (rank)	11.9% (#**23**)

- The typical IA student's district spends 8.1 pct. above adequate levels (rank #**21**).

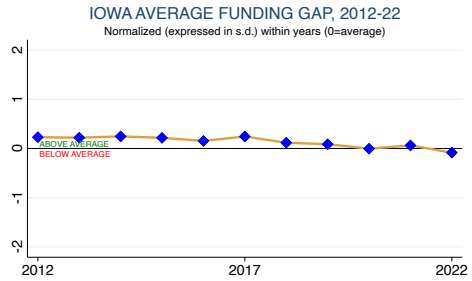
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (IA region: **Midwest**)



Statewide adequacy trend, 2012-22

- Spending in IA was substantially less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.314 s.d.



- IA's adequacy gap was ranked #17 in 2012 (#1 = most adequate) and #21 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

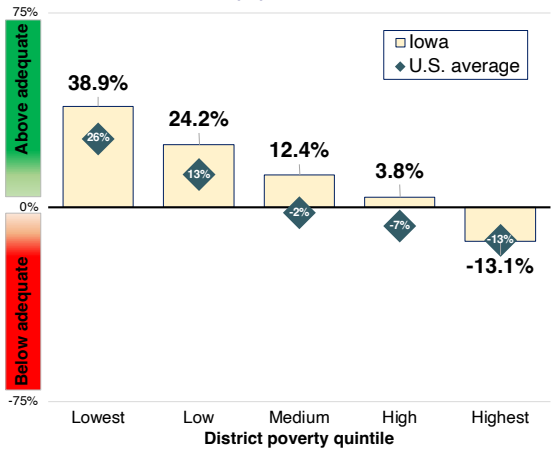
Rating **relative to other states** (high | medium | low):

Equal opportunity in IA is medium.

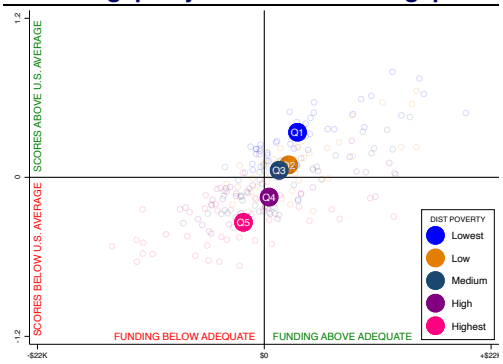
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	31.9 %
B. High/highest poverty districts	-8.5 %
C. Opportunity gap (B minus A)	-40.5 pts

- IA's opportunity gap of -40.5 points is ranked #**26** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- IA's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.68 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

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 **Albert Shanker Institute**, **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 SID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles:

- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
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Fiscal effort

SID variables used in this section: *effort*; *year*

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- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
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Statewide adequacy

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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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

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- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
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- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

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- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

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STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

KANSAS

Summary: This 2021-22 profile of Kansas's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Kansas scores 60 out of 100,** which **ranks 18th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	KS	U.S.
Child (5-17yo) poverty rate (%)	12.6	15.5
Public school coverage (%)	82.8	85.1
Percent revenue from state sources	65.2	43.7
Total enrollment (U.S. rank)	485,424 (34)	

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).

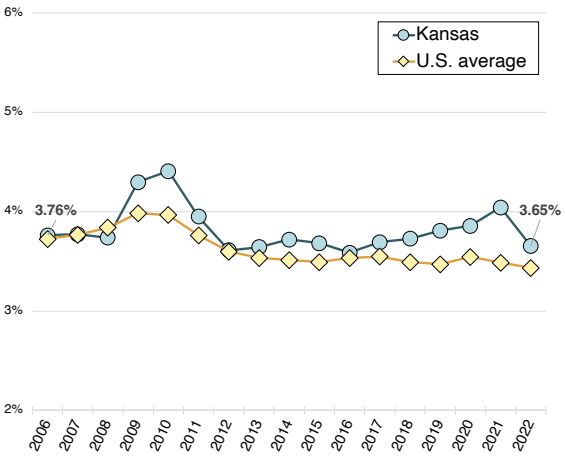
Rating **relative to other states** (high | medium | low):

KS is a medium effort state.

Fiscal effort summary	
Kansas effort	3.65%
U.S. average effort	3.43%

- KS spends 3.65 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.22 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**18** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- KS's 2022 effort level is 0.11 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #13 in the nation.

Net change by period (% pts.)		
Period	**KS**	**U.S.**
K-12 recession (2006-12)	-0.15	-0.13
Post-recession (2012-22)	0.04	-0.16
Full period (2006-22)	-0.11	-0.29

- KS's effort was lower than its 2006 level in 4 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $0.67 billion (1.4 percent) higher.
- KS is a relatively medium capacity state, with a GSP per capita ranked #23 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

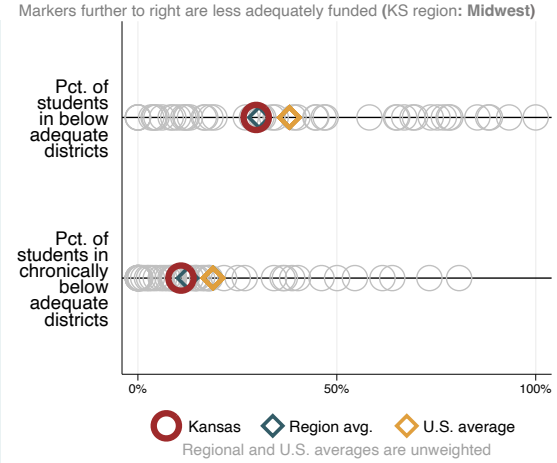
Statewide adequacy in KS is medium.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	29.7% (#**21**)
Pct. of students in *chronically* below adequate districts (rank)	10.8% (#**21**)

- The typical KS student's district spends 12.0 pct. above adequate levels (rank #**19**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (KS region: **Midwest**)

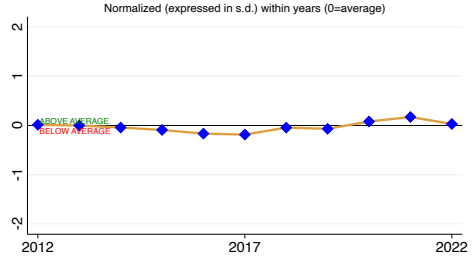


Statewide adequacy trend, 2012-22

- Spending in KS was no more or less adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.016 s.d.

KANSAS AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- KS's adequacy gap was ranked #20 in 2012 (#1 = most adequate) and #19 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

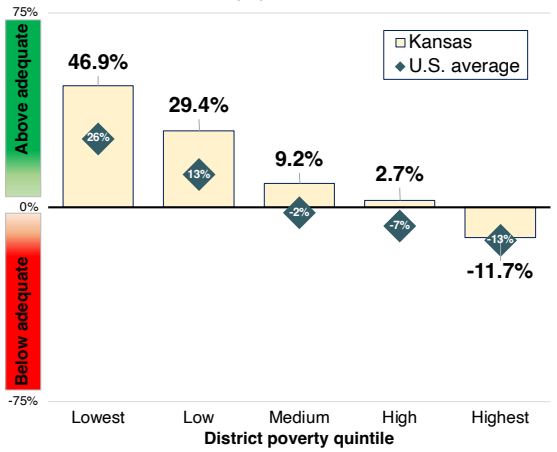
Rating **relative to other states** (high | medium | low):

Equal opportunity in KS is low.

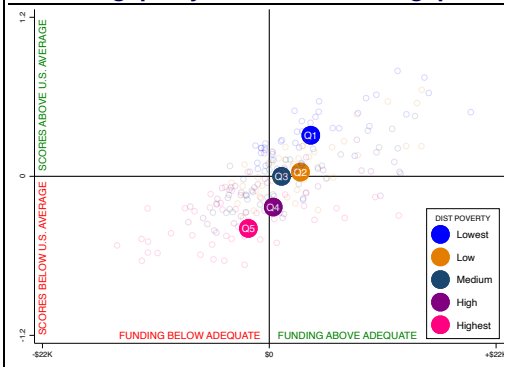
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	41.1 %
B. High/highest poverty districts	-7.2 %
C. Opportunity gap (B minus A)	**-48.3** pts

- KS's opportunity gap of -48.3 points is ranked #**32** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- KS's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.70 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

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State School Finance Profiles 2021-22 (publ. 2025)

General

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Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
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- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

KENTUCKY

Summary: This 2021-22 profile of Kentucky's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Kentucky scores 57 out of 100,** which **ranks 21st out of the 47 states** with possible ratings.

CONTEXTUAL STATS	KY	U.S.
Child (5-17yo) poverty rate (%)	19.4	15.5
Public school coverage (%)	79.8	85.1
Percent revenue from state sources	47.3	43.7
Total enrollment (U.S. rank)	654,239 (28)	

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).

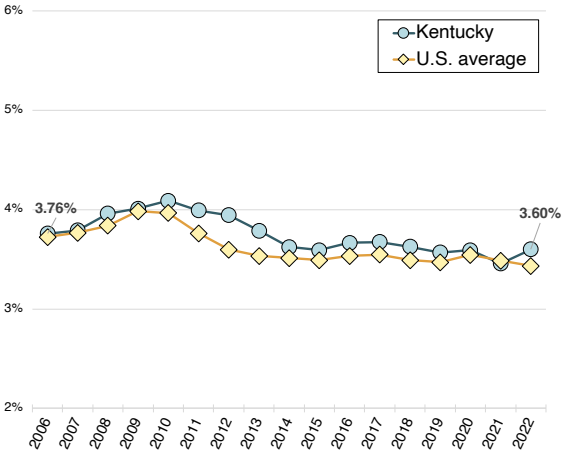
Rating **relative to other states** (high | medium | low):

KY is a medium effort state.

Fiscal effort summary	
Kentucky effort	3.60%
U.S. average effort	3.43%

- KY spends 3.60 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.16 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**21** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- KY's 2022 effort level is 0.16 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #16 in the nation.

Net change by period (% pts.)		
Period	**KY**	**U.S.**
K-12 recession (2006-12)	0.19	-0.13
Post-recession (2012-22)	-0.34	-0.16
Full period (2006-22)	-0.16	-0.29

- KY's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $2.48 billion (4.6 percent) higher.
- KY is a relatively low capacity state, with a GSP per capita ranked #45 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

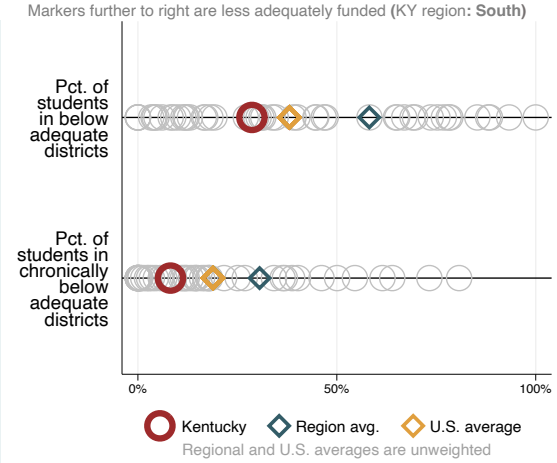
Statewide adequacy in KY is medium.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	28.7% (#**19**)
Pct. of students in *chronically* below adequate districts (rank)	8.2% (#**16**)

- The typical KY student's district spends 7.1 pct. above adequate levels (rank #**22**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (KY region: **South**)

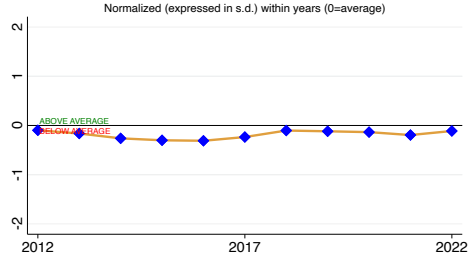


Statewide adequacy trend, 2012-22

- Spending in KY was no more or less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.014 s.d.

KENTUCKY AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- KY's adequacy gap was ranked #23 in 2012 (#1 = most adequate) and #22 in 2022.

EQUAL OPPORTUNITY

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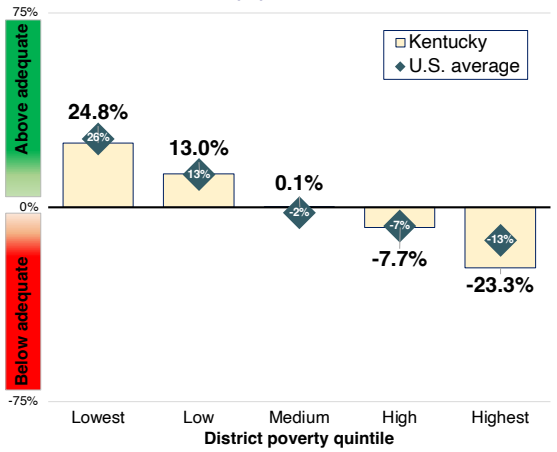
Rating **relative to other states** (high | medium | low):

Equal opportunity in KY is medium.

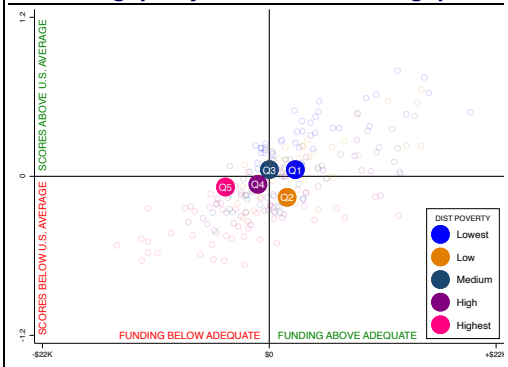
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	19.0 %
B. High/highest poverty districts	-15.8 %
C. Opportunity gap (B minus A)	-34.8 pts

- KY's opportunity gap of -34.8 points is ranked #**21** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



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Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

LOUISIANA

Summary: This 2021-22 profile of Louisiana's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Louisiana scores 33 out of 100,** which **ranks 33rd out of the 47 states** with possible ratings.

CONTEXTUAL STATS	LA	U.S.
Child (5-17yo) poverty rate (%)	24.3	15.5
Public school coverage (%)	78.2	85.1
Percent revenue from state sources	35.2	43.7
Total enrollment (U.S. rank)	683,216 (27)	

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).

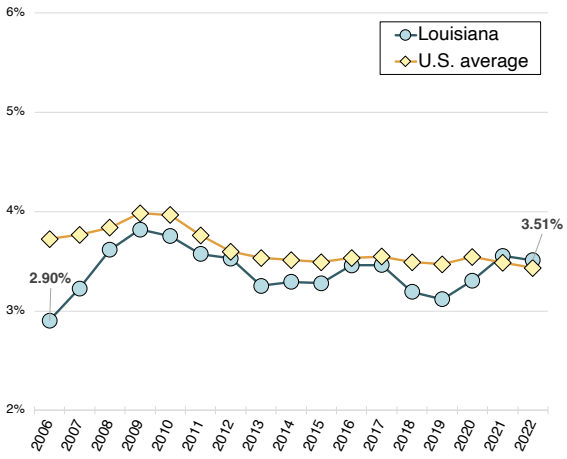
Rating **relative to other states** (high | medium | low):

LA is a medium effort state.

Fiscal effort summary	
Louisiana effort	3.51%
U.S. average effort	3.43%

- LA spends 3.51 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.08 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**26** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- LA's 2022 effort level is 0.61 pct. points higher than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #2 in the nation.

Net change by period (% pts.)		
Period	**LA**	**U.S.**
K-12 recession (2006-12)	0.63	-0.13
Post-recession (2012-22)	-0.02	-0.16
Full period (2006-22)	0.61	-0.29

- LA's effort was lower than its 2006 level in 0 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $0.00 billion (0.0 percent) higher.
- LA is a relatively low capacity state, with a GSP per capita ranked #38 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

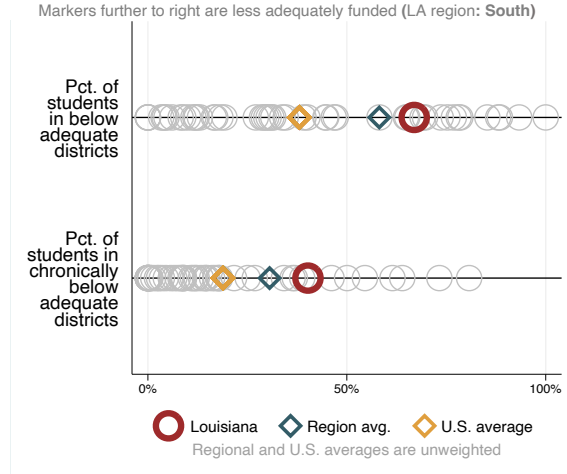
Statewide adequacy in LA is low.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	66.9% (#**36**)
Pct. of students in *chronically* below adequate districts (rank)	40.2% (#**41**)

- The typical LA student's district spends 16.5 pct. below adequate levels (rank #**38**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (LA region: **South**)

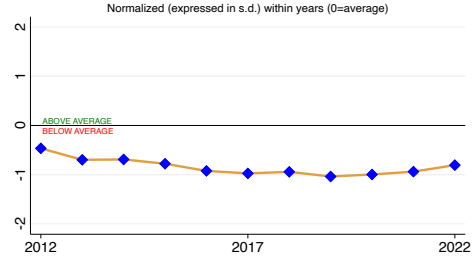


Statewide adequacy trend, 2012-22

- Spending in LA was substantially less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.342 s.d.

LOUISIANA AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- LA's adequacy gap was ranked #29 in 2012 (#1 = most adequate) and #38 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

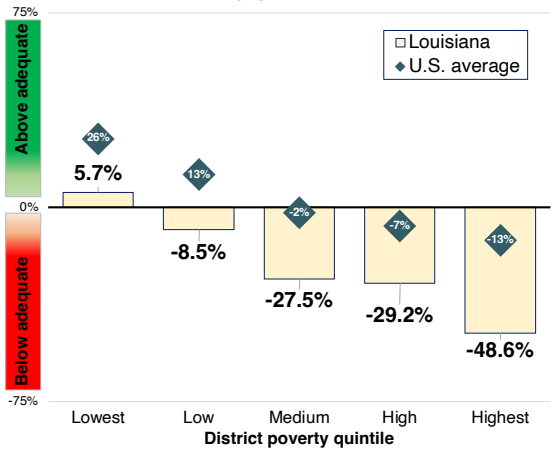
Rating **relative to other states** (high | medium | low):

Equal opportunity in LA is medium.

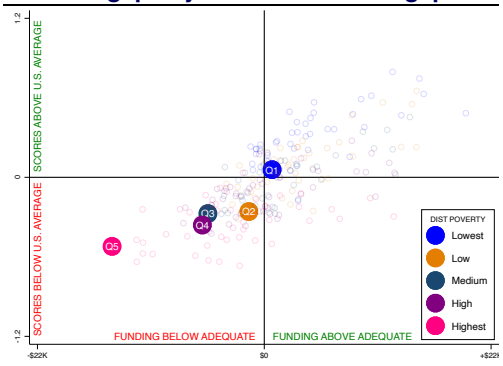
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	-2.5 %
B. High/highest poverty districts	-37.8 %
C. Opportunity gap (B minus A)	**-35.3** pts

- LA's opportunity gap of -35.3 points is ranked #**23** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- LA's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.58 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

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 **Albert Shanker Institute**, **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 SID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles:

- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

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- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

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- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

MAINE

State score: **77**

Summary: This 2021-22 profile of Maine's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Maine scores 77 out of 100,** which **ranks 7th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	ME	U.S.
Child (5-17yo) poverty rate (%)	11.5	15.5
Public school coverage (%)	86.0	85.1
Percent revenue from state sources	40.2	43.7
Total enrollment (U.S. rank)	173,215 (40)	

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).

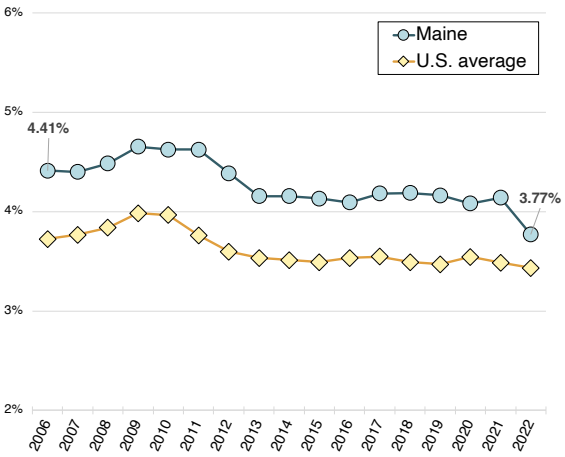
Rating **relative to other states** (high | medium | low):

ME is a high effort state.

Fiscal effort summary	
Maine effort	3.77%
U.S. average effort	3.43%

- ME spends 3.77 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.34 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**13** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- ME's 2022 effort level is 0.64 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #42 in the nation.

Net change by period (% pts.)		
Period	**ME**	**U.S.**
K-12 recession (2006-12)	-0.03	-0.13
Post-recession (2012-22)	-0.62	-0.16
Full period (2006-22)	-0.64	-0.29

- ME's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $1.61 billion (8.2 percent) higher.
- ME is a relatively low capacity state, with a GSP per capita ranked #41 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

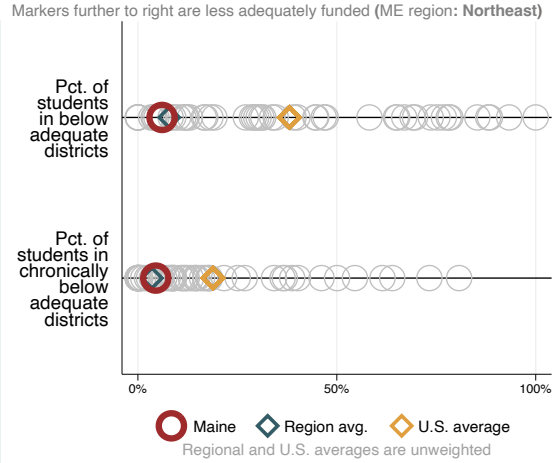
Statewide adequacy in ME is high.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	6.1% (#**7**)
Pct. of students in *chronically* below adequate districts (rank)	4.5% (#**13**)

- The typical ME student's district spends 52.4 pct. above adequate levels (rank #**7**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (ME region: **Northeast**)

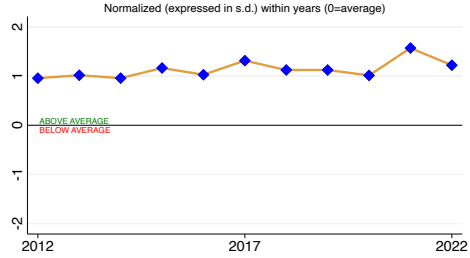


Statewide adequacy trend, 2012-22

- Spending in ME was more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.265 s.d.

MAINE AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- ME's adequacy gap was ranked #9 in 2012 (#1 = most adequate) and #7 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

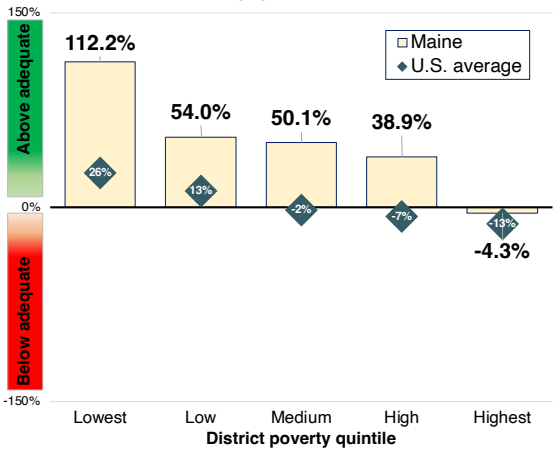
Rating **relative to other states** (high | medium | low):

Equal opportunity in ME is low.

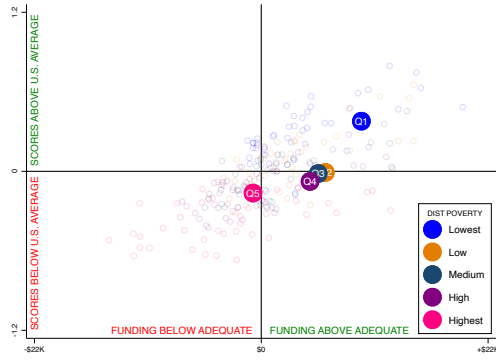
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	82.2 %
B. High/highest poverty districts	19.5 %
C. Opportunity gap (B minus A)	-62.6 pts

- ME's opportunity gap of -62.6 points is ranked #**37** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- ME's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.54 s.d. below its lowest-poverty districts (blue dot).

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State School Finance Profiles 2021-22 (publ. 2025)

General

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  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
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Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

MARYLAND

Summary: This 2021-22 profile of Maryland's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Maryland scores 55 out of 100,** which **ranks 22nd out of the 47 states** with possible ratings.

