

# STATE SCHOOL FINANCE PROFILES

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

**2018-2019**



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## ABOUT THE AUTHORS

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## ACKNOWLEDGMENTS

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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, advocates, educators 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](http://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 state-specific detail 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 individual state profiles can be downloaded 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. **Adequacy:** whether states provide districts with resources sufficient to meet common outcome goals;
3. **Progressivity:** whether states allocate more resources to districts serving larger proportions of disadvantaged students.

In the profiles, 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 trends over time. The profiles this year 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. It is our hope that the profiles contribute to improving the quality and productivity of school finance debates and policymaking.

## ALABAMA



**Summary:** This 2018-19 profile of Alabama's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Alabama scores 21 out of 100, which ranks 44th out of the 48 states with possible ratings.

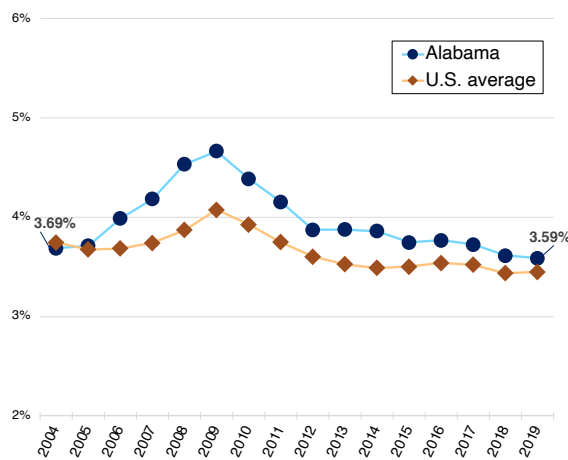
CONTEXTUAL STATS	AL	U.S.
Child (5-17yo) poverty rate (%)	20.7	15.8
Public school coverage (%)	86.1	87.6
Percent revenue from state sources	55.8	47.6
Total enrollment (U.S. rank)	737,200 (24)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Alabama effort	3.59 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in AL was equivalent to 3.59% of the state's economic capacity (GSP).
- This was 0.14 percentage points **higher** than the unweighted national average of 3.45%.
- AL's effort level ranks #19 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.29 percentage points in AL's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

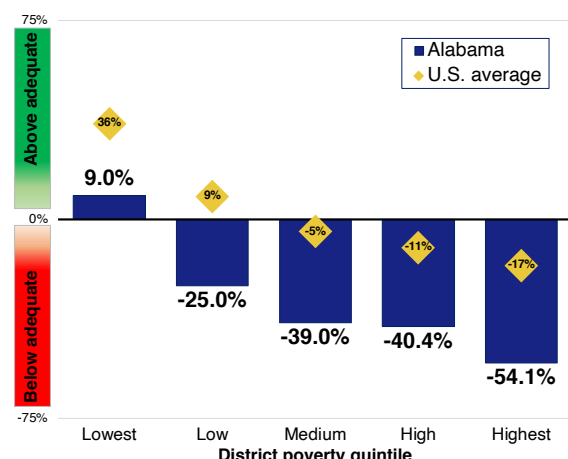
Period	AL	U.S.
2004-2007	0.50	-0.01
2012-2019	-0.29	-0.15
2004-2019	-0.10	-0.30

- Effort **increased** during the three years before the recession, going from 3.69% in 2004 to 4.18% in 2007.
- AL's effort was 0.10 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

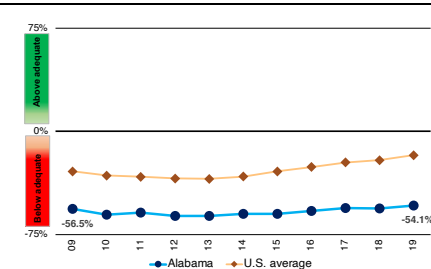
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in AL's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$12,800 PP **lower** than the adequacy target (\$23,664), a difference of -54.1%.
- This ranks #48 in the U.S. (out of 49).
- Across the entire state, 73.0% of AL students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