CONTEXTUAL STATS	MD	U.S.
Child (5-17yo) poverty rate (%)	11.6	15.5
Public school coverage (%)	82.8	85.1
Percent revenue from state sources	40.5	43.7
Total enrollment (U.S. rank)	881,461 (19)	

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).

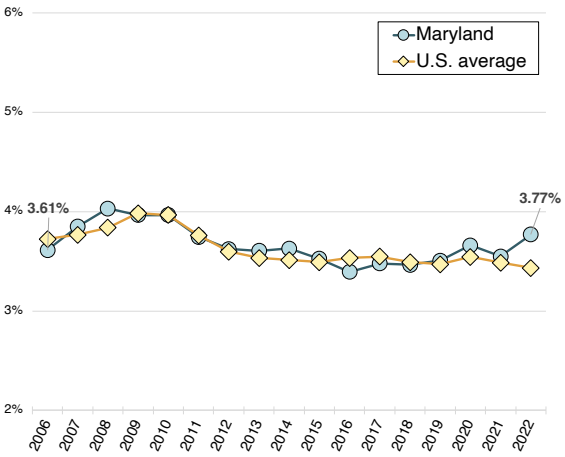
Rating **relative to other states** (high | medium | low):

MD is a high effort state.

Fiscal effort summary	
Maryland effort	3.77%
U.S. average effort	3.43%

- MD spends 3.77 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.33 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**14** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- MD's 2022 effort level is 0.16 pct. points higher than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #9 in the nation.

Net change by period (% pts.)		
Period	**MD**	**U.S.**
K-12 recession (2006-12)	0.01	-0.13
Post-recession (2012-22)	0.14	-0.16
Full period (2006-22)	0.16	-0.29

- MD's effort was lower than its 2006 level in 5 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $2.66 billion (2.6 percent) higher.
- MD is a relatively medium capacity state, with a GSP per capita ranked #17 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

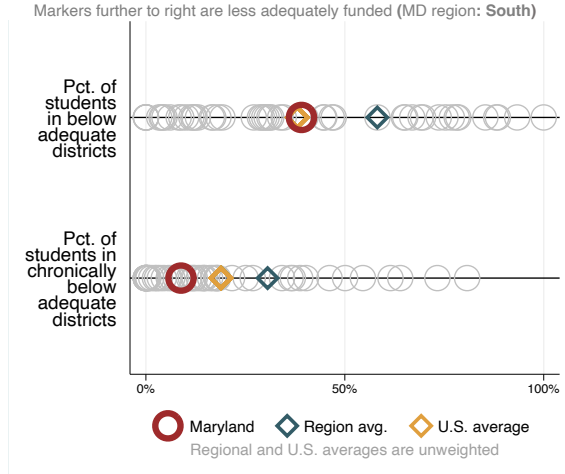
Statewide adequacy in MD is medium.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	39.1% (#**27**)
Pct. of students in *chronically* below adequate districts (rank)	8.8% (#**18**)

- The typical MD student's district spends 9.5 pct. above adequate levels (rank #**20**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (MD region: **South**)

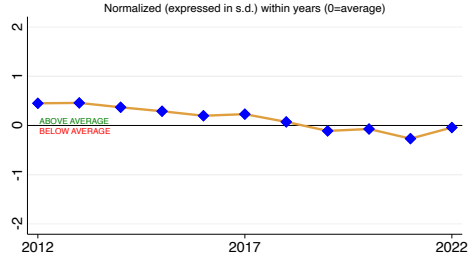


Statewide adequacy trend, 2012-22

- Spending in MD was substantially less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.493 s.d.

MARYLAND AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- MD's adequacy gap was ranked #14 in 2012 (#1 = most adequate) and #20 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

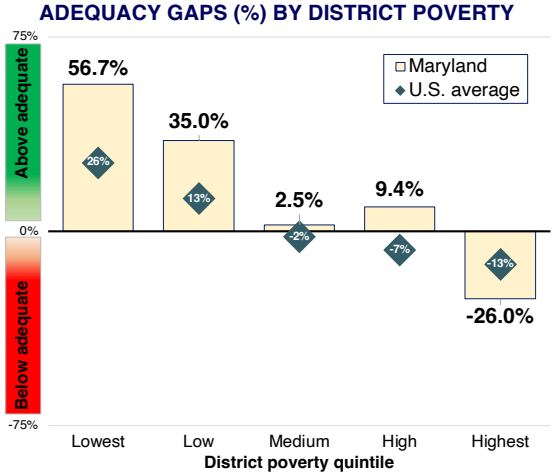
Rating **relative to other states** (high | medium | low):

Equal opportunity in MD is low.

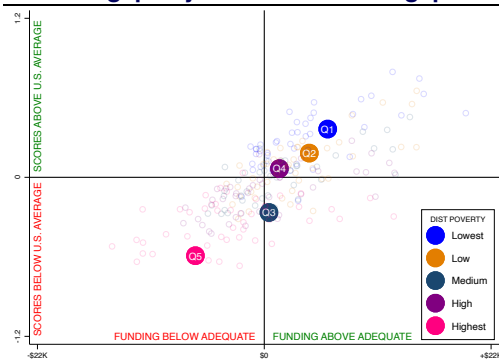
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	44.1 %
B. High/highest poverty districts	-8.5 %
C. Opportunity gap (B minus A)	-52.6 pts

- MD's opportunity gap of -52.6 points is ranked #**33** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



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Equal opportunity

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- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

MASSACHUSETTS

Summary: This 2021-22 profile of Massachusetts's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Massachusetts scores 64 out of 100,** which **ranks 13th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	MA	U.S.
Child (5-17yo) poverty rate (%)	11.6	15.5
Public school coverage (%)	87.2	85.1
Percent revenue from state sources	42.1	43.7
Total enrollment (U.S. rank)	921,180 (17)	

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).

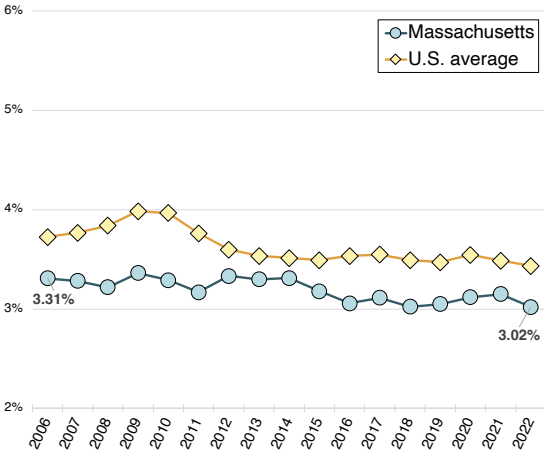
Rating **relative to other states** (high | medium | low):

MA is a low effort state.

Fiscal effort summary	
Massachusetts effort	3.02%
U.S. average effort	3.43%

- MA spends 3.02 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.41 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**36** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- MA's 2022 effort level is 0.29 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #23 in the nation.

Net change by period (% pts.)		
Period	**MA**	**U.S.**
K-12 recession (2006-12)	0.02	-0.13
Post-recession (2012-22)	-0.31	-0.16
Full period (2006-22)	-0.29	-0.29

- MA's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $9.36 billion (7.6 percent) higher.
- MA is a relatively high capacity state, with a GSP per capita ranked #3 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

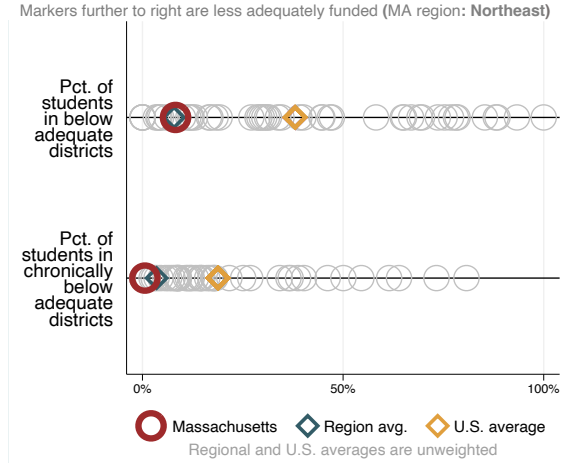
Statewide adequacy in MA is high.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	8.2% (#**8**)
Pct. of students in *chronically* below adequate districts (rank)	0.6% (#**8**)

- The typical MA student's district spends 59.9 pct. above adequate levels (rank #**6**).

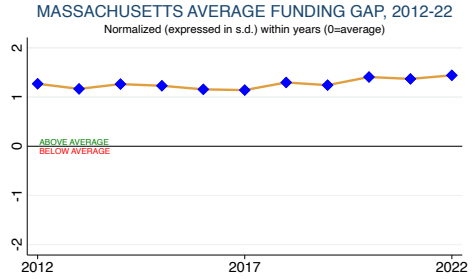
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (MA region: **Northeast**)



Statewide adequacy trend, 2012-22

- Spending in MA was more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.173 s.d.



- MA's adequacy gap was ranked #6 in 2012 (#1 = most adequate) and #6 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

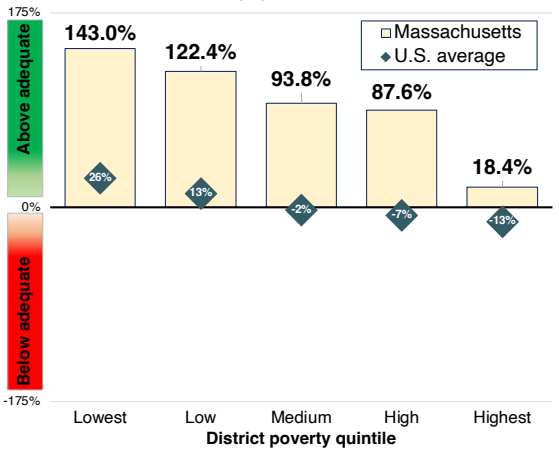
Rating **relative to other states** (high | medium | low):

Equal opportunity in MA is low.

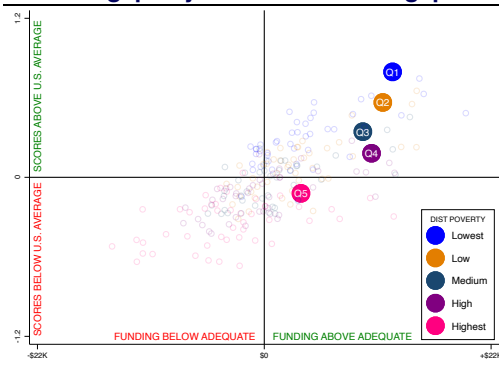
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	131.9 %
B. High/highest poverty districts	30.7 %
C. Opportunity gap (B minus A)	-101.2 pts

- MA's opportunity gap of -101.2 points is ranked #**44** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- MA's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.92 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

General

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- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

MICHIGAN

Summary: This 2021-22 profile of Michigan's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Michigan scores 49 out of 100,** which **ranks 25th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	MI	U.S.
Child (5-17yo) poverty rate (%)	16.9	15.5
Public school coverage (%)	86.1	85.1
Percent revenue from state sources	52.5	43.7
Total enrollment (U.S. rank)	1,440,090 (10)	

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).

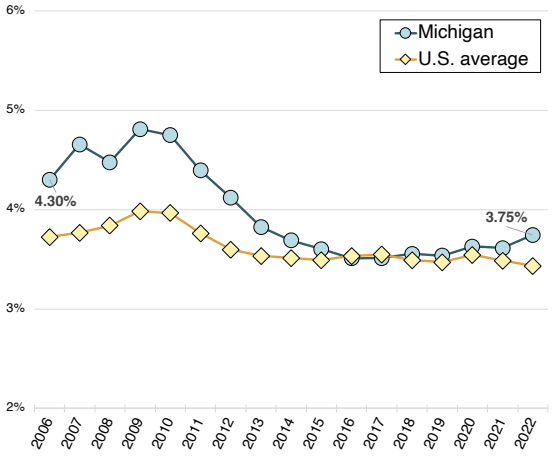
Rating **relative to other states** (high | medium | low):

MI is a high effort state.

Fiscal effort summary	
Michigan effort	3.75%
U.S. average effort	3.43%

- MI spends 3.75 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.31 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**15** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- MI's 2022 effort level is 0.55 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #37 in the nation.

Net change by period (% pts.)		
Period	**MI**	**U.S.**
K-12 recession (2006-12)	-0.18	-0.13
Post-recession (2012-22)	-0.37	-0.16
Full period (2006-22)	-0.55	-0.29

- MI's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $26.26 billion (19.7 percent) higher.
- MI is a relatively low capacity state, with a GSP per capita ranked #40 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

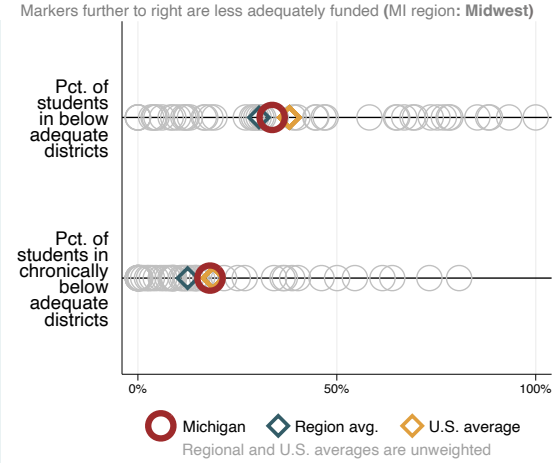
Statewide adequacy in MI is medium.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	33.8% (#**25**)
Pct. of students in *chronically* below adequate districts (rank)	18.1% (#**33**)

- The typical MI student's district spends 2.9 pct. below adequate levels (rank #**31**).

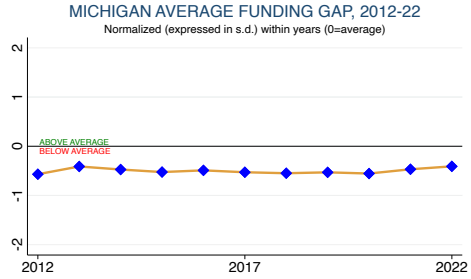
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (MI region: **Midwest**)



Statewide adequacy trend, 2012-22

- Spending in MI was more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.160 s.d.



- MI's adequacy gap was ranked #32 in 2012 (#1 = most adequate) and #31 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

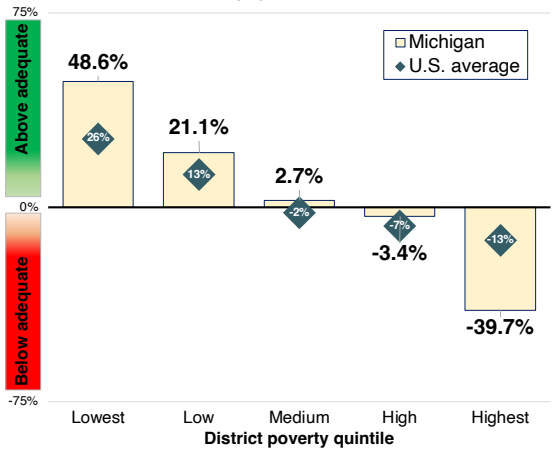
Rating **relative to other states** (high | medium | low):

Equal opportunity in MI is low.

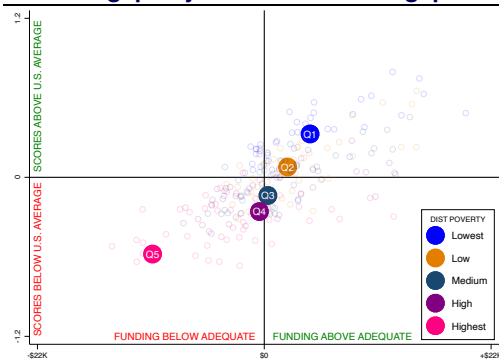
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	38.5 %
B. High/highest poverty districts	-32.0 %
C. Opportunity gap (B minus A)	-70.5 pts

- MI's opportunity gap of -70.5 points is ranked #**40** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- MI's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.91 s.d. below its lowest-poverty districts (blue dot).

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  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

MINNESOTA

Summary: This 2021-22 profile of Minnesota's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Minnesota scores 64 out of 100,** which **ranks 15th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	MN	U.S.
Child (5-17yo) poverty rate (%)	10.2	15.5
Public school coverage (%)	84.6	85.1
Percent revenue from state sources	59.6	43.7
Total enrollment (U.S. rank)	870,506 (21)	

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).

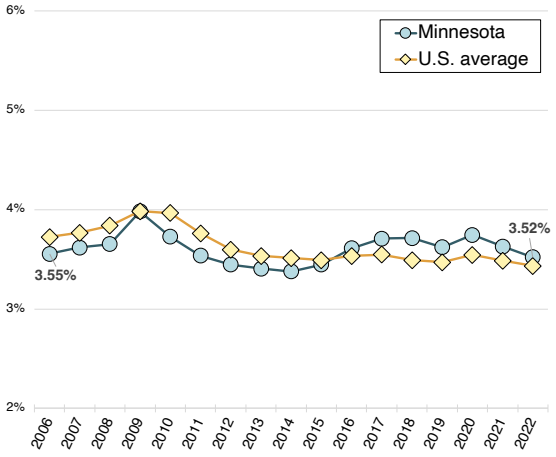
Rating **relative to other states** (high | medium | low):

MN is a medium effort state.

Fiscal effort summary	
Minnesota effort	3.52%
U.S. average effort	3.43%

- MN spends 3.52 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.09 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**24** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- MN's 2022 effort level is 0.04 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #11 in the nation.

Net change by period (% pts.)		
Period	**MN**	**U.S.**
K-12 recession (2006-12)	-0.11	-0.13
Post-recession (2012-22)	0.07	-0.16
Full period (2006-22)	-0.04	-0.29

- MN's effort was lower than its 2006 level in 1 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $0.15 billion (0.2 percent) higher.
- MN is a relatively high capacity state, with a GSP per capita ranked #16 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

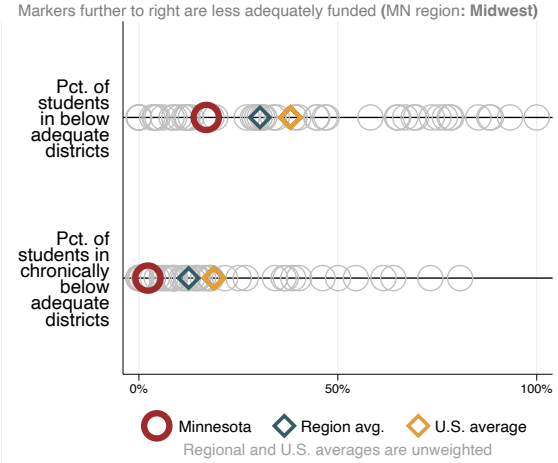
Statewide adequacy in MN is high.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	16.9% (#**15**)
Pct. of students in *chronically* below adequate districts (rank)	2.3% (#**10**)

- The typical MN student's district spends 19.0 pct. above adequate levels (rank #**14**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (MN region: **Midwest**)

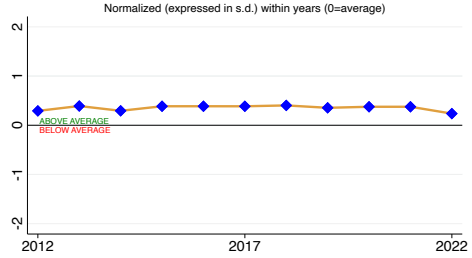


Statewide adequacy trend, 2012-22

- Spending in MN was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.055 s.d.

MINNESOTA AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- MN's adequacy gap was ranked #15 in 2012 (#1 = most adequate) and #14 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

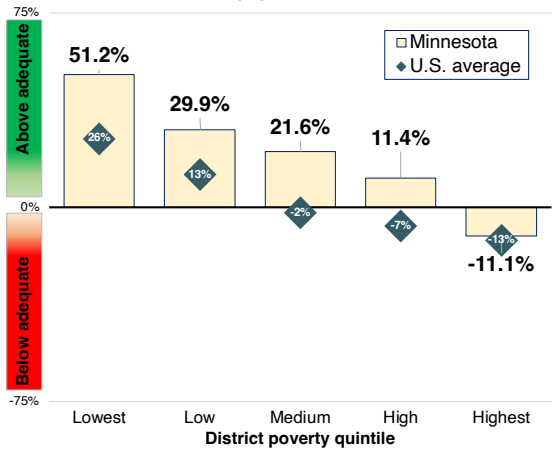
Rating **relative to other states** (high | medium | low):

Equal opportunity in MN is medium.

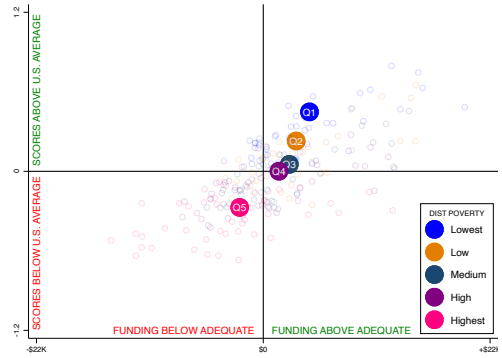
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	42.6 %
B. High/highest poverty districts	-2.2 %
C. Opportunity gap (B minus A)	**-44.8** pts

- MN's opportunity gap of -44.8 points is ranked #**31** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- MN's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.72 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

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 **Albert Shanker Institute**, **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 SID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles:

- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
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Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

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- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
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- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

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STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

MISSISSIPPI

Summary: This 2021-22 profile of Mississippi's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Mississippi scores 19 out of 100,** which **ranks 44th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	MS	U.S.
Child (5-17yo) poverty rate (%)	26.2	15.5
Public school coverage (%)	79.2	85.1
Percent revenue from state sources	43.8	43.7
Total enrollment (U.S. rank)	442,000 (35)	

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).

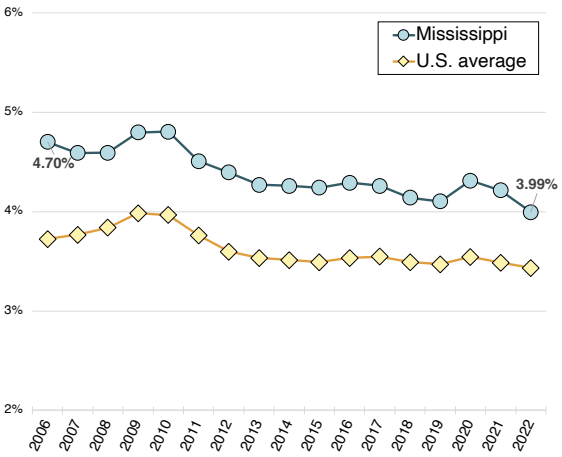
Rating **relative to other states** (high | medium | low):

MS is a high effort state.

Fiscal effort summary	
Mississippi effort	3.99%
U.S. average effort	3.43%

- MS spends 3.99 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.56 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**8** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- MS's 2022 effort level is 0.71 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #45 in the nation.

Net change by period (% pts.)		
Period	**MS**	**U.S.**
K-12 recession (2006-12)	-0.31	-0.13
Post-recession (2012-22)	-0.40	-0.16
Full period (2006-22)	-0.71	-0.29

- MS's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $4.22 billion (12.4 percent) higher.
- MS is a relatively low capacity state, with a GSP per capita ranked #51 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

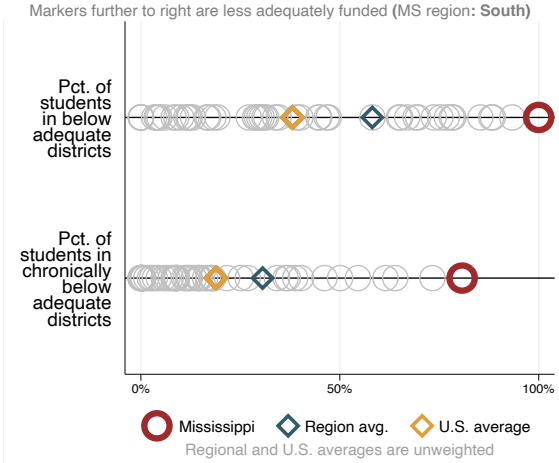
Statewide adequacy in MS is low.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	100.0% (#**48**)
Pct. of students in *chronically* below adequate districts (rank)	80.7% (#**48**)

- The typical MS student's district spends 46.5 pct. below adequate levels (rank #**48**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (MS region: **South**)

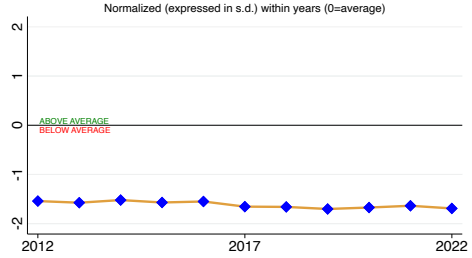


Statewide adequacy trend, 2012-22

- Spending in MS was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.150 s.d.

MISSISSIPPI AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- MS's adequacy gap was ranked #48 in 2012 (#1 = most adequate) and #48 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

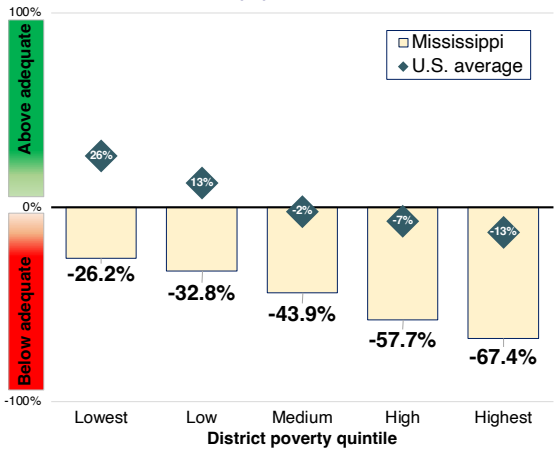
Rating **relative to other states** (high | medium | low):

Equal opportunity in MS is medium.

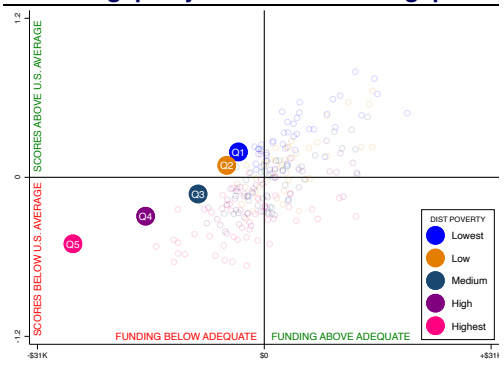
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	-28.5 %
B. High/highest poverty districts	-63.7 %
C. Opportunity gap (B minus A)	-35.2 pts

- MS's opportunity gap of -35.2 points is ranked #**22** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- MS's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.69 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

General

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Fiscal effort

SID variables used in this section: *effort*; *year*

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- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

MISSOURI

Summary: This 2021-22 profile of Missouri's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Missouri scores 38 out of 100,** which **ranks 29th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	MO	U.S.
Child (5-17yo) poverty rate (%)	15.5	15.5
Public school coverage (%)	81.8	85.1
Percent revenue from state sources	34.8	43.7
Total enrollment (U.S. rank)	888,823 (18)	

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).

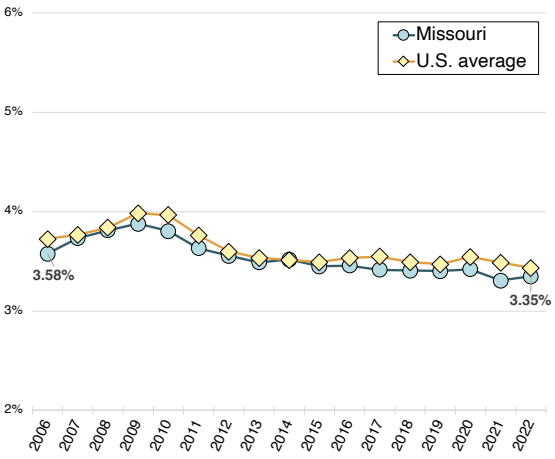
Rating **relative to other states** (high | medium | low):

MO is a medium effort state.

Fiscal effort summary	
Missouri effort	3.35%
U.S. average effort	3.43%

- MO spends 3.35 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.09 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**30** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- MO's 2022 effort level is 0.23 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #20 in the nation.

Net change by period (% pts.)		
Period	**MO**	**U.S.**
K-12 recession (2006-12)	-0.02	-0.13
Post-recession (2012-22)	-0.21	-0.16
Full period (2006-22)	-0.23	-0.29

- MO's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $4.31 billion (5.5 percent) higher.
- MO is a relatively low capacity state, with a GSP per capita ranked #36 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

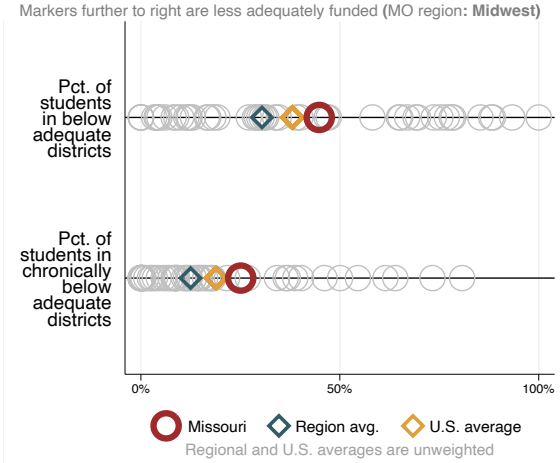
Statewide adequacy in MO is medium.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	44.8% (#**30**)
Pct. of students in *chronically* below adequate districts (rank)	25.1% (#**35**)

- The typical MO student's district spends 7.5 pct. below adequate levels (rank #**33**).

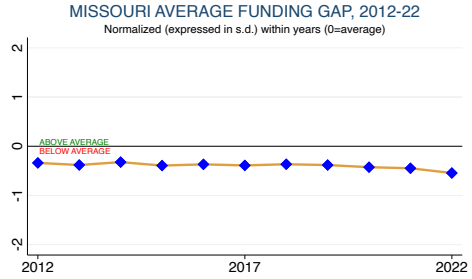
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (MO region: **Midwest**)



Statewide adequacy trend, 2012-22

- Spending in MO was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.206 s.d.



- MO's adequacy gap was ranked #27 in 2012 (#1 = most adequate) and #33 in 2022.

EQUAL OPPORTUNITY

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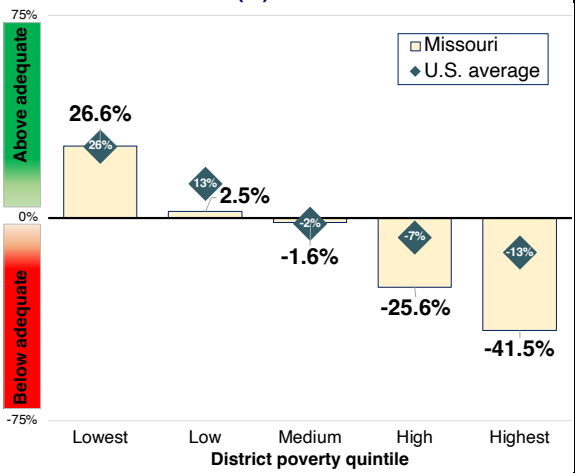
Rating **relative to other states** (high | medium | low):

Equal opportunity in MO is low.

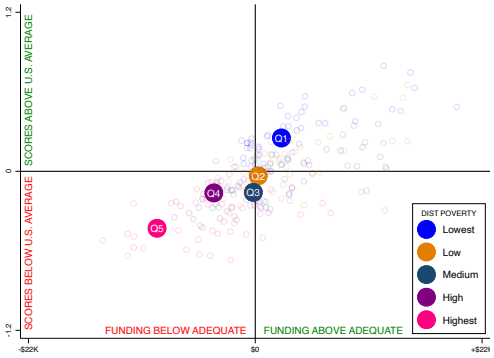
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	19.5 %
B. High/highest poverty districts	-34.2 %
C. Opportunity gap (B minus A)	-53.7 pts

- MO's opportunity gap of -53.7 points is ranked #**34** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



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Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

MONTANA

Summary: This 2021-22 profile of Montana's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Montana scores 52 out of 100,** which **ranks 24th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	MT	U.S.
Child (5-17yo) poverty rate (%)	12.9	15.5
Public school coverage (%)	85.1	85.1
Percent revenue from state sources	39.6	43.7
Total enrollment (U.S. rank)	150,195 (43)	

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).

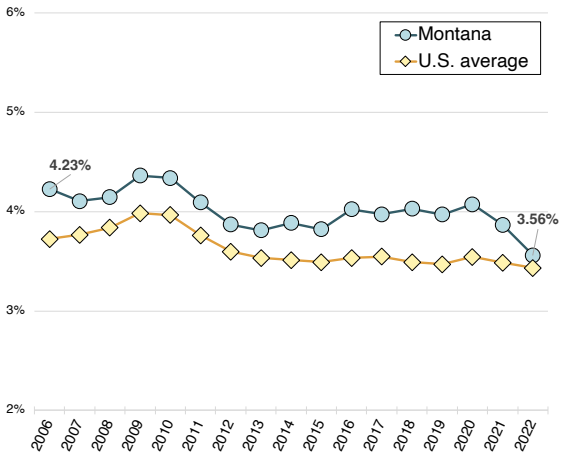
Rating **relative to other states** (high | medium | low):

MT is a medium effort state.

Fiscal effort summary	
Montana effort	3.56%
U.S. average effort	3.43%

- MT spends 3.56 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.13 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**23** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- MT's 2022 effort level is 0.67 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #43 in the nation.

Net change by period (% pts.)		
Period	**MT**	**U.S.**
K-12 recession (2006-12)	-0.36	-0.13
Post-recession (2012-22)	-0.31	-0.16
Full period (2006-22)	-0.67	-0.29

- MT's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $1.16 billion (8.1 percent) higher.
- MT is a relatively low capacity state, with a GSP per capita ranked #43 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

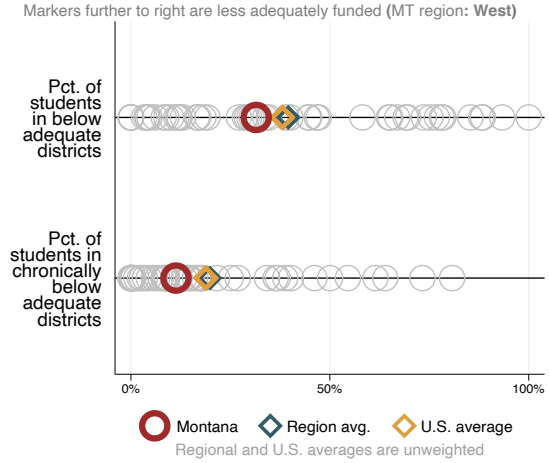
Statewide adequacy in MT is medium.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	31.5% (**#24**)
Pct. of students in *chronically* below adequate districts (rank)	11.3% (**#22**)

- The typical MT student's district spends 7.0 pct. above adequate levels (rank #**23**).

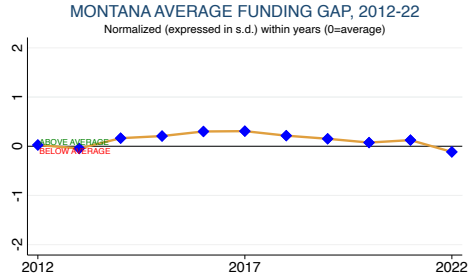
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (MT region: **West**)



Statewide adequacy trend, 2012-22

- Spending in MT was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.141 s.d.



- MT's adequacy gap was ranked #18 in 2012 (#1 = most adequate) and #23 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

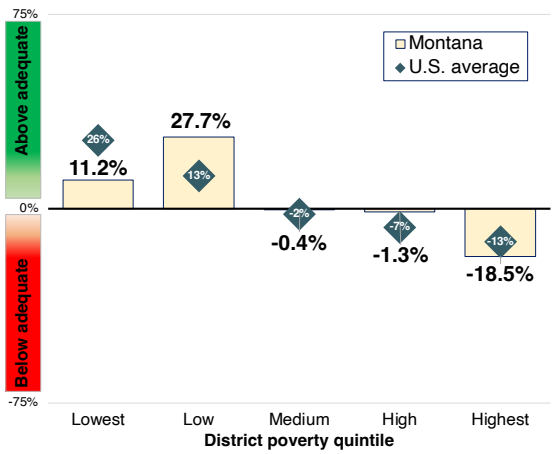
Rating **relative to other states** (high | medium | low):

Equal opportunity in MT is medium.

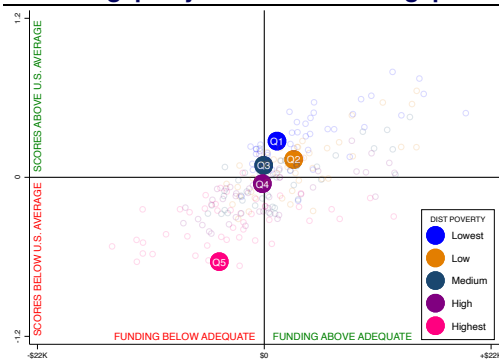
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	19.6 %
B. High/highest poverty districts	-8.9 %
C. Opportunity gap (B minus A)	**-28.6** pts

- MT's opportunity gap of -28.6 points is ranked #**16** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- MT's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.91 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

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 **Albert Shanker Institute**, **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 SID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles:

- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

NEBRASKA

Summary: This 2021-22 profile of Nebraska's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Nebraska scores 57 out of 100,** which **ranks 20th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	NE	U.S.
Child (5-17yo) poverty rate (%)	12.7	15.5
Public school coverage (%)	84.2	85.1
Percent revenue from state sources	30.0	43.7
Total enrollment (U.S. rank)	327,564 (36)	

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).

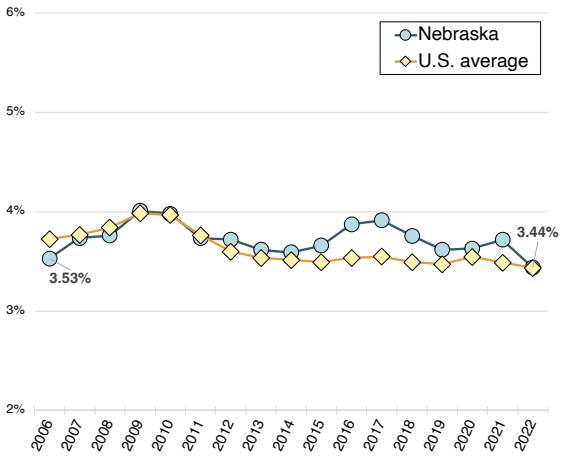
Rating **relative to other states** (high | medium | low):

NE is a medium effort state.

Fiscal effort summary	
Nebraska effort	3.44%
U.S. average effort	3.43%

- NE spends 3.44 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.00 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**29** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- NE's 2022 effort level is 0.09 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #12 in the nation.

Net change by period (% pts.)		
Period	**NE**	**U.S.**
K-12 recession (2006-12)	0.19	-0.13
Post-recession (2012-22)	-0.28	-0.16
Full period (2006-22)	-0.09	-0.29

- NE's effort was lower than its 2006 level in 1 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $0.14 billion (0.4 percent) higher.
- NE is a relatively high capacity state, with a GSP per capita ranked #12 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

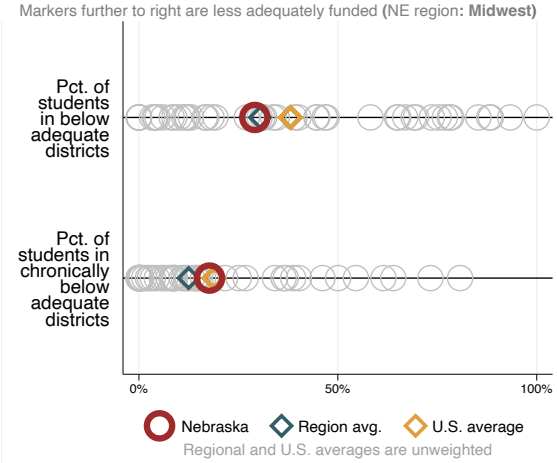
Statewide adequacy in NE is medium.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	29.2% (#**20**)
Pct. of students in *chronically* below adequate districts (rank)	17.8% (#**31**)

- The typical NE student's district spends 6.8 pct. above adequate levels (rank #**24**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (NE region: **Midwest**)

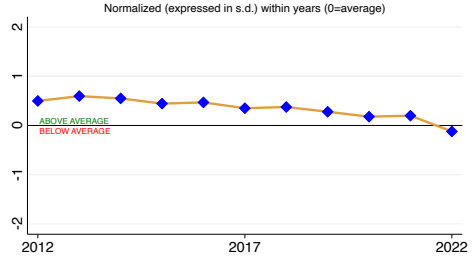


Statewide adequacy trend, 2012-22

- Spending in NE was substantially less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.621 s.d.

NEBRASKA AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- NE's adequacy gap was ranked #13 in 2012 (#1 = most adequate) and #24 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

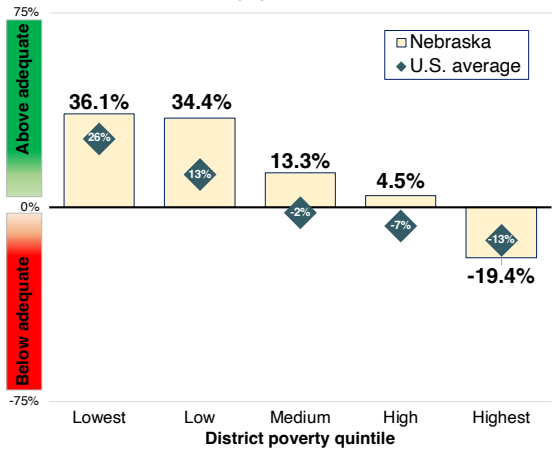
Rating **relative to other states** (high | medium | low):

Equal opportunity in NE is medium.

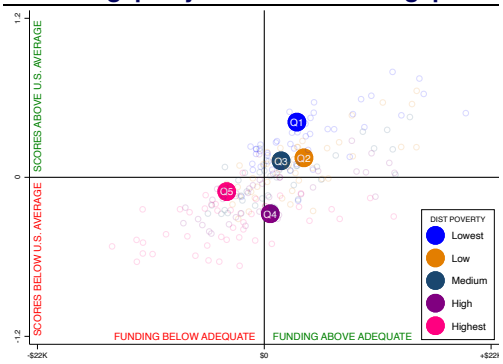
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	35.4 %
B. High/highest poverty districts	-8.8 %
C. Opportunity gap (B minus A)	**-44.2** pts

- NE's opportunity gap of -44.2 points is ranked #**30** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- NE's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.52 s.d. below its lowest-poverty districts (blue dot).

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State School Finance Profiles 2021-22 (publ. 2025)

General

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Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

NEVADA

Summary: This 2021-22 profile of Nevada's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Nevada scores 13 out of 100,** which **ranks 46th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	NV	U.S.
Child (5-17yo) poverty rate (%)	15.6	15.5
Public school coverage (%)	85.1	85.1
Percent revenue from state sources	69.3	43.7
Total enrollment (U.S. rank)	486,648 (33)	

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).

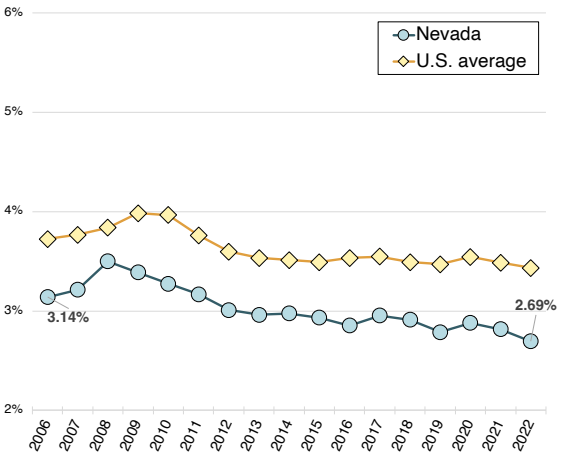
Rating **relative to other states** (high | medium | low):

NV is a low effort state.

Fiscal effort summary	
Nevada effort	2.69%
U.S. average effort	3.43%

- NV spends 2.69 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.74 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**45** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- NV's 2022 effort level is 0.45 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #31 in the nation.

Net change by period (% pts.)		
Period	**NV**	**U.S.**
K-12 recession (2006-12)	-0.13	-0.13
Post-recession (2012-22)	-0.32	-0.16
Full period (2006-22)	-0.45	-0.29

- NV's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $3.73 billion (10.7 percent) higher.
- NV is a relatively medium capacity state, with a GSP per capita ranked #29 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

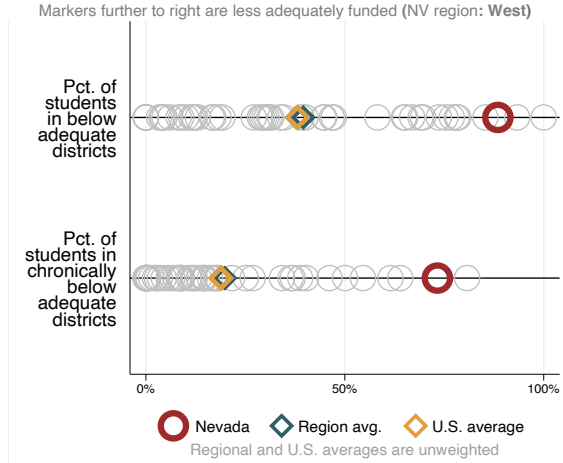
Statewide adequacy in NV is low.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	88.5% (**#46**)
Pct. of students in *chronically* below adequate districts (rank)	73.3% (**#47**)

- The typical NV student's district spends 25.0 pct. below adequate levels (rank #**44**).

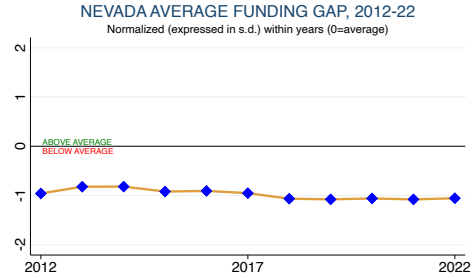
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (NV region: **West**)



Statewide adequacy trend, 2012-22

- Spending in NV was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.096 s.d.



- NV's adequacy gap was ranked #43 in 2012 (#1 = most adequate) and #44 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

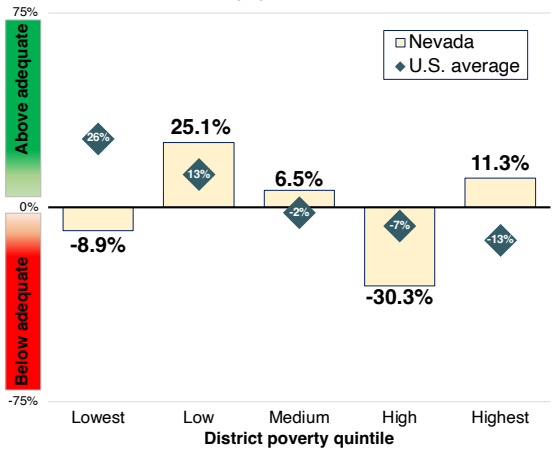
Rating **relative to other states** (high | medium | low):

Equal opportunity in NV is high.

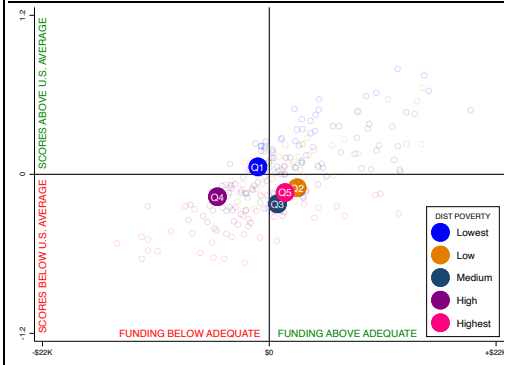
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	-5.7 %
B. High/highest poverty districts	-29.5 %
C. Opportunity gap (B minus A)	**-23.8** pts

- NV's opportunity gap of -23.8 points is ranked #**11** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



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Equal opportunity

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- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

NEW HAMPSHIRE

Summary: This 2021-22 profile of New Hampshire's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **New Hampshire scores 90 out of 100,** which **ranks 4th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	NH	U.S.
Child (5-17yo) poverty rate (%)	6.6	15.5
Public school coverage (%)	86.6	85.1
Percent revenue from state sources	29.4	43.7
Total enrollment (U.S. rank)	170,005 (42)	

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).

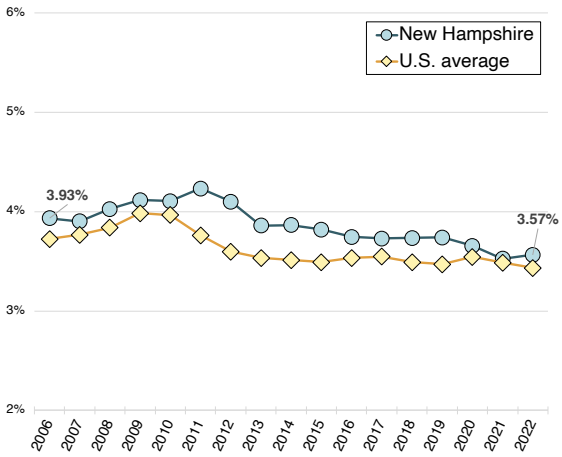
Rating **relative to other states** (high | medium | low):

NH is a medium effort state.

Fiscal effort summary	
New Hampshire effort	3.57%
U.S. average effort	3.43%

- NH spends 3.57 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.13 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**22** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- NH's 2022 effort level is 0.37 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #27 in the nation.