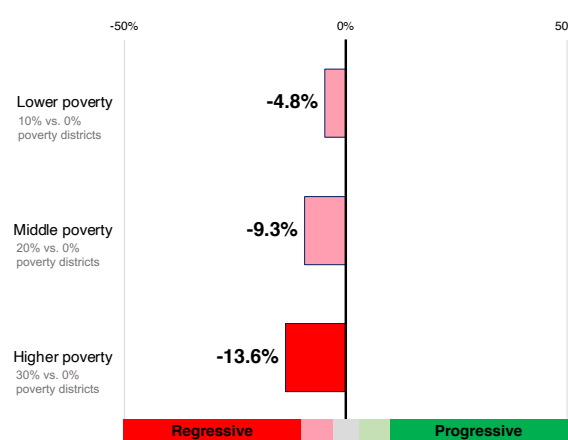


- Adequacy in AL's highest-poverty districts was **roughly similar** between 2009 (-56.5%) and 2019 (-54.1%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

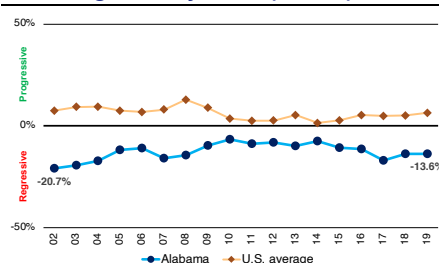
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in AL is **regressive**.
- Higher-poverty (30%) districts receive 13.6% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #39 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- AL's funding was **less regressive** in 2019 (-13.6%) vs. 2002 (-20.7%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## ALASKA



**Summary:** This 2018-19 profile of Alaska's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Alaska scores 99 out of 100, which ranks 1st out of the 48 states with possible ratings.

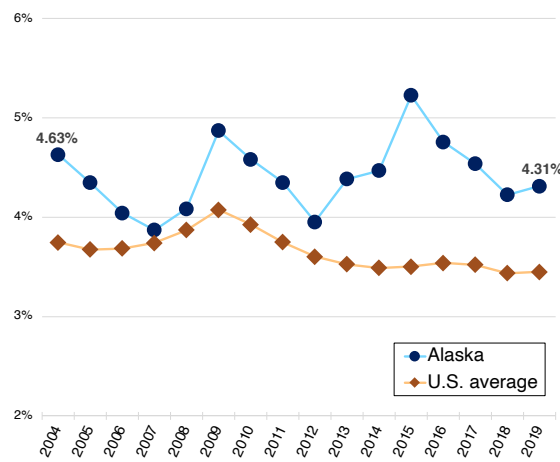
CONTEXTUAL STATS	AK	U.S.
Child (5-17yo) poverty rate (%)	11.9	15.8
Public school coverage (%)	85.4	87.6
Percent revenue from state sources	62.6	47.6
Total enrollment (U.S. rank)	133,200 (47)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Alaska effort	4.31 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in AK was equivalent to 4.31% of the state's economic capacity (GSP).
- This was 0.86 percentage points **higher** than the unweighted national average of 3.45%.
- AK's effort level ranks #2 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was an **increase** of 0.36 percentage points in AK's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

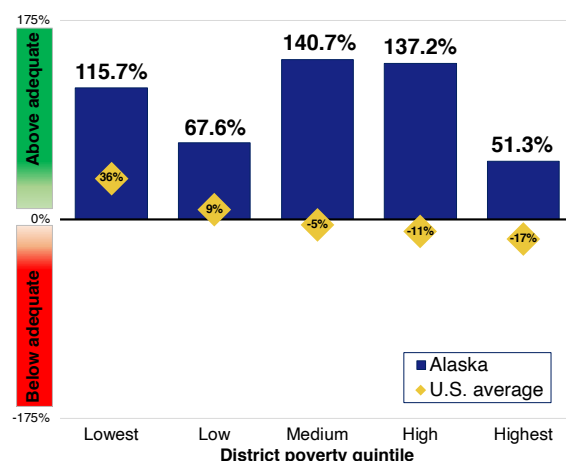
Period	AK	U.S.
2004-2007	-0.76	-0.01
2012-2019	0.36	-0.15
2004-2019	-0.32	-0.30

- Effort **decreased** during the three years before the recession, going from 4.63% in 2004 to 3.87% in 2007.
- AK's effort was 0.32 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