Net change by period (% pts.)		
Period	**NH**	**U.S.**
K-12 recession (2006-12)	0.17	-0.13
Post-recession (2012-22)	-0.53	-0.16
Full period (2006-22)	-0.37	-0.29

- NH's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $1.64 billion (7.4 percent) higher.
- NH is a relatively medium capacity state, with a GSP per capita ranked #18 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

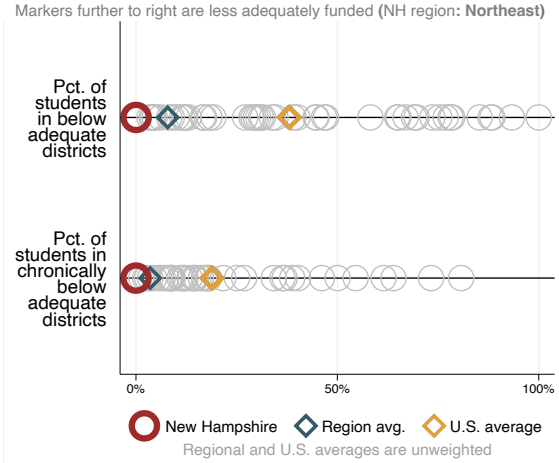
Statewide adequacy in NH is high.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	0.0% (#**3**)
Pct. of students in *chronically* below adequate districts (rank)	0.0% (#**1**)

- The typical NH student's district spends 121.8 pct. above adequate levels (rank #**1**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (NH region: **Northeast**)

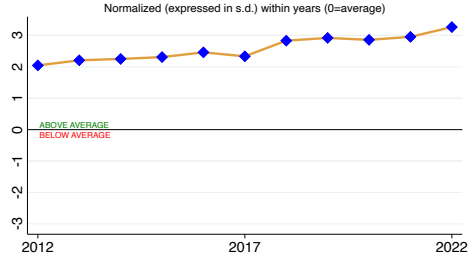


Statewide adequacy trend, 2012-22

- Spending in NH was substantially more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 1.222 s.d.

NEW HAMPSHIRE AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- NH's adequacy gap was ranked #2 in 2012 (#1 = most adequate) and #1 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

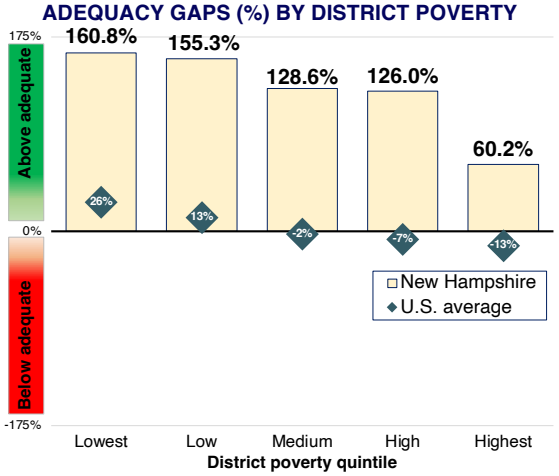
Rating **relative to other states** (high | medium | low):

Equal opportunity in NH is low.

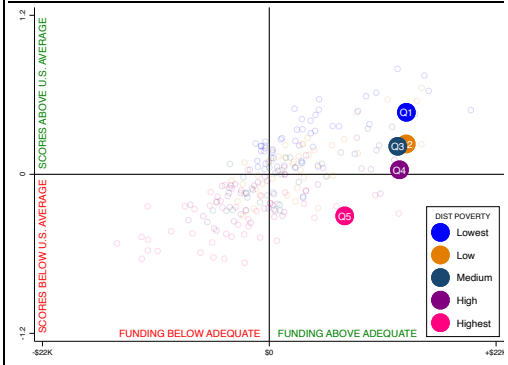
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	157.8 %
B. High/highest poverty districts	87.3 %
C. Opportunity gap (B minus A)	-70.5 pts

- NH's opportunity gap of -70.5 points is ranked #**39** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- NH's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.78 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

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 **Albert Shanker Institute**, **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 SID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles:

- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
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- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

NEW JERSEY

Summary: This 2021-22 profile of New Jersey's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **New Jersey scores 94 out of 100,** which **ranks 1st out of the 47 states** with possible ratings.

CONTEXTUAL STATS	NJ	U.S.
Child (5-17yo) poverty rate (%)	12.2	15.5
Public school coverage (%)	86.1	85.1
Percent revenue from state sources	44.8	43.7
Total enrollment (U.S. rank)	1,372,381	(11)

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).

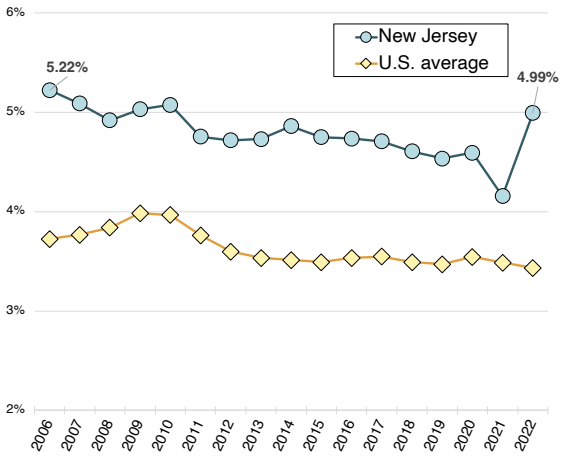
Rating **relative to other states** (high | medium | low):

NJ is a high effort state.

Fiscal effort summary	
New Jersey effort	4.99%
U.S. average effort	3.43%

- NJ spends 4.99 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 1.56 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**1** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- NJ's 2022 effort level is 0.23 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #21 in the nation.

Net change by period (% pts.)		
Period	**NJ**	**U.S.**
K-12 recession (2006-12)	-0.51	-0.13
Post-recession (2012-22)	0.28	-0.16
Full period (2006-22)	-0.23	-0.29

- NJ's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $26.55 billion (13.1 percent) higher.
- NJ is a relatively high capacity state, with a GSP per capita ranked #14 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

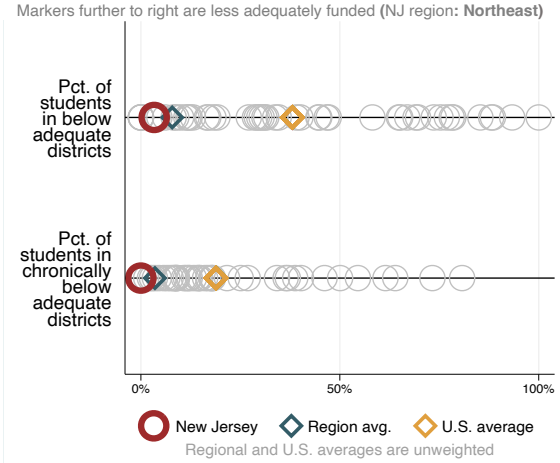
Statewide adequacy in NJ is high.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	3.4% (#**4**)
Pct. of students in *chronically* below adequate districts (rank)	0.0% (#**1**)

- The typical NJ student's district spends 77.7 pct. above adequate levels (rank #**3**).

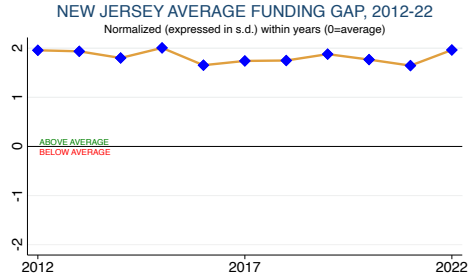
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (NJ region: **Northeast**)



Statewide adequacy trend, 2012-22

- Spending in NJ was no more or less adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.007 s.d.



- NJ's adequacy gap was ranked #3 in 2012 (#1 = most adequate) and #3 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

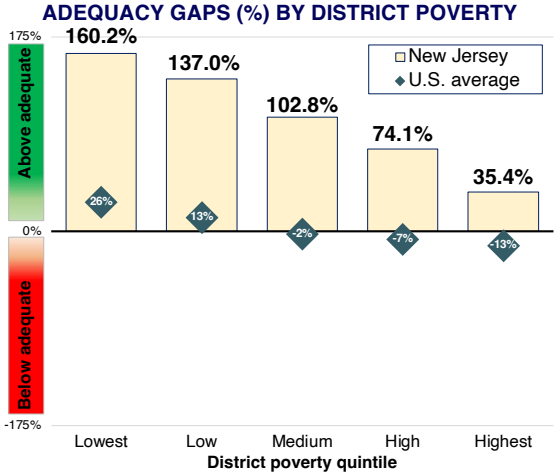
Rating **relative to other states** (high | medium | low):

Equal opportunity in NJ is low.

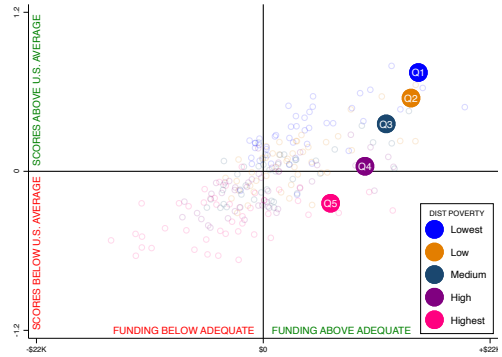
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	148.0 %
B. High/highest poverty districts	44.9 %
C. Opportunity gap (B minus A)	-103.2 pts

- NJ's opportunity gap of -103.2 points is ranked #**45** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- NJ's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.99 s.d. below its lowest-poverty districts (blue dot).

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- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

NEW MEXICO

Summary: This 2021-22 profile of New Mexico's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **New Mexico scores 33 out of 100,** which **ranks 34th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	NM	U.S.
Child (5-17yo) poverty rate (%)	22.6	15.5
Public school coverage (%)	87.3	85.1
Percent revenue from state sources	64.5	43.7
Total enrollment (U.S. rank)	316,785 (37)	

FISCAL EFFORT

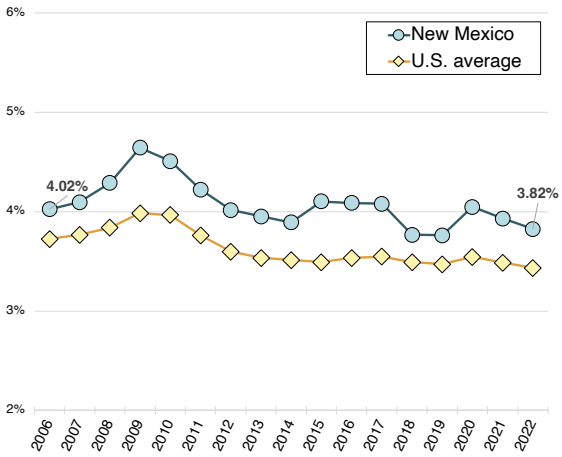
Fiscal effort is a measure of how much states devote to their schools as a share of their economic capacity (i.e., ability to raise revenue). Effort is calculated by dividing direct state and local K-12 expenditures in each state by its gross state product (GSP).

Rating **relative to other states** (high | medium | low):
NM is a high effort state.

Fiscal effort summary	
New Mexico effort	3.82%
U.S. average effort	3.43%

- NM spends 3.82 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.39 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**12** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- NM's 2022 effort level is 0.20 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #18 in the nation.

Net change by period (% pts.)		
Period	**NM**	**U.S.**
K-12 recession (2006-12)	-0.01	-0.13
Post-recession (2012-22)	-0.19	-0.16
Full period (2006-22)	-0.20	-0.29

- NM's effort was lower than its 2006 level in 4 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $0.84 billion (3.1 percent) higher.
- NM is a relatively low capacity state, with a GSP per capita ranked #44 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

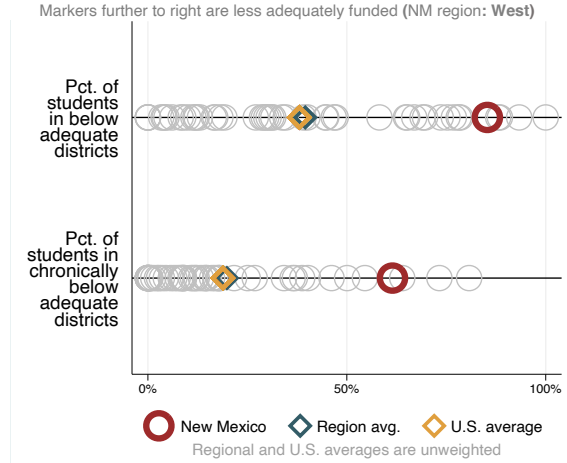
Rating **relative to other states** (high | medium | low):
Statewide adequacy in NM is low.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	85.3% (#**44**)
Pct. of students in *chronically* below adequate districts (rank)	59.8% (#**45**)

- The typical NM student's district spends 21.9 pct. below adequate levels (rank #**43**).

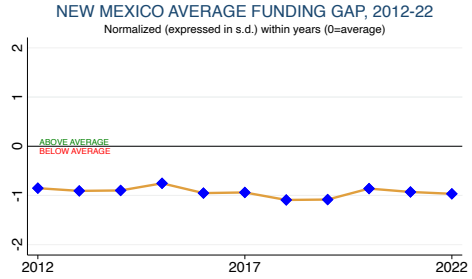
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (NM region: **West**)



Statewide adequacy trend, 2012-22

- Spending in NM was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.115 s.d.



- NM's adequacy gap was ranked #39 in 2012 (#1 = most adequate) and #43 in 2022.

EQUAL OPPORTUNITY

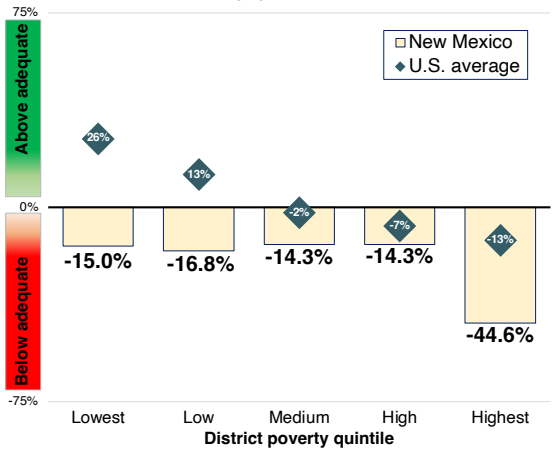
Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

Rating **relative to other states** (high | medium | low):
Equal opportunity in NM is high.

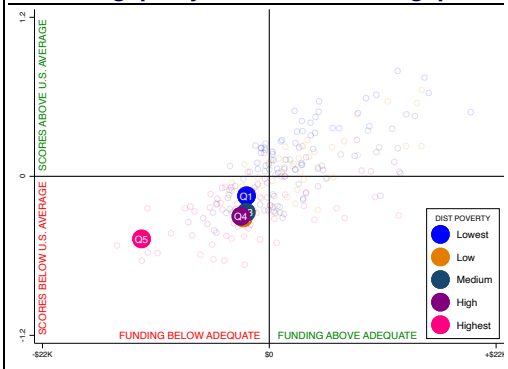
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	-15.5 %
B. High/highest poverty districts	-37.4 %
C. Opportunity gap (B minus A)	**-21.9** pts

- NM's opportunity gap of -21.9 points is ranked #**9** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- NM's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.33 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

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 **Albert Shanker Institute**, **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 SID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles:

- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
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  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
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Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

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- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
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- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
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- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

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STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

NEW YORK

Summary: This 2021-22 profile of New York's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **New York scores 90 out of 100,** which **ranks 3rd out of the 47 states** with possible ratings. **(See warnings below.)**

CONTEXTUAL STATS	NY	U.S.
Child (5-17yo) poverty rate (%)	18.2	15.5
Public school coverage (%)	83.0	85.1
Percent revenue from state sources	36.1	43.7
Total enrollment (U.S. rank)	2,548,490 (4)	

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).

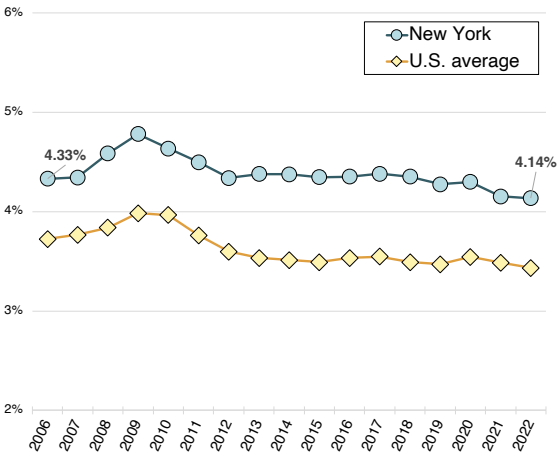
Rating **relative to other states** (high I medium I low):

NY is a high effort state.

Fiscal effort summary	
New York effort	4.14%
U.S. average effort	3.43%

- NY spends 4.14 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.70 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**5** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- NY's 2022 effort level is 0.19 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #17 in the nation.

Net change by period (% pts.)		
Period	**NY**	**U.S.**
K-12 recession (2006-12)	0.01	-0.13
Post-recession (2012-22)	-0.20	-0.16
Full period (2006-22)	-0.19	-0.29

- NY's effort was lower than its 2006 level in 4 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $8.55 billion (1.7 percent) higher.
- NY is a relatively high capacity state, with a GSP per capita ranked #2 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high I medium I low):

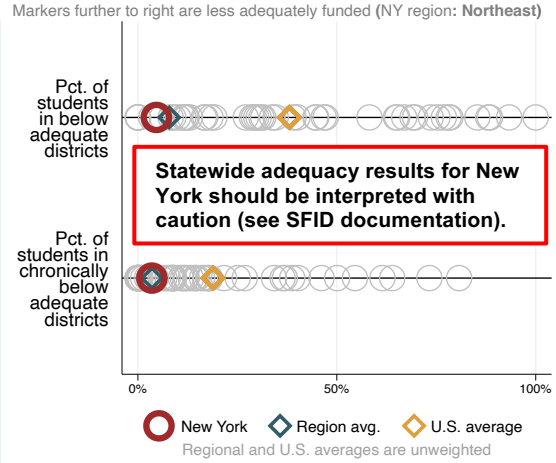
Statewide adequacy in NY is high.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	4.7% (#**6**)
Pct. of students in *chronically* below adequate districts (rank)	3.5% (#**12**)

- The typical NY student's district spends 74.4 pct. above adequate levels (rank #**4**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (NY region: **Northeast**)

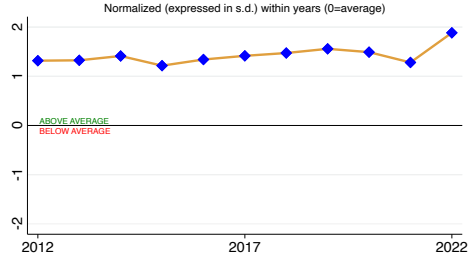


Statewide adequacy trend, 2012-22

- Spending in NY was substantially more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.562 s.d.

NEW YORK AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- NY's adequacy gap was ranked #5 in 2012 (#1 = most adequate) and #4 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

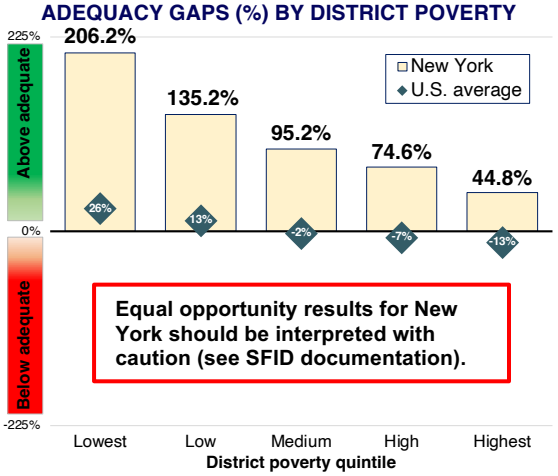
Rating **relative to other states** (high I medium I low):

Equal opportunity in NY is low.

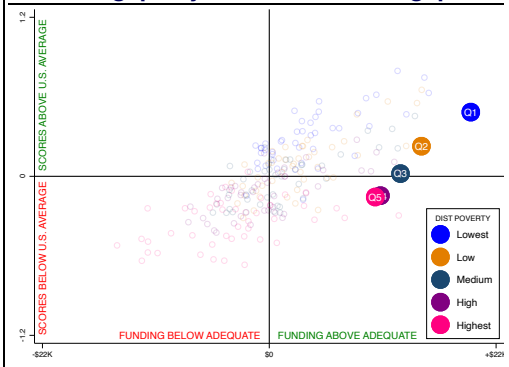
Average (enr-weighted) funding gaps by poverty (Red=below adequate I Green=above adequate)	
A. Low/lowest poverty districts	169.3 %
B. High/highest poverty districts	47.9 %
C. Opportunity gap (B minus A)	-121.4 pts

- NY's opportunity gap of -121.4 points is ranked #**46** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- NY's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.64 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

General

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Fiscal effort

SID variables used in this section: *effort*; *year*

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- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
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- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

NORTH CAROLINA

Summary: This 2021-22 profile of North Carolina's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **North Carolina scores 21 out of 100,** which **ranks 41st out of the 47 states** with possible ratings.

CONTEXTUAL STATS	NC	U.S.
Child (5-17yo) poverty rate (%)	16.5	15.5
Public school coverage (%)	83.7	85.1
Percent revenue from state sources	55.8	43.7
Total enrollment (U.S. rank)	1,525,223 (9)	

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).

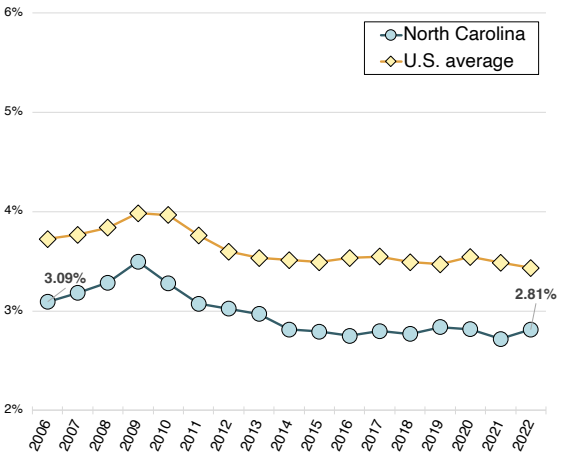
Rating **relative to other states** (high | medium | low):

NC is a low effort state.

Fiscal effort summary	
North Carolina effort	2.81%
U.S. average effort	3.43%

- NC spends 2.81 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.62 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**42** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- NC's 2022 effort level is 0.28 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #22 in the nation.

Net change by period (% pts.)		
Period	**NC**	**U.S.**
K-12 recession (2006-12)	-0.07	-0.13
Post-recession (2012-22)	-0.21	-0.16
Full period (2006-22)	-0.28	-0.29

- NC's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $12.54 billion (11.0 percent) higher.
- NC is a relatively medium capacity state, with a GSP per capita ranked #33 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

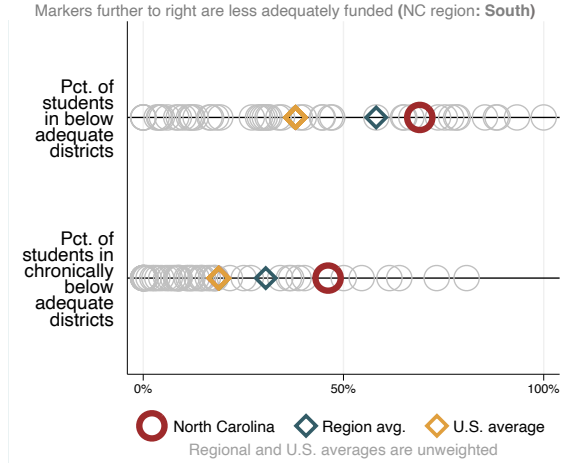
Statewide adequacy in NC is low.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	69.1% (#**37**)
Pct. of students in *chronically* below adequate districts (rank)	46.2% (#**42**)

- The typical NC student's district spends 16.3 pct. below adequate levels (rank #**37**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (NC region: **South**)

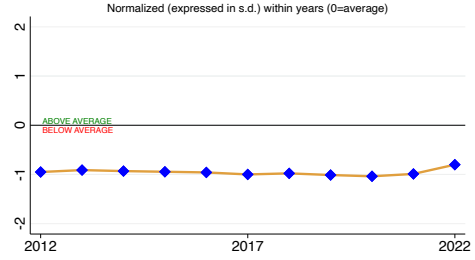


Statewide adequacy trend, 2012-22

- Spending in NC was more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.149 s.d.

NORTH CAROLINA AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- NC's adequacy gap was ranked #42 in 2012 (#1 = most adequate) and #37 in 2022.

EQUAL OPPORTUNITY

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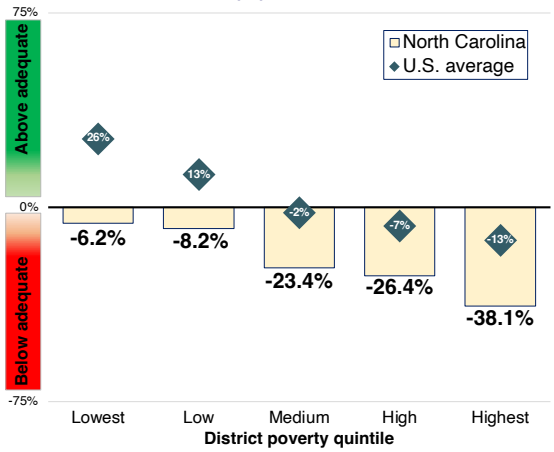
Rating **relative to other states** (high | medium | low):

Equal opportunity in NC is high.

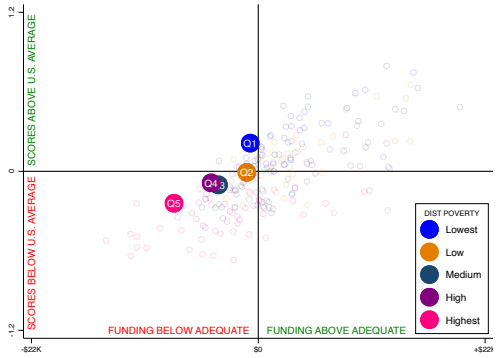
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	-6.8 %
B. High/highest poverty districts	-32.2 %
C. Opportunity gap (B minus A)	**-25.4** pts

- NC's opportunity gap of -25.4 points is ranked #**13** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



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Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

NORTH DAKOTA

Summary: This 2021-22 profile of North Dakota's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **North Dakota scores 71 out of 100,** which **ranks 9th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	ND	U.S.
Child (5-17yo) poverty rate (%)	11.7	15.5
Public school coverage (%)	87.9	85.1
Percent revenue from state sources	49.1	43.7
Total enrollment (U.S. rank)	116,864 (48)	

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).

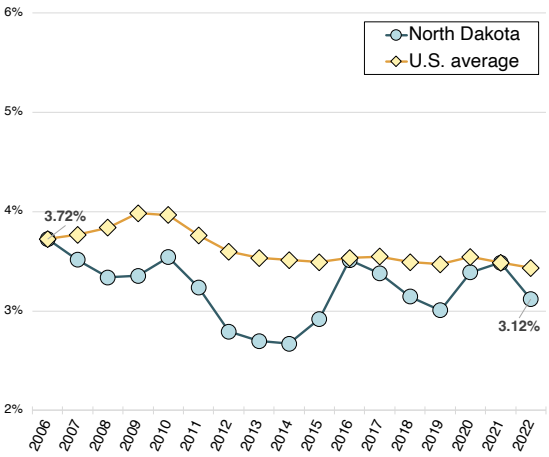
Rating **relative to other states** (high | medium | low):

ND is a medium effort state.

Fiscal effort summary	
North Dakota effort	3.12%
U.S. average effort	3.43%

- ND spends 3.12 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.32 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**33** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- ND's 2022 effort level is 0.61 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #41 in the nation.

Net change by period (% pts.)		
Period	**ND**	**U.S.**
K-12 recession (2006-12)	-0.93	-0.13
Post-recession (2012-22)	0.33	-0.16
Full period (2006-22)	-0.61	-0.29

- ND's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $1.81 billion (13.5 percent) higher.
- ND is a relatively high capacity state, with a GSP per capita ranked #6 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

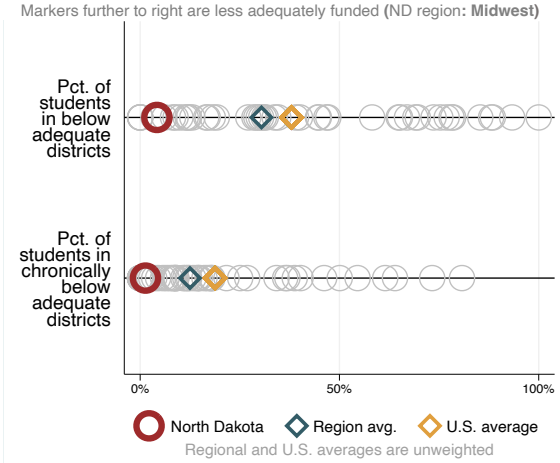
Statewide adequacy in ND is high.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	4.2% (#**5**)
Pct. of students in *chronically* below adequate districts (rank)	1.3% (#**9**)

- The typical ND student's district spends 27.7 pct. above adequate levels (rank #**11**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (ND region: **Midwest**)

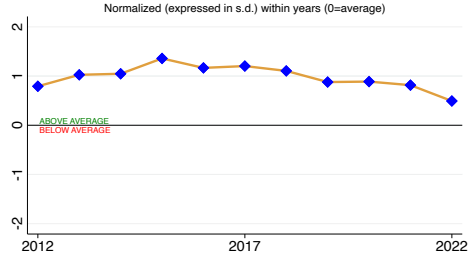


Statewide adequacy trend, 2012-22

- Spending in ND was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.299 s.d.

NORTH DAKOTA AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- ND's adequacy gap was ranked #10 in 2012 (#1 = most adequate) and #11 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

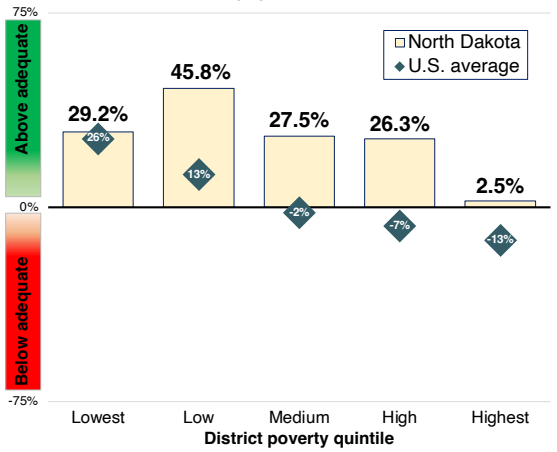
Rating **relative to other states** (high | medium | low):

Equal opportunity in ND is high.

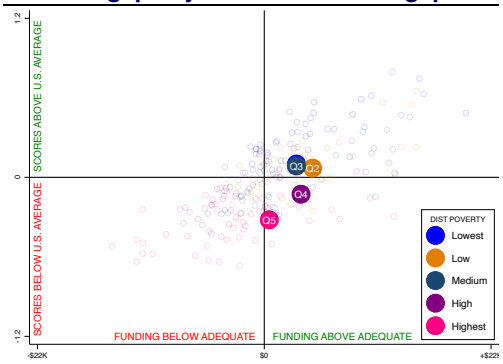
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	39.9 %
B. High/highest poverty districts	16.2 %
C. Opportunity gap (B minus A)	-23.7 pts

- ND's opportunity gap of -23.7 points is ranked #**10** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- ND's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.42 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

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 **Albert Shanker Institute**, **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 SID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles:

- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

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- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

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STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

OHIO

Summary: This 2021-22 profile of Ohio's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Ohio scores 54 out of 100,** which **ranks 23rd out of the 47 states** with possible ratings.

CONTEXTUAL STATS	OH	U.S.
Child (5-17yo) poverty rate (%)	16.8	15.5
Public school coverage (%)	81.8	85.1
Percent revenue from state sources	34.2	43.7
Total enrollment (U.S. rank)	1,683,612 (8)	

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).

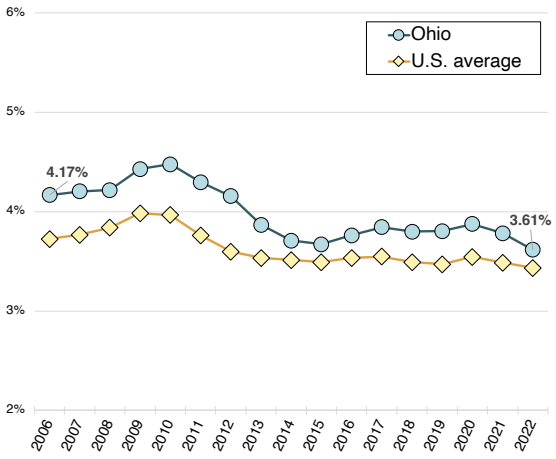
Rating **relative to other states** (high | medium | low):

OH is a medium effort state.

Fiscal effort summary	
Ohio effort	3.61%
U.S. average effort	3.43%

- OH spends 3.61 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.18 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**20** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- OH's 2022 effort level is 0.55 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #36 in the nation.

Net change by period (% pts.)		
Period	**OH**	**U.S.**
K-12 recession (2006-12)	-0.01	-0.13
Post-recession (2012-22)	-0.54	-0.16
Full period (2006-22)	-0.55	-0.29

- OH's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $18.59 billion (10.2 percent) higher.
- OH is a relatively medium capacity state, with a GSP per capita ranked #26 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

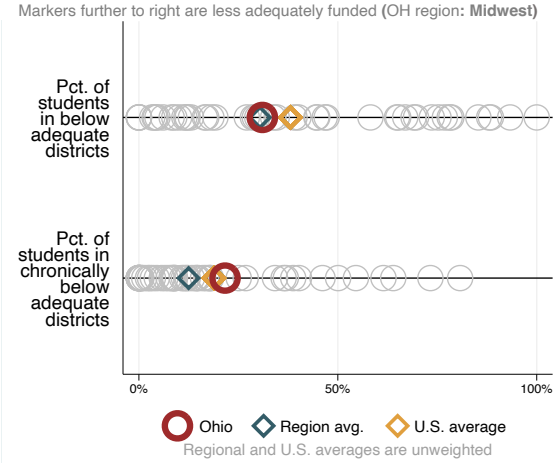
Statewide adequacy in OH is medium.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	31.0% (**#23**)
Pct. of students in *chronically* below adequate districts (rank)	21.7% (**#34**)

- The typical OH student's district spends 0.3 pct. above adequate levels (rank #**27**).

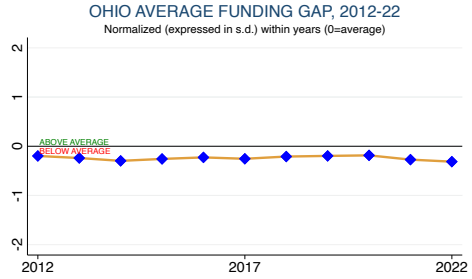
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (OH region: **Midwest**)



Statewide adequacy trend, 2012-22

- Spending in OH was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.116 s.d.



- OH's adequacy gap was ranked #26 in 2012 (#1 = most adequate) and #27 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

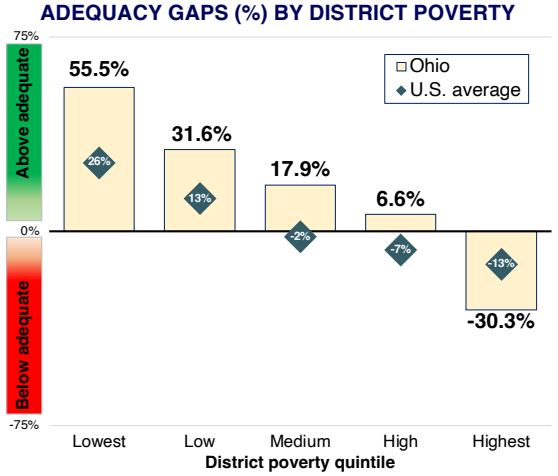
Rating **relative to other states** (high | medium | low):

Equal opportunity in OH is low.

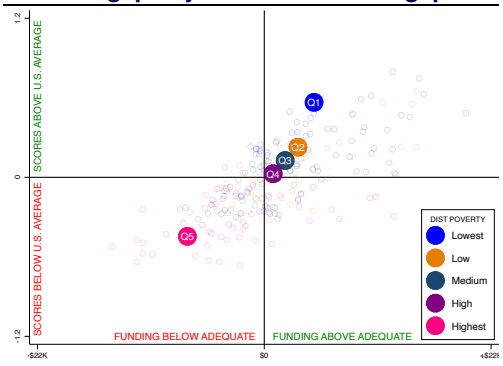
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	44.6 %
B. High/highest poverty districts	-22.1 %
C. Opportunity gap (B minus A)	-66.7 pts

- OH's opportunity gap of -66.7 points is ranked #**38** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- OH's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 1.01 s.d. below its lowest-poverty districts (blue dot).

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State School Finance Profiles 2021-22 (publ. 2025)

General

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- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
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Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

OKLAHOMA

Summary: This 2021-22 profile of Oklahoma's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Oklahoma scores 28 out of 100,** which **ranks 38th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	OK	U.S.
Child (5-17yo) poverty rate (%)	18.7	15.5
Public school coverage (%)	85.0	85.1
Percent revenue from state sources	41.7	43.7
Total enrollment (U.S. rank)	698,696 (25)	

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).

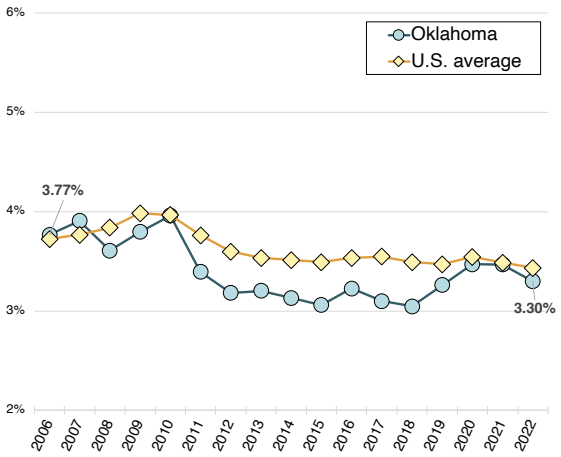
Rating **relative to other states** (high I medium I low):

OK is a medium effort state.

Fiscal effort summary	
Oklahoma effort	3.30%
U.S. average effort	3.43%

- OK spends 3.30 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.14 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**31** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- OK's 2022 effort level is 0.47 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #32 in the nation.

Net change by period (% pts.)		
Period	**OK**	**U.S.**
K-12 recession (2006-12)	-0.59	-0.13
Post-recession (2012-22)	0.12	-0.16
Full period (2006-22)	-0.47	-0.29

- OK's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $6.97 billion (15.2 percent) higher.
- OK is a relatively low capacity state, with a GSP per capita ranked #42 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high I medium I low):

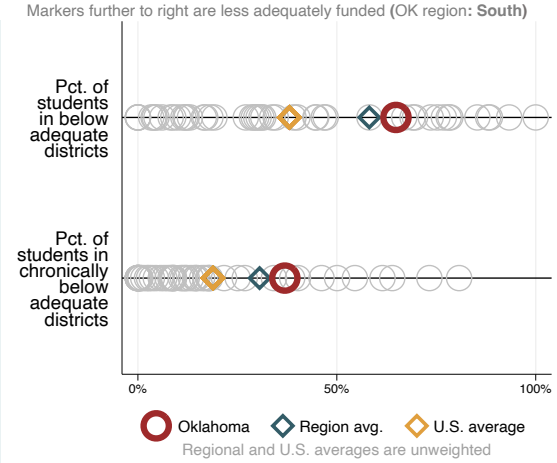
Statewide adequacy in OK is low.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	64.9% (#**34**)
Pct. of students in *chronically* below adequate districts (rank)	36.9% (#**39**)

- The typical OK student's district spends 16.5 pct. below adequate levels (rank #**39**).

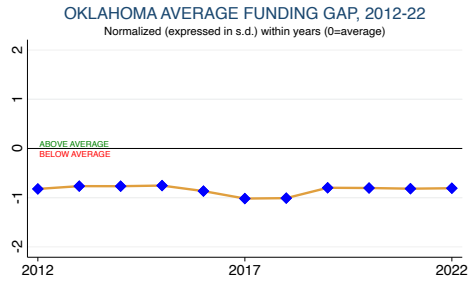
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (OK region: **South**)



Statewide adequacy trend, 2012-22

- Spending in OK was no more or less adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.014 s.d.



- OK's adequacy gap was ranked #35 in 2012 (#1 = most adequate) and #39 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

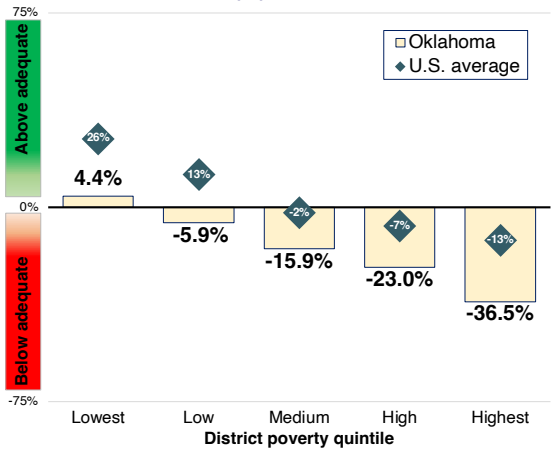
Rating **relative to other states** (high I medium I low):

Equal opportunity in OK is medium.

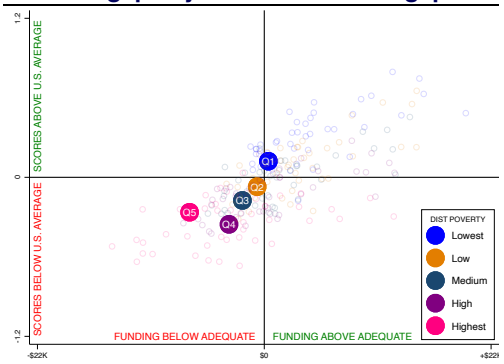
Average (enr-weighted) funding gaps by poverty (Red=below adequate I Green=above adequate)	
A. Low/lowest poverty districts	1.3 %
B. High/highest poverty districts	-31.8 %
C. Opportunity gap (B minus A)	-33.1 pts

- OK's opportunity gap of -33.1 points is ranked #**19** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



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Equal opportunity

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- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
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- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

OREGON

Summary: This 2021-22 profile of Oregon's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Oregon scores 70 out of 100,** which **ranks 10th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	OR	U.S.
Child (5-17yo) poverty rate (%)	12.5	15.5
Public school coverage (%)	85.1	85.1
Percent revenue from state sources	52.8	43.7
Total enrollment (U.S. rank)	576,201 (29)	

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).

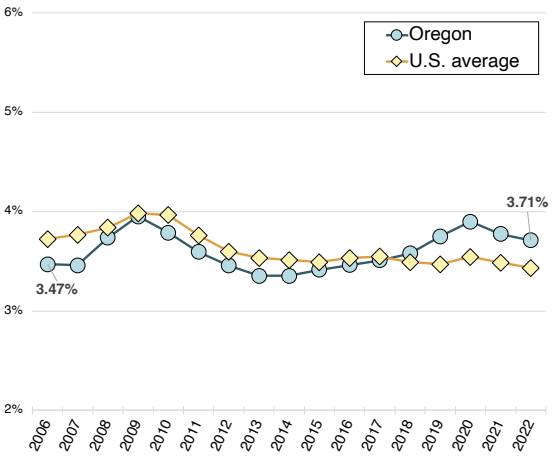
Rating **relative to other states** (high | medium | low):

OR is a high effort state.

Fiscal effort summary	
Oregon effort	3.71%
U.S. average effort	3.43%

- OR spends 3.71 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.28 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**16** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- OR's 2022 effort level is 0.24 pct. points higher than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #6 in the nation.

Net change by period (% pts.)		
Period	**OR**	**U.S.**
K-12 recession (2006-12)	-0.01	-0.13
Post-recession (2012-22)	0.25	-0.16
Full period (2006-22)	0.24	-0.29

- OR's effort was lower than its 2006 level in 1 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $0.02 billion (0.0 percent) higher.
- OR is a relatively medium capacity state, with a GSP per capita ranked #25 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

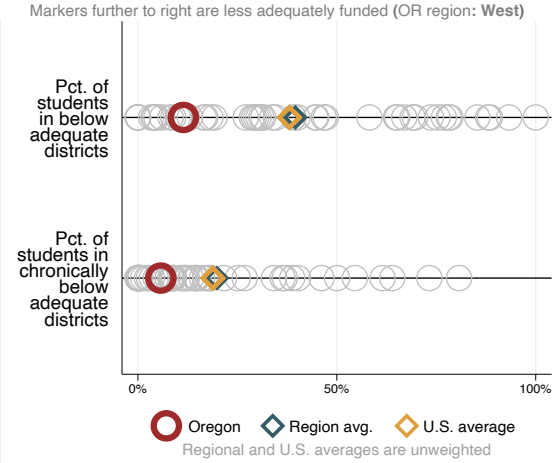
Statewide adequacy in OR is high.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	11.4% (#**10**)
Pct. of students in *chronically* below adequate districts (rank)	5.8% (#**14**)

- The typical OR student's district spends 20.5 pct. above adequate levels (rank #**13**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (OR region: **West**)

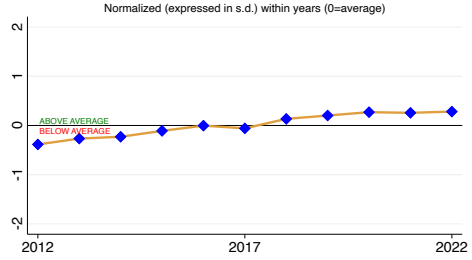


Statewide adequacy trend, 2012-22

- Spending in OR was substantially more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.668 s.d.

OREGON AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- OR's adequacy gap was ranked #28 in 2012 (#1 = most adequate) and #13 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

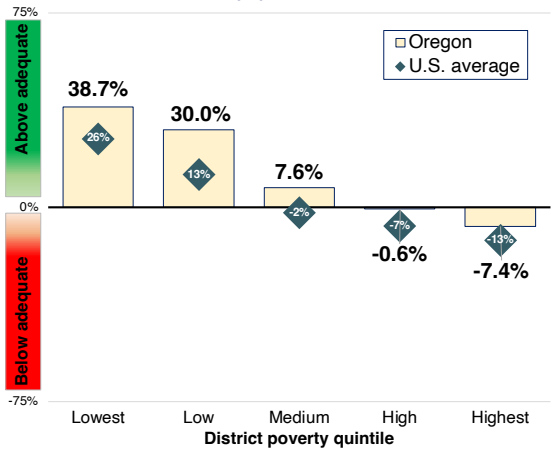
Rating **relative to other states** (high | medium | low):

Equal opportunity in OR is medium.

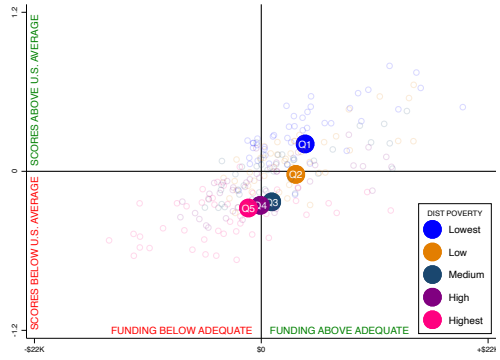
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	36.2 %
B. High/highest poverty districts	-1.7 %
C. Opportunity gap (B minus A)	-37.9 pts

- OR's opportunity gap of -37.9 points is ranked #**24** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- OR's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.48 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

General

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- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

PENNSYLVANIA

Summary: This 2021-22 profile of Pennsylvania's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Pennsylvania scores 69 out of 100,** which **ranks 11th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	PA	U.S.
Child (5-17yo) poverty rate (%)	14.6	15.5
Public school coverage (%)	81.8	85.1
Percent revenue from state sources	35.5	43.7
Total enrollment (U.S. rank)	1,695,092 (7)	

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).

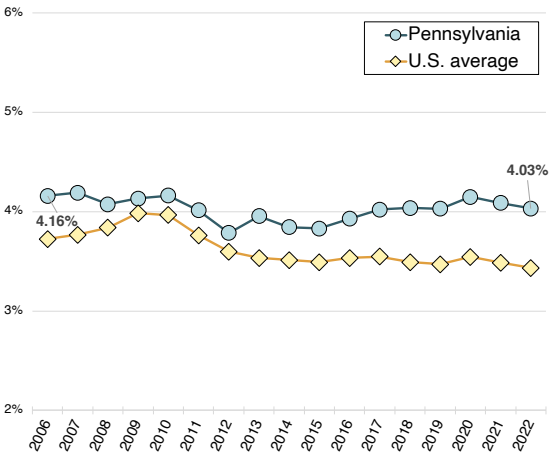
Rating **relative to other states** (high | medium | low):

PA is a high effort state.

Fiscal effort summary	
Pennsylvania effort	4.03%
U.S. average effort	3.43%

- PA spends 4.03 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.60 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**6** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- PA's 2022 effort level is 0.13 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #14 in the nation.