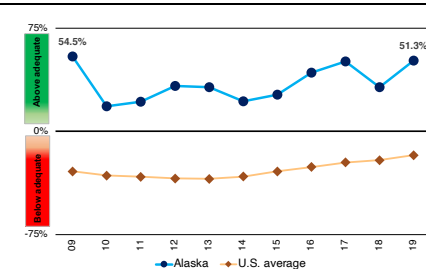
### ADEQUACY

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- Resources in AK's highest poverty districts are **above adequate**.
- Spending in these districts is \$10,066 PP **higher** than the adequacy target (\$19,607), a difference of 51.3%.
- This ranks #2 in the U.S. (out of 49).
- Across the entire state, 1.4% of AK students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

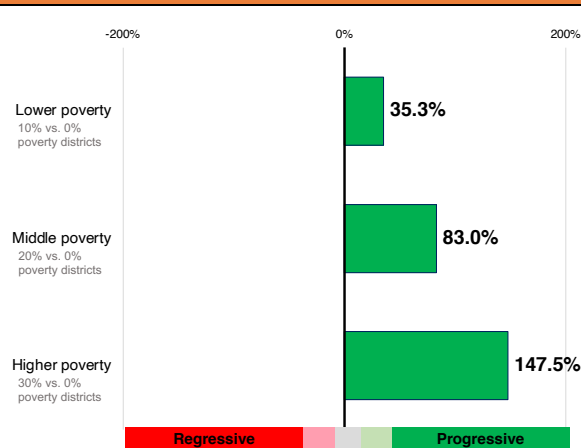


- Adequacy in AK's highest-poverty districts **worsened** between 2009 (54.5%) and 2019 (51.3%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

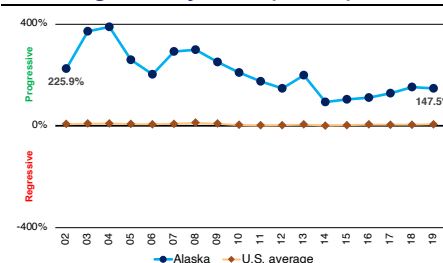
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- School funding in AK is **progressive**.
- Higher-poverty (30%) districts receive 147.5% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #1 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- AK's funding was **more regressive** in 2019 (147.5%) vs. 2002 (225.9%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

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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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
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## Adequacy

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- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## ARIZONA



**Summary:** This 2018-19 profile of Arizona's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Arizona scores 13 out of 100, which ranks 48th out of the 48 states with possible ratings.

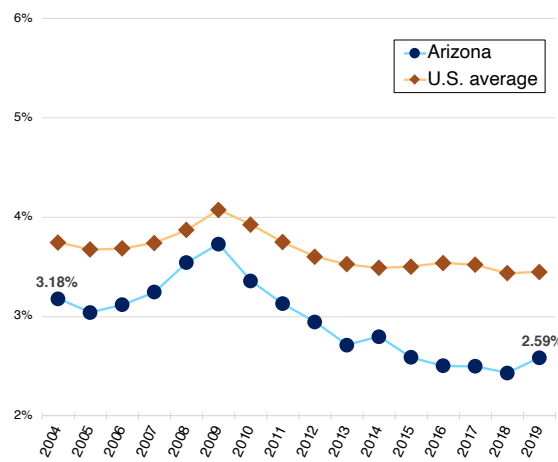
CONTEXTUAL STATS	AZ	U.S.
Child (5-17yo) poverty rate (%)	18.1	15.8
Public school coverage (%)	89.4	87.6
Percent revenue from state sources	42.4	47.6
Total enrollment (U.S. rank)	1,111,000 (14)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Arizona effort	2.59 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in AZ was equivalent to 2.59% of the state's economic capacity (GSP).
- This was 0.86 percentage points **lower** than the unweighted national average of 3.45%.
- AZ's effort level ranks #48 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.36 percentage points in AZ's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