Net change by period (% pts.)		
Period	**PA**	**U.S.**
K-12 recession (2006-12)	-0.37	-0.13
Post-recession (2012-22)	0.25	-0.16
Full period (2006-22)	-0.13	-0.29

- PA's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $6.43 billion (2.9 percent) higher.
- PA is a relatively medium capacity state, with a GSP per capita ranked #24 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

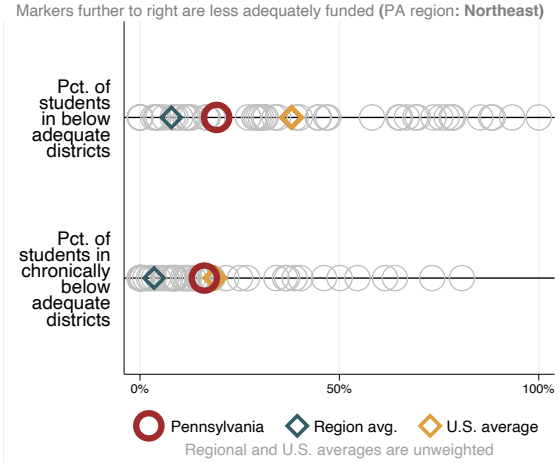
Statewide adequacy in PA is high.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	19.2% (#**17**)
Pct. of students in *chronically* below adequate districts (rank)	16.1% (#**29**)

- The typical PA student's district spends 33.8 pct. above adequate levels (rank #**10**).

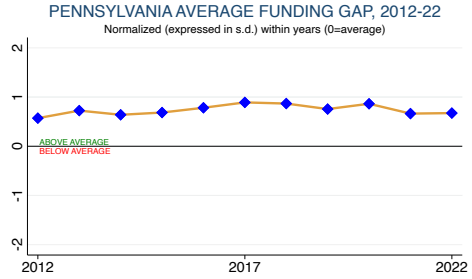
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (PA region: **Northeast**)



Statewide adequacy trend, 2012-22

- Spending in PA was more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.103 s.d.



- PA's adequacy gap was ranked #12 in 2012 (#1 = most adequate) and #10 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

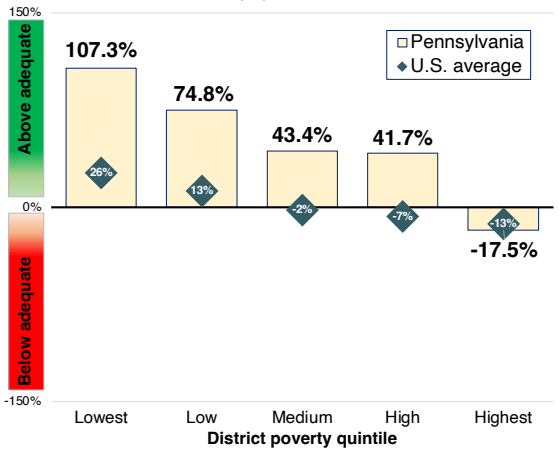
Rating **relative to other states** (high | medium | low):

Equal opportunity in PA is low.

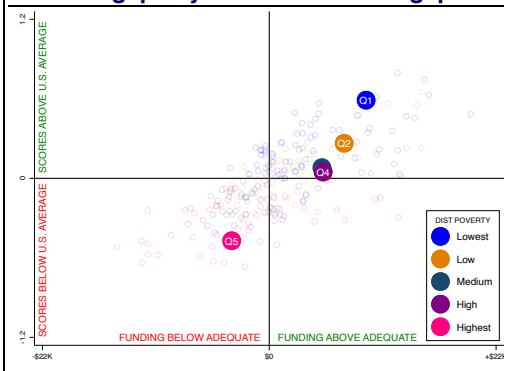
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	95.0 %
B. High/highest poverty districts	-5.2 %
C. Opportunity gap (B minus A)	**-100.2** pts

- PA's opportunity gap of -100.2 points is ranked #**43** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- PA's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 1.06 s.d. below its lowest-poverty districts (blue dot).

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- **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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

RHODE ISLAND

Summary: This 2021-22 profile of Rhode Island's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Rhode Island scores 85 out of 100,** which **ranks 5th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	RI	U.S.
Child (5-17yo) poverty rate (%)	13.6	15.5
Public school coverage (%)	84.2	85.1
Percent revenue from state sources	39.6	43.7
Total enrollment (U.S. rank)	138,566 (46)	

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).

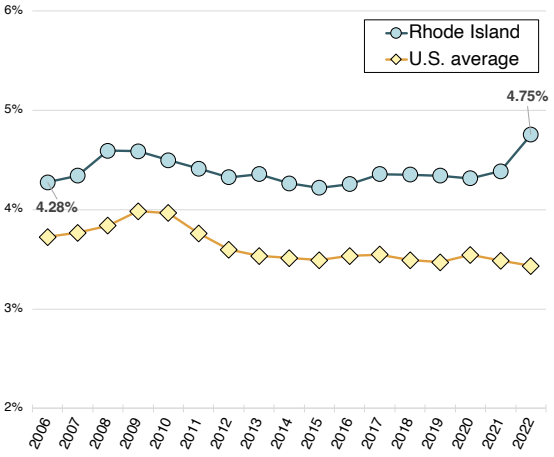
Rating **relative to other states** (high | medium | low):

RI is a high effort state.

Fiscal effort summary	
Rhode Island effort	4.75%
U.S. average effort	3.43%

- RI spends 4.75 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 1.32 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**2** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- RI's 2022 effort level is 0.48 pct. points higher than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #4 in the nation.

Net change by period (% pts.)		
Period	**RI**	**U.S.**
K-12 recession (2006-12)	0.05	-0.13
Post-recession (2012-22)	0.43	-0.16
Full period (2006-22)	0.48	-0.29

- RI's effort was lower than its 2006 level in 1 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $0.01 billion (0.1 percent) higher.
- RI is a relatively low capacity state, with a GSP per capita ranked #34 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

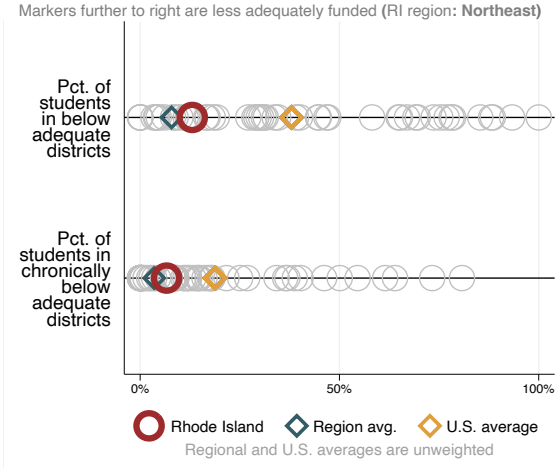
Statewide adequacy in RI is high.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	13.1% (#**13**)
Pct. of students in *chronically* below adequate districts (rank)	6.6% (#**15**)

- The typical RI student's district spends 42.8 pct. above adequate levels (rank #**8**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (RI region: **Northeast**)

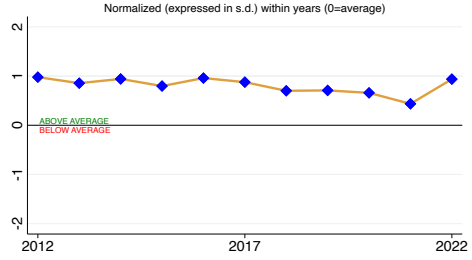


Statewide adequacy trend, 2012-22

- Spending in RI was modestly less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.040 s.d.

RHODE ISLAND AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- RI's adequacy gap was ranked #7 in 2012 (#1 = most adequate) and #8 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

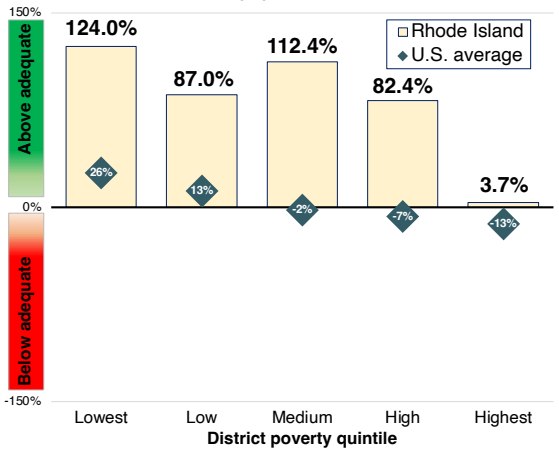
Rating **relative to other states** (high | medium | low):

Equal opportunity in RI is low.

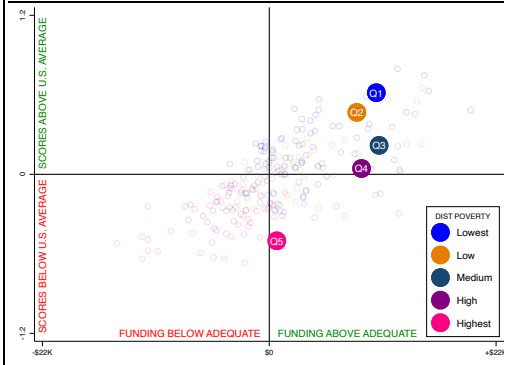
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	104.6 %
B. High/highest poverty districts	22.6 %
C. Opportunity gap (B minus A)	**-82.0** pts

- RI's opportunity gap of -82.0 points is ranked #**42** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- RI's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 1.12 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

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 **Albert Shanker Institute**, **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 SID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles:

- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
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Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

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- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

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STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

SOUTH CAROLINA

Summary: This 2021-22 profile of South Carolina's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **South Carolina scores 36 out of 100,** which **ranks 30th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	SC	U.S.
Child (5-17yo) poverty rate (%)	18.4	15.5
Public school coverage (%)	83.7	85.1
Percent revenue from state sources	43.3	43.7
Total enrollment (U.S. rank)	780,878 (23)	

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).

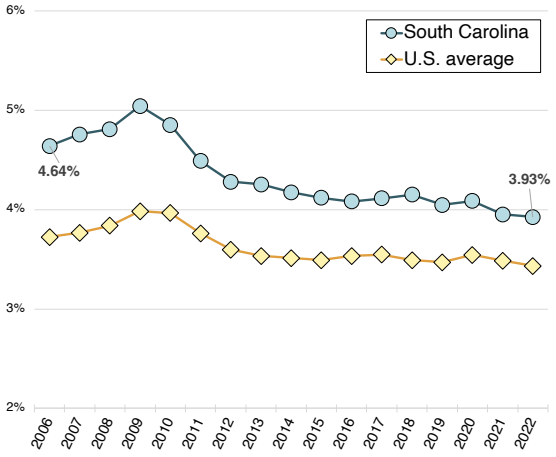
Rating **relative to other states** (high | medium | low):

SC is a high effort state.

Fiscal effort summary	
South Carolina effort	3.93%
U.S. average effort	3.43%

- SC spends 3.93 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.49 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**10** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- SC's 2022 effort level is 0.71 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #46 in the nation.

Net change by period (% pts.)		
Period	**SC**	**U.S.**
K-12 recession (2006-12)	-0.36	-0.13
Post-recession (2012-22)	-0.36	-0.16
Full period (2006-22)	-0.71	-0.29

- SC's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $10.07 billion (14.7 percent) higher.
- SC is a relatively low capacity state, with a GSP per capita ranked #47 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

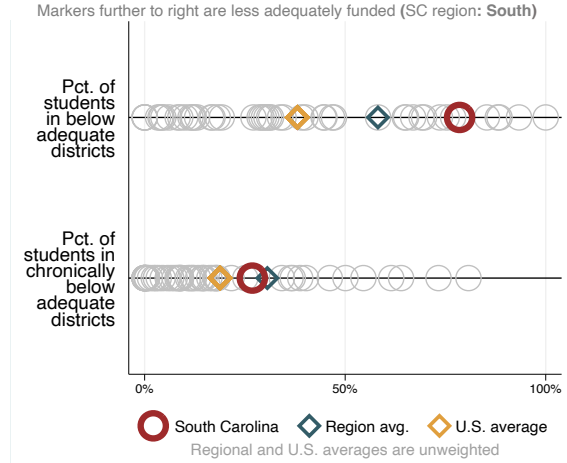
Statewide adequacy in SC is low.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	78.5% (**#43**)
Pct. of students in *chronically* below adequate districts (rank)	26.9% (**#36**)

- The typical SC student's district spends 13.8 pct. below adequate levels (rank #**36**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (SC region: **South**)

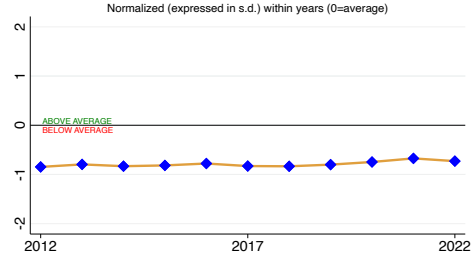


Statewide adequacy trend, 2012-22

- Spending in SC was more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.117 s.d.

SOUTH CAROLINA AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- SC's adequacy gap was ranked #38 in 2012 (#1 = most adequate) and #36 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

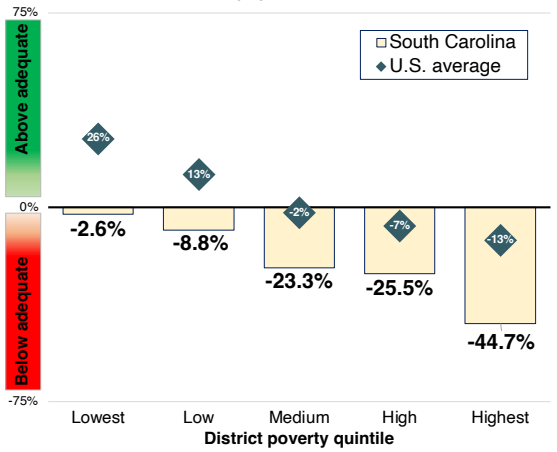
Rating **relative to other states** (high | medium | low):

Equal opportunity in SC is high.

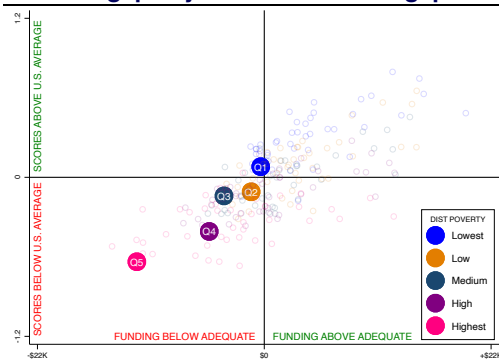
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	-4.5 %
B. High/highest poverty districts	-32.1 %
C. Opportunity gap (B minus A)	-27.6 pts

- SC's opportunity gap of -27.6 points is ranked #**14** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- SC's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.72 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

General

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Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

SOUTH DAKOTA

Summary: This 2021-22 profile of South Dakota's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **South Dakota scores 35 out of 100,** which **ranks 32nd out of the 47 states** with possible ratings.

CONTEXTUAL STATS	SD	U.S.
Child (5-17yo) poverty rate (%)	13.9	15.5
Public school coverage (%)	88.5	85.1
Percent revenue from state sources	30.6	43.7
Total enrollment (U.S. rank)	141,307 (44)	

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).

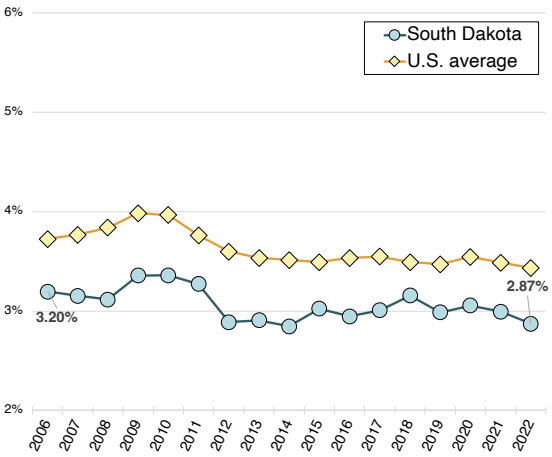
Rating **relative to other states** (high | medium | low):

SD is a low effort state.

Fiscal effort summary	
South Dakota effort	2.87%
U.S. average effort	3.43%

- SD spends 2.87 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.56 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**40** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- SD's 2022 effort level is 0.32 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #24 in the nation.

Net change by period (% pts.)		
Period	**SD**	**U.S.**
K-12 recession (2006-12)	-0.31	-0.13
Post-recession (2012-22)	-0.02	-0.16
Full period (2006-22)	-0.32	-0.29

- SD's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $0.76 billion (6.6 percent) higher.
- SD is a relatively medium capacity state, with a GSP per capita ranked #21 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

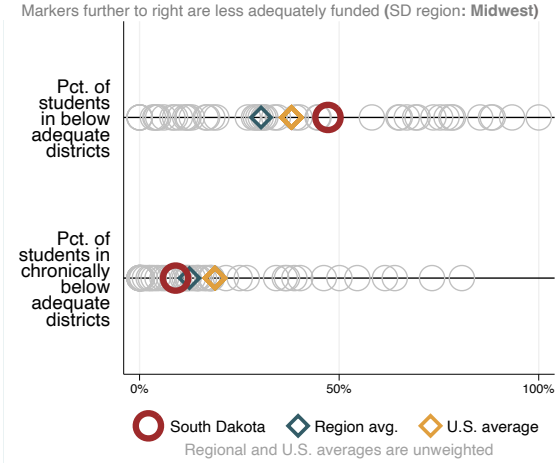
Statewide adequacy in SD is medium.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	47.2% (#**32**)
Pct. of students in *chronically* below adequate districts (rank)	9.0% (#**19**)

- The typical SD student's district spends 1.5 pct. below adequate levels (rank #**30**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (SD region: **Midwest**)

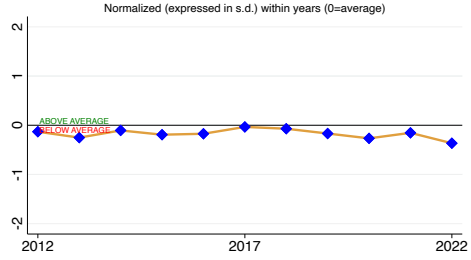


Statewide adequacy trend, 2012-22

- Spending in SD was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.234 s.d.

SOUTH DAKOTA AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- SD's adequacy gap was ranked #24 in 2012 (#1 = most adequate) and #30 in 2022.

EQUAL OPPORTUNITY

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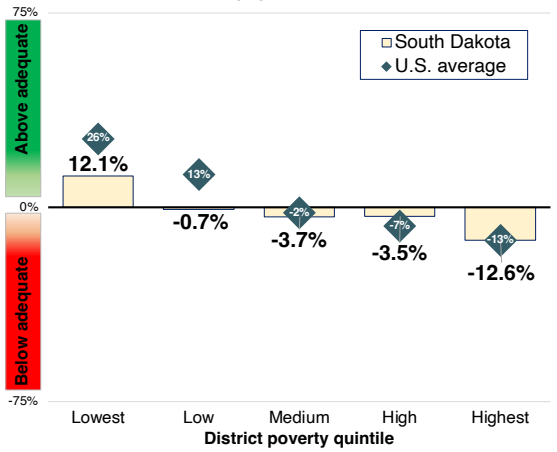
Rating **relative to other states** (high | medium | low):

Equal opportunity in SD is high.

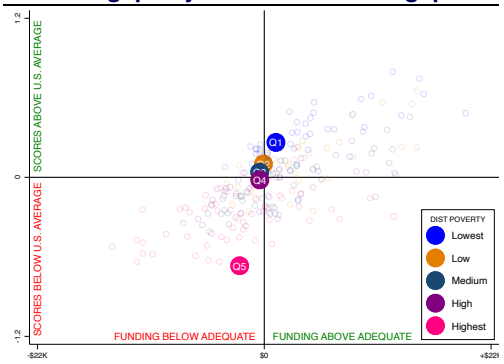
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	3.1 %
B. High/highest poverty districts	-7.5 %
C. Opportunity gap (B minus A)	-10.6 pts

- SD's opportunity gap of -10.6 points is ranked #**1** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



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Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

TENNESSEE

Summary: This 2021-22 profile of Tennessee's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Tennessee scores 23 out of 100,** which **ranks 40th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	TN	U.S.
Child (5-17yo) poverty rate (%)	16.7	15.5
Public school coverage (%)	82.3	85.1
Percent revenue from state sources	40.5	43.7
Total enrollment (U.S. rank)	996,709 (16)	

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).

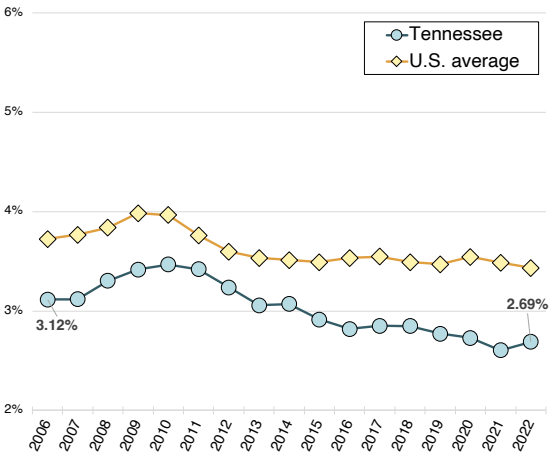
Rating **relative to other states** (high | medium | low):

TN is a low effort state.

Fiscal effort summary	
Tennessee effort	2.69%
U.S. average effort	3.43%

- TN spends 2.69 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.75 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**46** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- TN's 2022 effort level is 0.43 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #30 in the nation.

Net change by period (% pts.)		
Period	**TN**	**U.S.**
K-12 recession (2006-12)	0.12	-0.13
Post-recession (2012-22)	-0.55	-0.16
Full period (2006-22)	-0.43	-0.29

- TN's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $9.76 billion (13.3 percent) higher.
- TN is a relatively medium capacity state, with a GSP per capita ranked #31 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

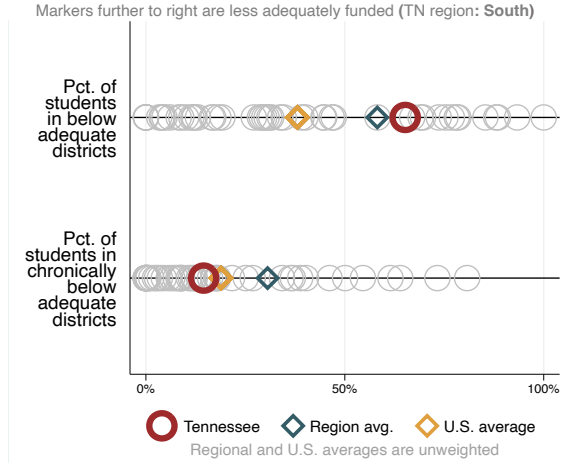
Statewide adequacy in TN is low.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	65.2% (#**35**)
Pct. of students in *chronically* below adequate districts (rank)	14.5% (#**27**)

- The typical TN student's district spends 8.3 pct. below adequate levels (rank #**34**).

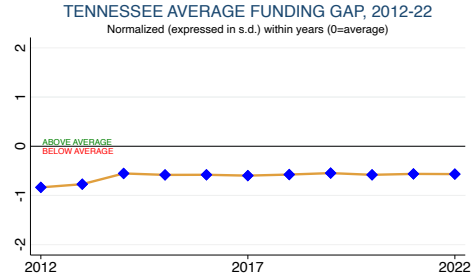
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (TN region: **South**)



Statewide adequacy trend, 2012-22

- Spending in TN was more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.269 s.d.



- TN's adequacy gap was ranked #37 in 2012 (#1 = most adequate) and #34 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

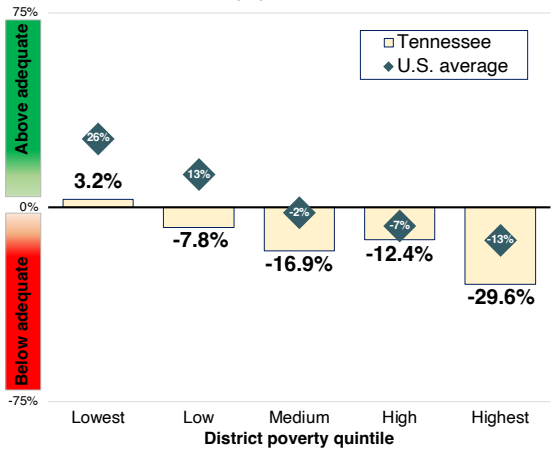
Rating **relative to other states** (high | medium | low):

Equal opportunity in TN is high.

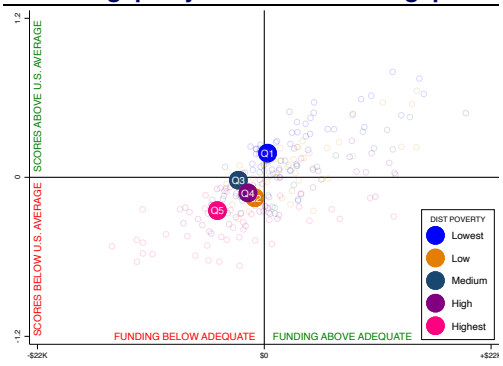
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	-0.5 %
B. High/highest poverty districts	-20.7 %
C. Opportunity gap (B minus A)	**-20.2** pts

- TN's opportunity gap of -20.2 points is ranked #**6** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- TN's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.43 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

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 **Albert Shanker Institute**, **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 SID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles:

- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

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- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

TEXAS

Summary: This 2021-22 profile of Texas's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Texas scores 19 out of 100,** which **ranks 43rd out of the 47 states** with possible ratings.

CONTEXTUAL STATS	TX	U.S.
Child (5-17yo) poverty rate (%)	18.3	15.5
Public school coverage (%)	89.2	85.1
Percent revenue from state sources	31.0	43.7
Total enrollment (U.S. rank)	5,428,613 (2)	

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).

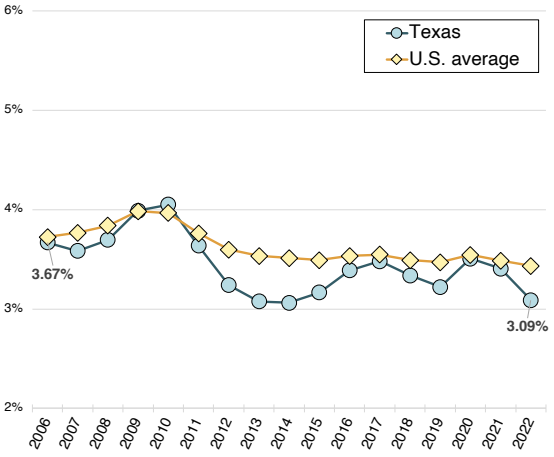
Rating **relative to other states** (high I medium I low):

TX is a low effort state.

Fiscal effort summary	
Texas effort	3.09%
U.S. average effort	3.43%

- TX spends 3.09 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.34 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**34** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- TX's 2022 effort level is 0.58 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #40 in the nation.

Net change by period (% pts.)		
Period	**TX**	**U.S.**
K-12 recession (2006-12)	-0.43	-0.13
Post-recession (2012-22)	-0.15	-0.16
Full period (2006-22)	-0.58	-0.29

- TX's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $42.57 billion (10.0 percent) higher.
- TX is a relatively high capacity state, with a GSP per capita ranked #15 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high I medium I low):

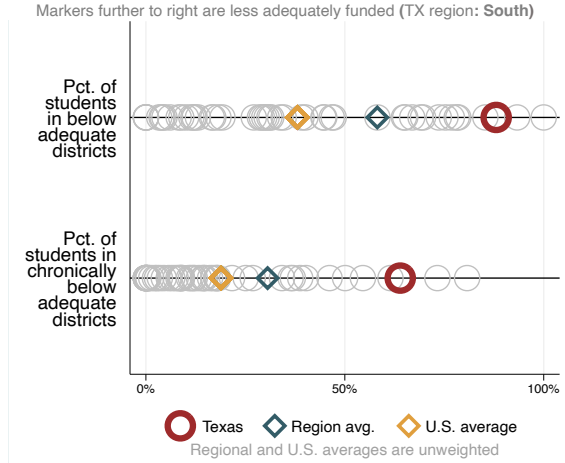
Statewide adequacy in TX is low.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	88.1% (#**45**)
Pct. of students in *chronically* below adequate districts (rank)	63.7% (#**46**)

- The typical TX student's district spends 31.4 pct. below adequate levels (rank #**47**).

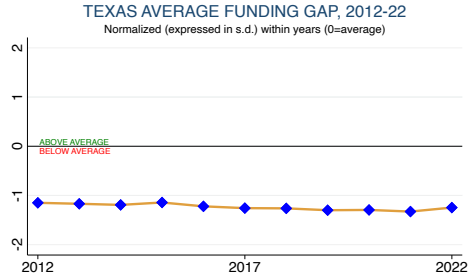
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (TX region: **South**)



Statewide adequacy trend, 2012-22

- Spending in TX was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.097 s.d.



- TX's adequacy gap was ranked #46 in 2012 (#1 = most adequate) and #47 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

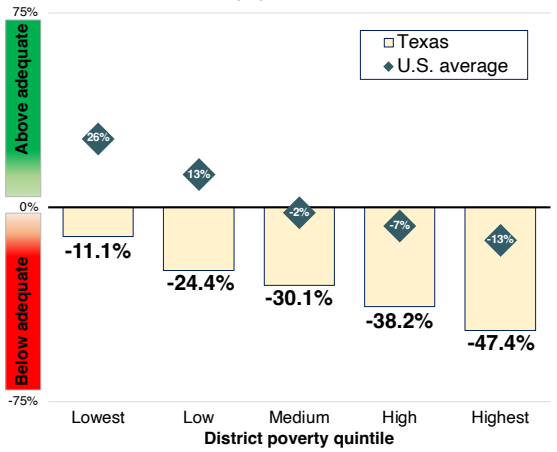
Rating **relative to other states** (high I medium I low):

Equal opportunity in TX is high.

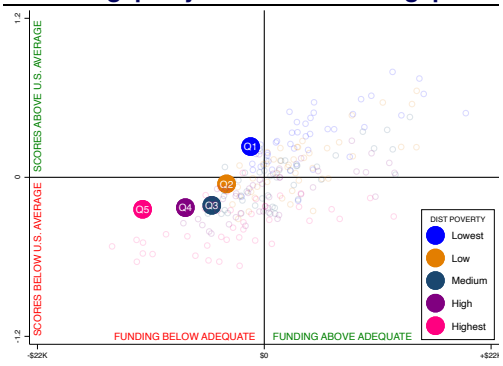
Average (enr-weighted) funding gaps by poverty (Red=below adequate I Green=above adequate)	
A. Low/lowest poverty districts	-16.8 %
B. High/highest poverty districts	-44.5 %
C. Opportunity gap (B minus A)	-27.7 pts

- TX's opportunity gap of -27.7 points is ranked #**15** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- TX's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.47 s.d. below its lowest-poverty districts (blue dot).

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State School Finance Profiles 2021-22 (publ. 2025)

General

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Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

UTAH

Summary: This 2021-22 profile of Utah's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Utah scores 31 out of 100,** which **ranks 36th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	UT	U.S.
Child (5-17yo) poverty rate (%)	7.5	15.5
Public school coverage (%)	90.5	85.1
Percent revenue from state sources	47.7	43.7
Total enrollment (U.S. rank)	690,934 (26)	

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).

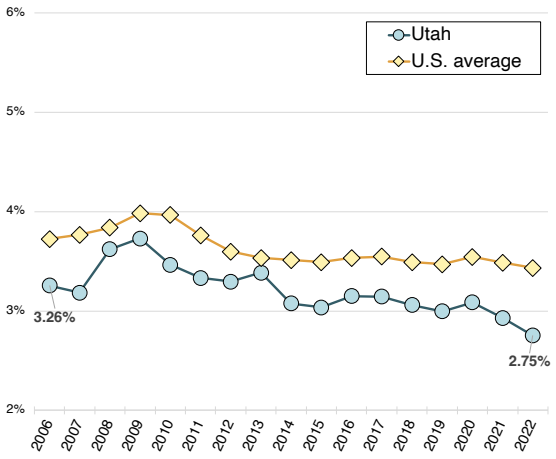
Rating **relative to other states** (high | medium | low):

UT is a low effort state.

Fiscal effort summary	
Utah effort	2.75%
U.S. average effort	3.43%

- UT spends 2.75 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.68 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**44** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- UT's 2022 effort level is 0.50 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #34 in the nation.

Net change by period (% pts.)		
Period	**UT**	**U.S.**
K-12 recession (2006-12)	0.04	-0.13
Post-recession (2012-22)	-0.54	-0.16
Full period (2006-22)	-0.50	-0.29

- UT's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $3.47 billion (8.6 percent) higher.
- UT is a relatively medium capacity state, with a GSP per capita ranked #20 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

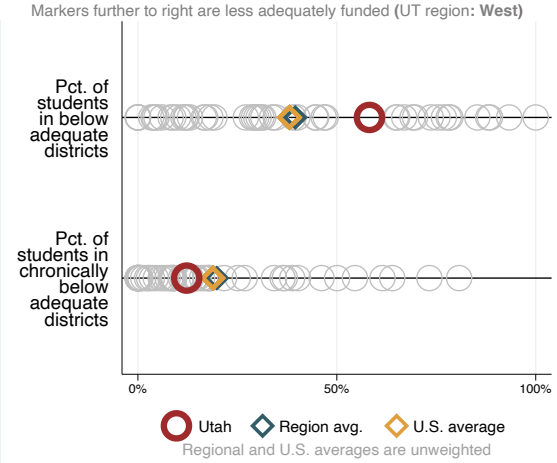
Statewide adequacy in UT is low.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	58.2% (#**33**)
Pct. of students in *chronically* below adequate districts (rank)	12.3% (#**24**)

- The typical UT student's district spends 3.6 pct. below adequate levels (rank #**32**).

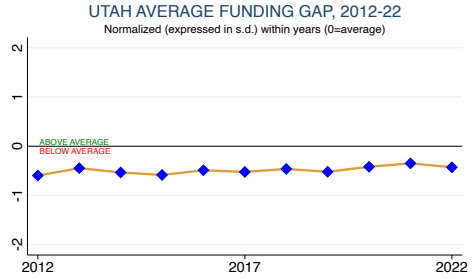
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (UT region: **West**)



Statewide adequacy trend, 2012-22

- Spending in UT was more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.167 s.d.



- UT's adequacy gap was ranked #33 in 2012 (#1 = most adequate) and #32 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

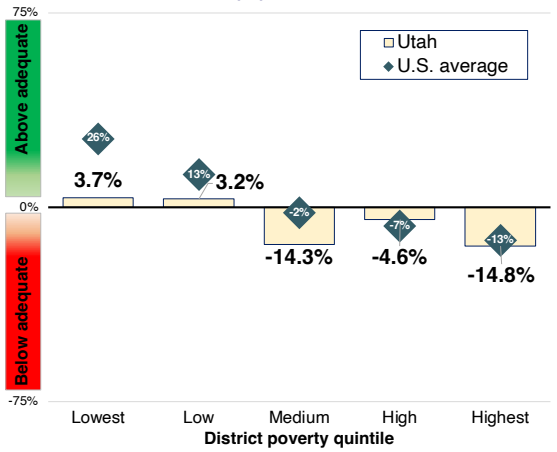
Rating **relative to other states** (high | medium | low):

Equal opportunity in UT is high.

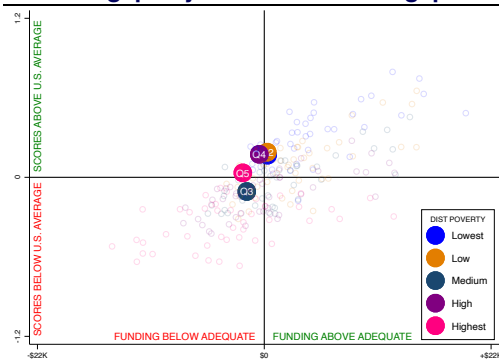
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	3.5 %
B. High/highest poverty districts	-9.6 %
C. Opportunity gap (B minus A)	-13.1 pts

- UT's opportunity gap of -13.1 points is ranked #**3** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



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Equal opportunity

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- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
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- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

VERMONT

OVERALL STATE SCORE NOT AVAILBLE

Summary: This 2021-22 profile of Vermont's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. We cannot calculate an overall state score for Vermont, as data are not available for one or more of the measures we use in calculating those overall scores (see below).

CONTEXTUAL STATS	VT	U.S.
Child (5-17yo) poverty rate (%)	9.9	15.5
Public school coverage (%)	85.6	85.1
Percent revenue from state sources	87.4	43.7
Total enrollment (U.S. rank)	83,975 (51)	

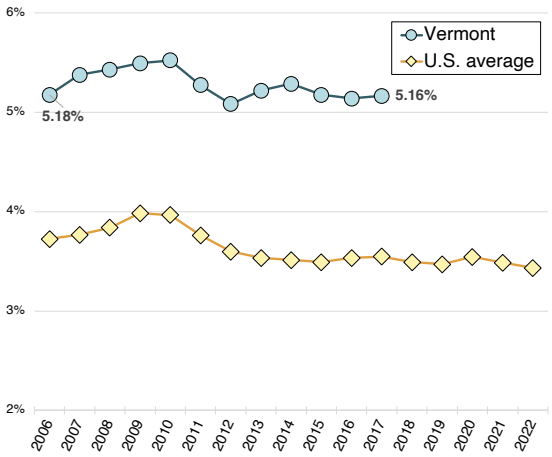
FISCAL EFFORT

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).

We do not publish fiscal effort estimates for Vermont between 2018-2022 due to data irregularities in that state.

- In the graph to the right, there are estimates for 2006-2017, but note that the national averages do not include Vermont.

K-12 FISCAL EFFORT TREND, 2006-17



Fiscal effort trend, 2006-22

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

We do not publish statewide adequacy estimates for Vermont between 2017 and 2022 due to data irregularities in that state. You can view previous years' data by downloading the full state dataset at the project website, but these estimates should be interpreted with caution.

Statewide adequacy trend, 2012-22

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

Equal opportunity cannot be calculated for Vermont (see above).

EO gaps by student outcome gaps

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NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

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 **Albert Shanker Institute**, **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 SID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles:

- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
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- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
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Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

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STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

VIRGINIA

Summary: This 2021-22 profile of Virginia's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Virginia scores 45 out of 100,** which **ranks 26th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	VA	U.S.
Child (5-17yo) poverty rate (%)	11.8	15.5
Public school coverage (%)	84.4	85.1
Percent revenue from state sources	38.9	43.7
Total enrollment (U.S. rank)	1,249,815 (12)	

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).

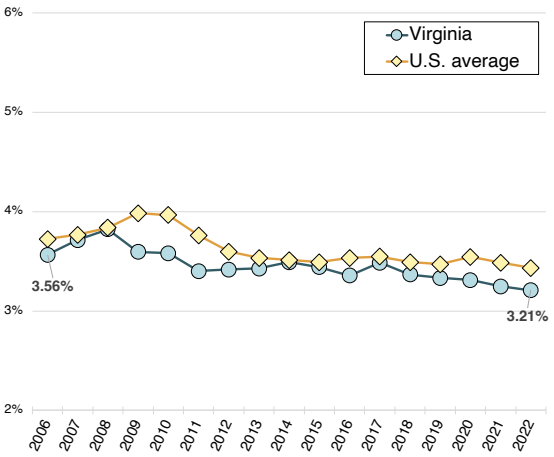
Rating **relative to other states** (high I medium I low):

VA is a medium effort state.

Fiscal effort summary	
Virginia effort	3.21%
U.S. average effort	3.43%

- VA spends 3.21 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.22 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**32** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- VA's 2022 effort level is 0.36 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #26 in the nation.

Net change by period (% pts.)		
Period	**VA**	**U.S.**
K-12 recession (2006-12)	-0.15	-0.13
Post-recession (2012-22)	-0.21	-0.16
Full period (2006-22)	-0.36	-0.29

- VA's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $9.28 billion (7.2 percent) higher.
- VA is a relatively medium capacity state, with a GSP per capita ranked #19 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high I medium I low):

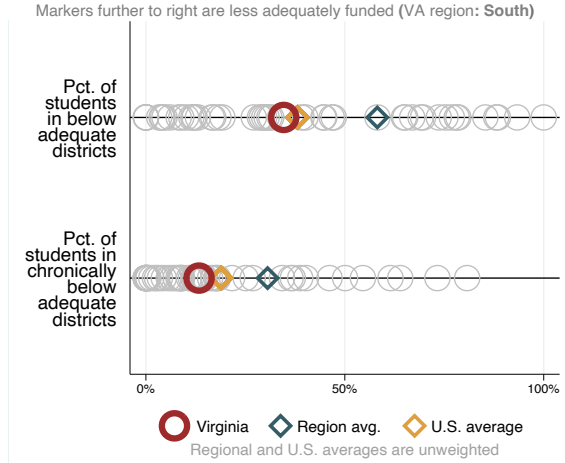
Statewide adequacy in VA is medium.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	34.6% (#**26**)
Pct. of students in *chronically* below adequate districts (rank)	13.4% (#**25**)

- The typical VA student's district spends 5.3 pct. above adequate levels (rank #**26**).

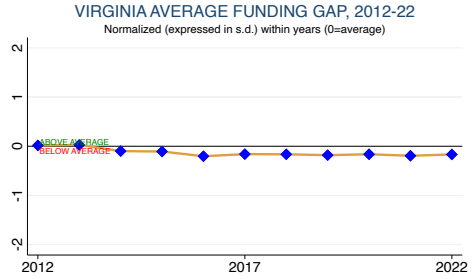
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (VA region: **South**)



Statewide adequacy trend, 2012-22

- Spending in VA was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.183 s.d.



- VA's adequacy gap was ranked #19 in 2012 (#1 = most adequate) and #26 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

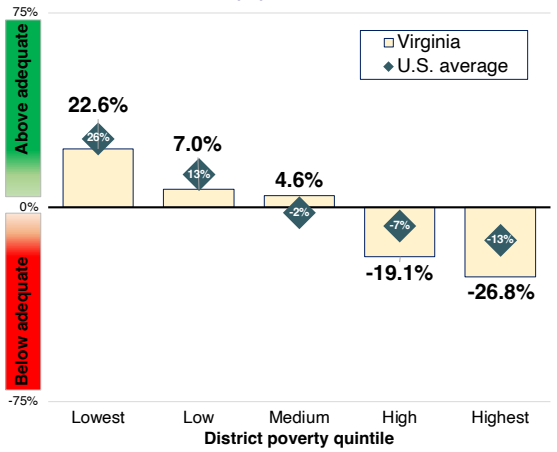
Rating **relative to other states** (high I medium I low):

Equal opportunity in VA is medium.

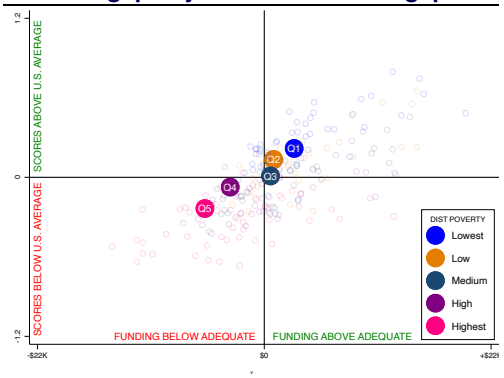
Average (enr-weighted) funding gaps by poverty (Red=below adequate I Green=above adequate)	
A. Low/lowest poverty districts	17.8 %
B. High/highest poverty districts	-24.3 %
C. Opportunity gap (B minus A)	**-42.0** pts

- VA's opportunity gap of -42.0 points is ranked #**28** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- VA's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.45 s.d. below its lowest-poverty districts (blue dot).

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Fiscal effort

SID variables used in this section: *effort*; *year*

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Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

WASHINGTON

Summary: This 2021-22 profile of Washington's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Washington scores 64 out of 100,** which **ranks 12th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	WA	U.S.
Child (5-17yo) poverty rate (%)	11.1	15.5
Public school coverage (%)	86.4	85.1
Percent revenue from state sources	63.3	43.7
Total enrollment (U.S. rank)	1,081,835	(14)

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).

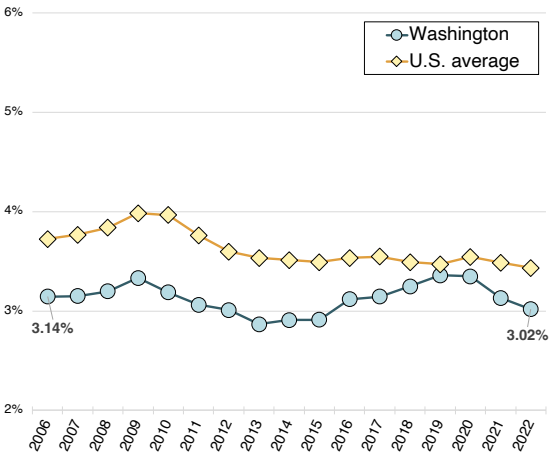
Rating **relative to other states** (high I medium I low):

WA is a low effort state.

Fiscal effort summary	
Washington effort	3.02%
U.S. average effort	3.43%

- WA spends 3.02 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.42 percentage points lower than the unweighted U.S. average of 3.43 percent (rank #**37** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- WA's 2022 effort level is 0.13 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #15 in the nation.

Net change by period (% pts.)		
Period	**WA**	**U.S.**
K-12 recession (2006-12)	-0.14	-0.13
Post-recession (2012-22)	0.01	-0.16
Full period (2006-22)	-0.13	-0.29

- WA's effort was lower than its 2006 level in 4 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $1.13 billion (0.9 percent) higher.
- WA is a relatively high capacity state, with a GSP per capita ranked #4 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high I medium I low):

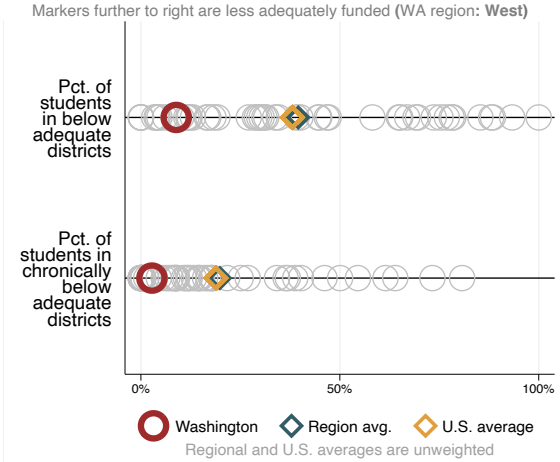
Statewide adequacy in WA is high.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	8.9% (#**9**)
Pct. of students in *chronically* below adequate districts (rank)	2.8% (#**11**)

- The typical WA student's district spends 34.9 pct. above adequate levels (rank #**9**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (WA region: **West**)

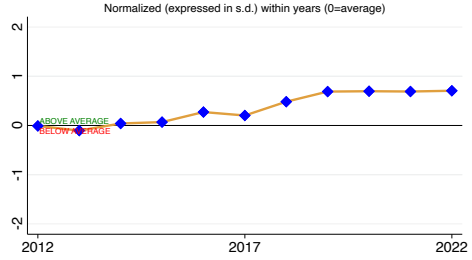


Statewide adequacy trend, 2012-22

- Spending in WA was substantially more adequate in 2022 compared with 2012, with a net change (in standard deviations) of 0.716 s.d.

WASHINGTON AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- WA's adequacy gap was ranked #21 in 2012 (#1 = most adequate) and #9 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

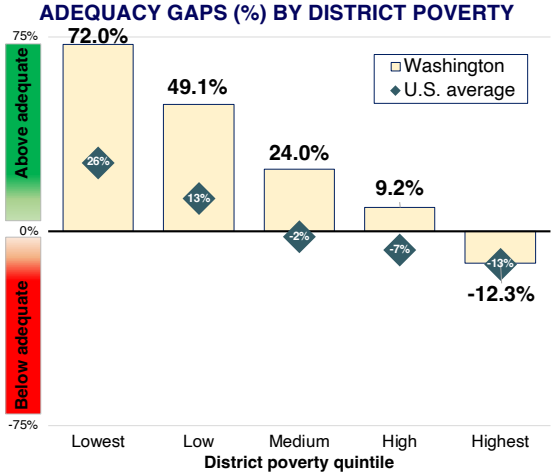
Rating **relative to other states** (high I medium I low):

Equal opportunity in WA is low.

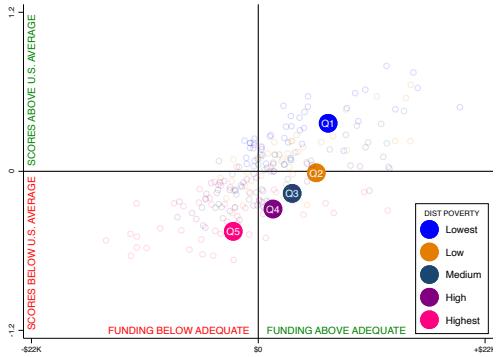
Average (enr-weighted) funding gaps by poverty (Red=below adequate I Green=above adequate)	
A. Low/lowest poverty districts	58.6 %
B. High/highest poverty districts	3.2 %
C. Opportunity gap (B minus A)	-55.4 pts

- WA's opportunity gap of -55.4 points is ranked #**35** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- WA's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.82 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

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 **Albert Shanker Institute**, **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 SID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles:

- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

WEST VIRGINIA

Summary: This 2021-22 profile of West Virginia's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **West Virginia scores 78 out of 100,** which **ranks 6th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	WV	U.S.
Child (5-17yo) poverty rate (%)	21.5	15.5
Public school coverage (%)	85.2	85.1
Percent revenue from state sources	47.1	43.7
Total enrollment (U.S. rank)	252,720 (39)	

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).

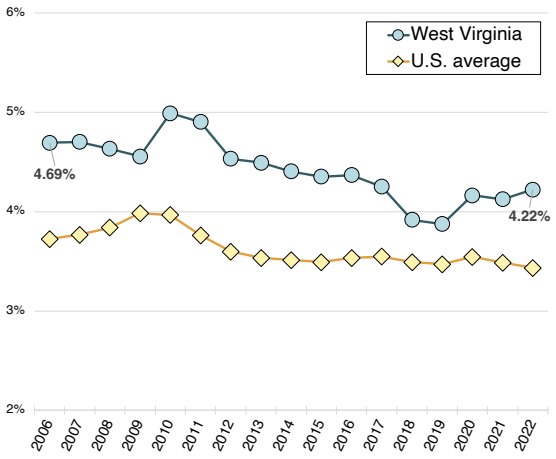
Rating **relative to other states** (high | medium | low):

WV is a high effort state.

Fiscal effort summary	
West Virginia effort	4.22%
U.S. average effort	3.43%

- WV spends 4.22 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.79 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**4** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- WV's 2022 effort level is 0.47 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #33 in the nation.

Net change by period (% pts.)		
Period	**WV**	**U.S.**
K-12 recession (2006-12)	-0.16	-0.13
Post-recession (2012-22)	-0.31	-0.16
Full period (2006-22)	-0.47	-0.29

- WV's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $3.12 billion (13.7 percent) higher.
- WV is a relatively low capacity state, with a GSP per capita ranked #49 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

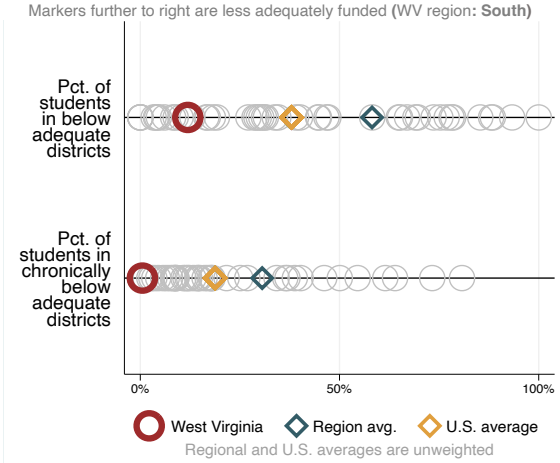
Statewide adequacy in WV is high.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	11.9% (**#11**)
Pct. of students in *chronically* below adequate districts (rank)	0.5% (**#7**)

- The typical WV student's district spends 15.1 pct. above adequate levels (rank #**15**).

PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (WV region: **South**)

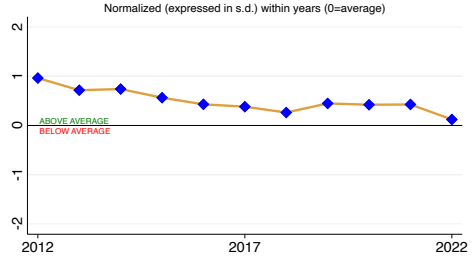


Statewide adequacy trend, 2012-22

- Spending in WV was substantially less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.842 s.d.

WEST VIRGINIA AVERAGE FUNDING GAP, 2012-22

Normalized (expressed in s.d.) within years (0=average)



- WV's adequacy gap was ranked #8 in 2012 (#1 = most adequate) and #15 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

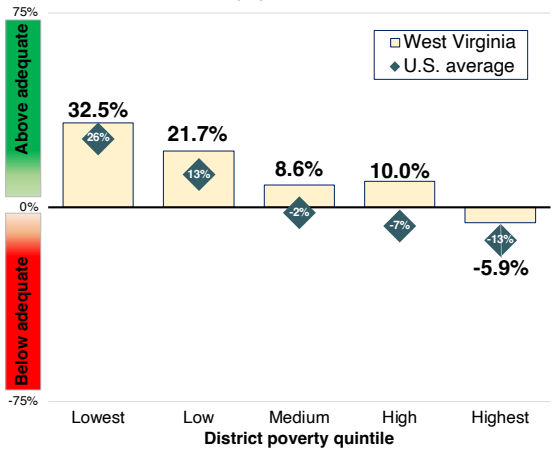
Rating **relative to other states** (high | medium | low):

Equal opportunity in WV is high.

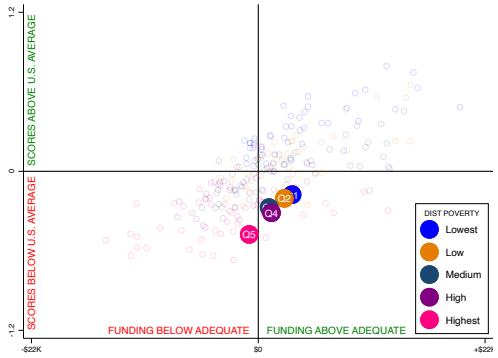
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	27.6 %
B. High/highest poverty districts	3.3 %
C. Opportunity gap (B minus A)	**-24.4** pts

- WV's opportunity gap of -24.4 points is ranked #**12** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- WV's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.30 s.d. below its lowest-poverty districts (blue dot).

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State School Finance Profiles 2021-22 (publ. 2025)

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  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
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Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- We characterize each state's degree of equal opportunity as low, medium, or high by sorting states into three groups based on their opportunity gaps (using terciles).
- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

WISCONSIN

Summary: This 2021-22 profile of Wisconsin's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Wisconsin scores 59 out of 100,** which **ranks 19th out of the 47 states** with possible ratings.

CONTEXTUAL STATS	WI	U.S.
Child (5-17yo) poverty rate (%)	12.2	15.5
Public school coverage (%)	81.7	85.1
Percent revenue from state sources	52.2	43.7
Total enrollment (U.S. rank)	829,359 (22)	

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).

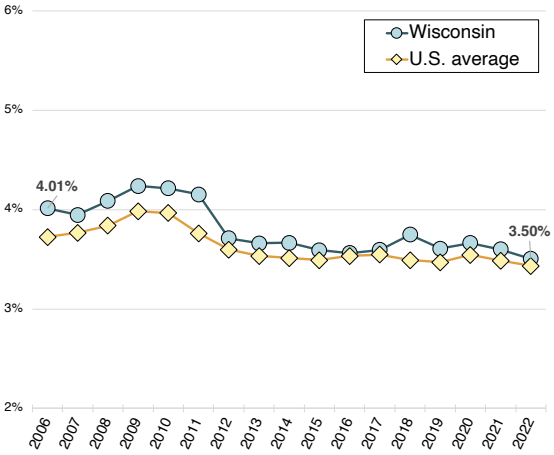
Rating **relative to other states** (high | medium | low):

WI is a medium effort state.

Fiscal effort summary	
Wisconsin effort	3.50%
U.S. average effort	3.43%

- WI spends 3.50 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.07 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**27** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- WI's 2022 effort level is 0.51 pct. points lower than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #35 in the nation.

Net change by period (% pts.)		
Period	**WI**	**U.S.**
K-12 recession (2006-12)	-0.30	-0.13
Post-recession (2012-22)	-0.21	-0.16
Full period (2006-22)	-0.51	-0.29

- WI's effort was lower than its 2006 level in 7 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $9.60 billion (11.2 percent) higher.
- WI is a relatively medium capacity state, with a GSP per capita ranked #32 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high | medium | low):

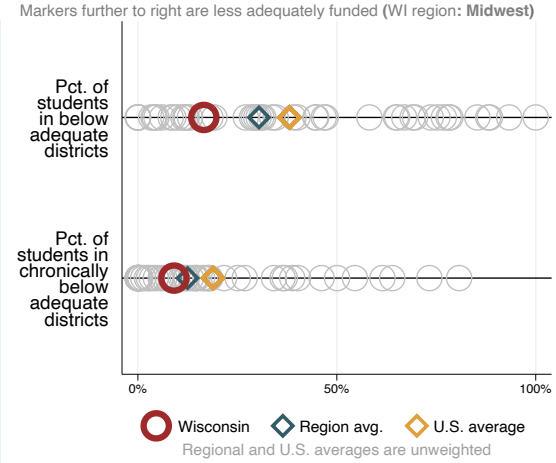
Statewide adequacy in WI is medium.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	16.6% (**#14**)
Pct. of students in *chronically* below adequate districts (rank)	9.1% (**#20**)

- The typical WI student's district spends 14.3 pct. above adequate levels (rank #**17**).

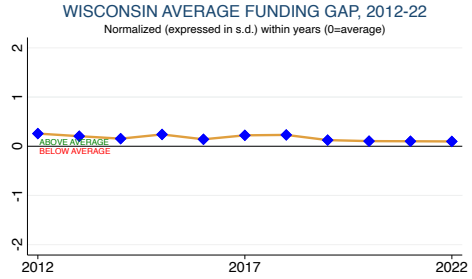
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (WI region: **Midwest**)



Statewide adequacy trend, 2012-22

- Spending in WI was less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -0.160 s.d.



- WI's adequacy gap was ranked #16 in 2012 (#1 = most adequate) and #17 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

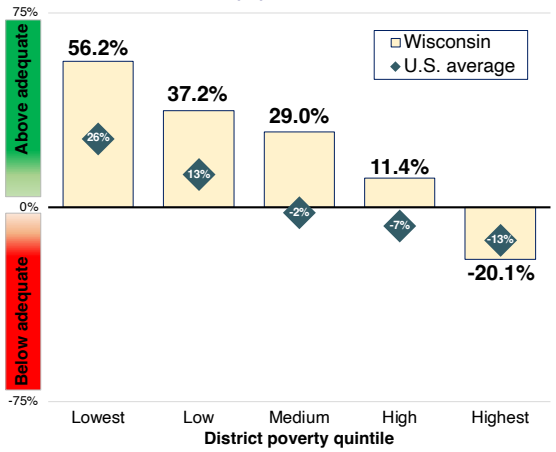
Rating **relative to other states** (high | medium | low):

Equal opportunity in WI is low.

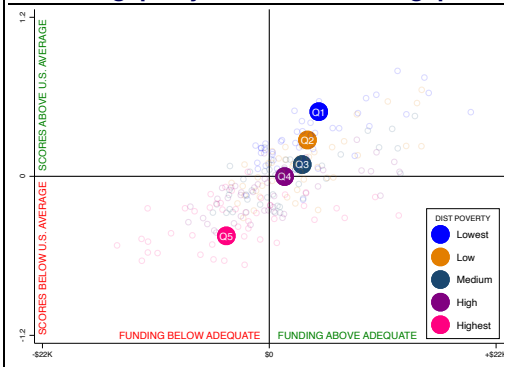
Average (enr-weighted) funding gaps by poverty (Red=below adequate | Green=above adequate)	
A. Low/lowest poverty districts	48.1 %
B. High/highest poverty districts	-8.0 %
C. Opportunity gap (B minus A)	-56.1 pts

- WI's opportunity gap of -56.1 points is ranked #**36** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



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Equal opportunity

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- 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 two highest- and the two lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (diamonds) estimates in the graph are average differences between actual and estimated adequate spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the U.S. averages (diamonds) represent an approximation of the national situation. Axis ranges for this graph may vary between states.
- The scatterplot in the right panel presents, 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 student outcome data are for 2019, the latest available year in the Stanford Education Data Archive (some districts' values are imputed). The other markers (hollow 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 between 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. Note that this gap compares different groups than does our opportunity gap measure. Axis ranges for this graph are expanded in a handful of states.

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

STATE SCHOOL FINANCE PROFILE

2021-22 SCHOOL YEAR

WYOMING

Summary: This 2021-22 profile of Wyoming's public K-12 school finance system focuses on three core indicators: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures, with performance assessed relative to that of other states (see back), **Wyoming scores 92 out of 100,** which **ranks 2nd out of the 47 states** with possible ratings.

CONTEXTUAL STATS	WY	U.S.
Child (5-17yo) poverty rate (%)	11.8	15.5
Public school coverage (%)	89.4	85.1
Percent revenue from state sources	52.1	43.7
Total enrollment (U.S. rank)	93,093 (49)	

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).

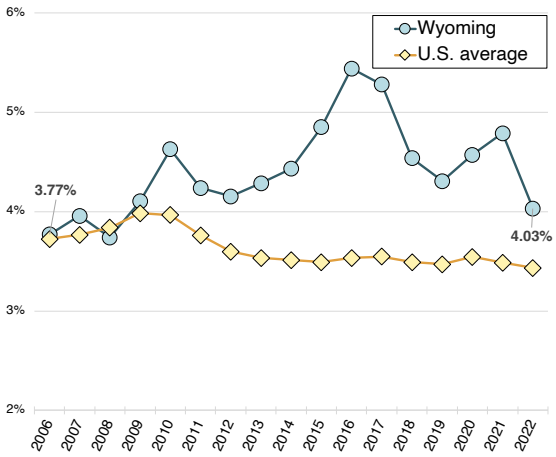
Rating **relative to other states** (high I medium I low):

WY is a high effort state.

Fiscal effort summary	
Wyoming effort	4.03%
U.S. average effort	3.43%

- WY spends 4.03 percent of its economic capacity (gross state product) on its K-12 public schools.
- This effort level is 0.60 percentage points higher than the unweighted U.S. average of 3.43 percent (rank #**7** of 50).

K-12 FISCAL EFFORT TREND, 2006-22



Fiscal effort trend, 2006-22

- WY's 2022 effort level is 0.26 pct. points higher than it was pre-recession (2006).
- This net change in effort between 2006 and 2022 is ranked #5 in the nation.

Net change by period (% pts.)		
Period	**WY**	**U.S.**
K-12 recession (2006-12)	0.38	-0.13
Post-recession (2012-22)	-0.12	-0.16
Full period (2006-22)	0.26	-0.29

- WY's effort was lower than its 2006 level in 0 of 7 years between 2016-2022; had effort recovered to its 2006 level during these years, total 2016-22 spending would have been $0.00 billion (0.0 percent) higher.
- WY is a relatively high capacity state, with a GSP per capita ranked #11 in the nation.

STATEWIDE ADEQUACY

Statewide adequacy compares actual per-pupil (PP) spending in each state to estimates of the amount adequate to achieve the modest goal of U.S. average test scores. The graph to the right compares this state with other states in terms of the percentage of students in below adequate districts (spending is below adequate) and the percentage in *chronically* below adequate districts (the top 20% largest negative gaps nationally).

Rating **relative to other states** (high I medium I low):

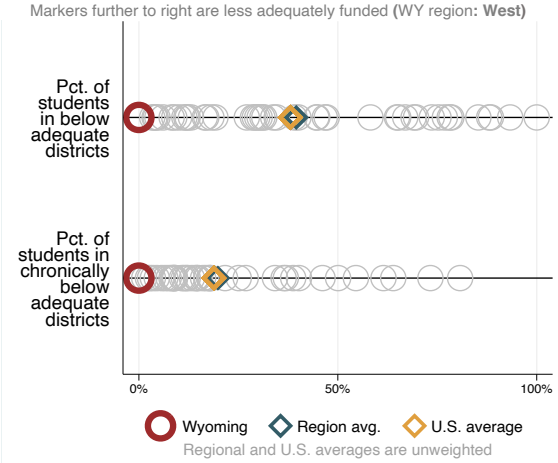
Statewide adequacy in WY is high.

Percent underfunded (rank #1 = most adequate)	
Pct. of students in below adequate districts (rank of 48)	0.0% (#**1**)
Pct. of students in *chronically* below adequate districts (rank)	0.0% (#**1**)

- The typical WY student's district spends 78.5 pct. above adequate levels (rank #**2**).

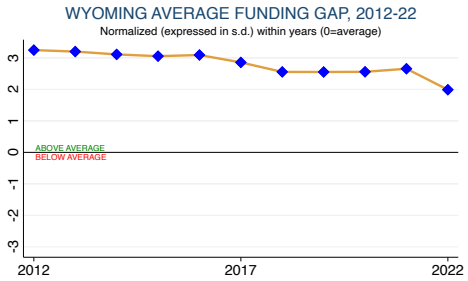
PERCENT BELOW ADEQUATE COMPARISONS

Markers further to right are less adequately funded (WY region: **West**)



Statewide adequacy trend, 2012-22

- Spending in WY was substantially less adequate in 2022 compared with 2012, with a net change (in standard deviations) of -1.257 s.d.



- WY's adequacy gap was ranked #1 in 2012 (#1 = most adequate) and #2 in 2022.

EQUAL OPPORTUNITY

Equal opportunity compares adequacy between states' higher- and lower-poverty districts. The graph to the right presents adequate funding gaps (as a %) by district poverty quintile (the teal diamonds are U.S. averages). The difference (in pct. points) between the (weighted) average gap of the two lowest-poverty and the two highest-poverty groups is a state's "opportunity gap."

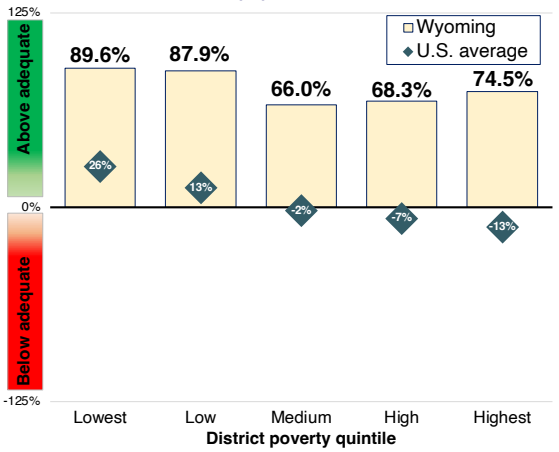
Rating **relative to other states** (high I medium I low):

Equal opportunity in WY is high.

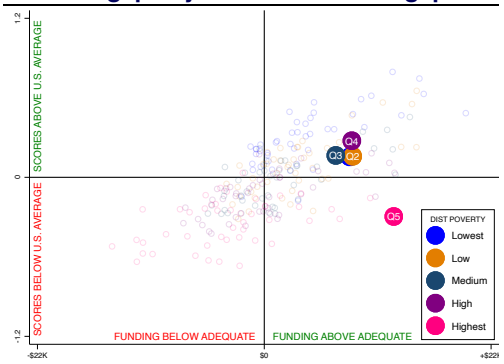
Average (enr-weighted) funding gaps by poverty (Red=below adequate I Green=above adequate)	
A. Low/lowest poverty districts	88.6 %
B. High/highest poverty districts	70.8 %
C. Opportunity gap (B minus A)	-17.9 pts

- WY's opportunity gap of -17.9 points is ranked #**4** out of 47 (#1=most equal).

ADEQUACY GAPS (%) BY DISTRICT POVERTY



EO gaps by student outcome gaps



- WY's opportunity gap contributes to a student outcome gap: the state's highest-poverty districts (pink dot) score 0.45 s.d. below its lowest-poverty districts (blue dot).

$$(In)SCHOOL = b_0 + b_1State_i + b_2LaborMarket_{ij} + b_3CWI_{ij} + b_4FINANCE_{ij} + b_5PopulationDensity_{ij} + b_6 Enrollment_{ij} + b_7INDICATORS_{ij} + b_8Scale_{ij} + b_9Poverty_{ij} + b_{10}SchlType_{ij} + b_{11}DATABASE_{ij} + e$$

NOTES ON DATA AND MEASURES

State School Finance Profiles 2021-22 (publ. 2025)

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 **Albert Shanker Institute**, **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 SID dataset, along with accessible documentation of and data sources for all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: schoolfinancedata.org. The following are some general notes about the profiles:

- **The measures in this profile are interpreted relatively**—that is, by making comparisons between states (rankings) and within states (e.g., by district poverty or over time).
- The years in the profile refer to the spring semester of the school year (e.g., 2022 is the 2021-22 school year).
- Estimates for prior years may differ from previous profiles, as some measures are changed or improved each year, and all years are recalculated annually with updated data.
- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations of the estimates on the front side.
- The total number of states assigned rankings varies slightly by measure (as indicated), 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. Each state is scored entirely relative to other states, and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - The scores are calculated as a weighted average of z-scores (final averages expressed as percentile equivalents, with a score of 50 = z-score of 0) of the following measures (weights in parentheses): 1) percent of students in districts with above adequate funding (30%); 2) statewide (%) adequacy gap (30%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) equal opportunity gap (Q4/5 vs. Q1/2 difference in adequacy gap, in pct. points) (10%). State rankings may reflect differences in unrounded scores.
  - Alaska, D.C., Hawaii, and Vermont are not assigned scores, as one or more of the measures that constitute the scores cannot be calculated for these states.
- **Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2022) from the U.S. Census Bureau's Small Area Income and Poverty Estimates (SAIPE) program; 2) see SID documentation for school coverage estimates; 3) percent of total (FY 2022) revenue from state sources from the U.S. Census Bureau Annual Survey of School System Finances; 4) total state public elementary and secondary school enrollment (Fall 2021) from the *Digest of Education Statistics*, published by the National Center for Education Statistics.

Fiscal effort

SID variables used in this section: *effort*; *year*

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 API). GSP and API 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. We present GSP-based effort in these profiles, but the two are highly correlated, and the API-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 still produce the same funding. We therefore use effort primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.

- U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-22 due to data irregularities), so as to keep a consistent set of states across years.
- We characterize each state's effort level as low, medium, or high by sorting states into three groups based on their effort levels (using terciles). Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.
- The table in the right panel summarizes the center-panel graph, with a focus on effort trends before and after the 2007-09 recession. The 2006-12 period (the "K-12 recession") is highlighted in the table (rather than, say, 2006-09) because the direct impact of the recession on K-12 funding in the typical state persisted for a few years after the "official recession" ended, and because federal stimulus funds ran out after 2011. 2012 is therefore an apt starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- In the third bullet of the right panel, below the table, we present a "thought experiment" of sorts, in which we calculate how much additional total state and local spending each state would have had between 2016 and 2022 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-22 effort exceeded the state's 2006 level, the hypothetical additional spending is zero (i.e., the hypothetical additional funding estimates do not include years in which 2016-22 funding would have been lower under states' 2006 effort levels).
- In order to provide a sense of states' capacity, we characterize each state's GSP per capita as small, medium, or large by sorting states into three groups using terciles.

Statewide adequacy

SID variables used in this section: *necm_predcost_state*; *necm_ppcstot_state*; *necm_enroll_state*

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 three ways: 1) the proportion of students in each state in districts with actual funding below estimated adequate levels; and 2) the proportion of students in *chronically* below adequate districts (see below); and 3) 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 cost factors such as regional wage variation, district size, and student characteristics. Given the imprecision inherent in comparing both finance and testing data between districts in all states, as well as the fact that we set a modest common outcome goal (average test scores), our adequacy estimates are most appropriate when making comparisons within or between states. For more information about the NECM, see the SID user's guide. Some of the estimates presented in this section (e.g., percent in below adequate districts) require use of the SFID's District Cost Database (DCD); all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2022 estimates will be released in mid-2024).

- Statewide adequacy estimates are not available for Alaska (isolated, unique costs), Hawaii (isolated, single-district), and Vermont (missing/irregular data). Estimates for D.C. apply to a single school district (District of Columbia Public Schools). We also recommend that New York results be interpreted with particular caution (see SID users' guide for more information).
- We characterize each state's statewide adequacy as low, medium, or high by averaging within-year z-scores for percent above adequate and average funding gap and dividing states into three groups using these average z-scores (terciles).
- "Chronically below adequate" districts are those with funding gaps (percent difference between actual and adequate funding) among the 20 percent largest in the nation.
- The regional and U.S. averages in the middle graph (the teal and gold diamonds, respectively) are unweighted—i.e., they represent adequacy in the typical state, not the typical student.
- The trend graph in the right panel presents the average statewide funding gap (the percentage difference between actual and estimated adequate funding for the typical student) normalized within each year (converted to standard deviations) such that the average is zero. This allows for more appropriate comparisons over time. In the first bullet of this panel, states' net changes between 2012 and 2022 are characterized as "substantial" if the absolute change exceeds 0.3 s.d., "modest" if the absolute change is between 0.05 and 0.3 s.d., and "no more or less adequate" if the absolute change does not exceed 0.05 s.d. Axis ranges for this graph are expanded in a handful of states.

Equal opportunity

SID variables used in this section: *necm_predcost_q1—q5*; *necm_ppcstot_q1-q5*; *necm_enroll_q1-q5; necm_outcomegap_q1-q5*

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 two highest- and the two lowest-poverty districts in each state (i.e., a weighted average of the "highest" and "high" poverty quintiles and a weighted average of the "lowest" and "low" poverty quintiles). Each state's "opportunity gap" is the difference (in percentage points) between these two groups. Note that EO is conceptually independent of statewide 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 lower-poverty districts. Statewide adequacy and equal opportunity as we define them are independent concepts.

- EO estimates are not available for Alaska, Hawaii, and Vermont (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
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