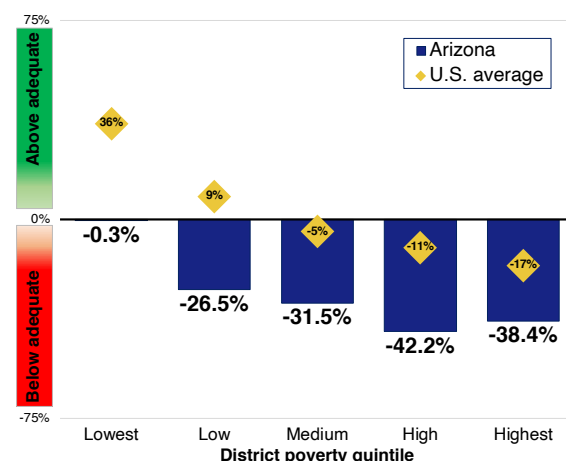
Period	AZ	U.S.
2004-2007	0.07	-0.01
2012-2019	-0.36	-0.15
2004-2019	-0.59	-0.30

- Effort **increased** during the three years before the recession, going from 3.18% in 2004 to 3.24% in 2007.
- AZ's effort was 0.59 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

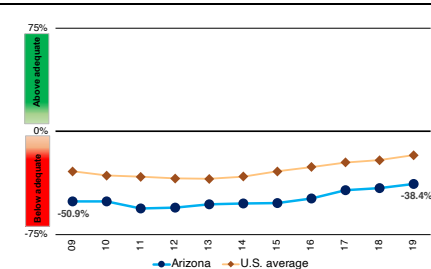
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in AZ's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$6,548 PP **lower** than the adequacy target (\$17,050), a difference of -38.4%.
- This ranks #41 in the U.S. (out of 49).
- Across the entire state, 79.1% of AZ students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

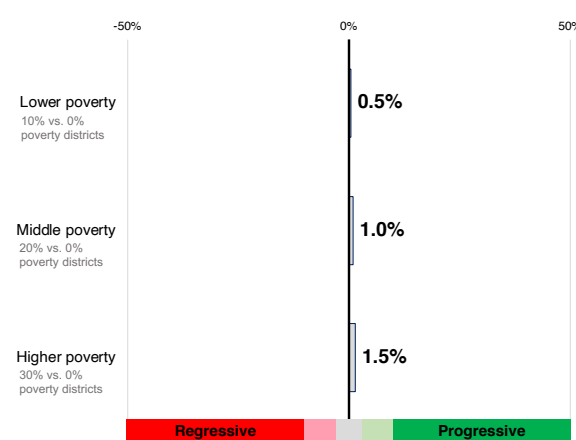


- Adequacy in AZ's highest-poverty districts **improved** between 2009 (-50.9%) and 2019 (-38.4%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

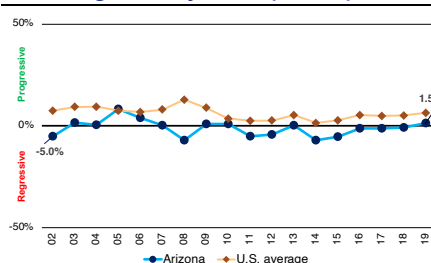
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in AZ is **neither progressive nor regressive**.
- Higher-poverty (30%) districts receive 1.5% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #26 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- AZ's funding was **more progressive** in 2019 (1.5%) vs. 2002 (-5.0%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## ARKANSAS



**Summary:** This 2018-19 profile of Arkansas's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Arkansas scores 37 out of 100, which ranks 28th out of the 48 states with possible ratings.

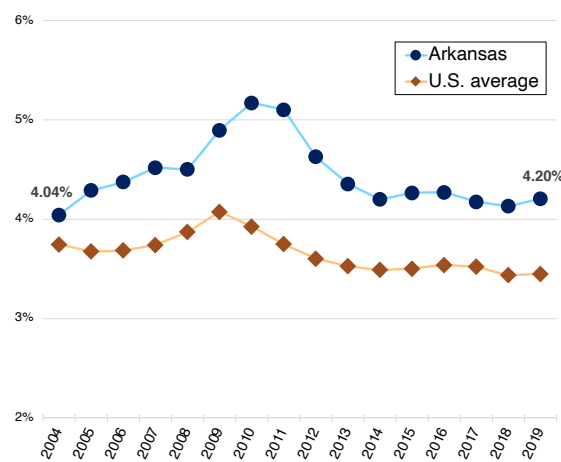
CONTEXTUAL STATS	AR	U.S.
Child (5-17yo) poverty rate (%)	19.9	15.8
Public school coverage (%)	90.2	87.6
Percent revenue from state sources	74.9	47.6
Total enrollment (U.S. rank)	496,100 (32)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Arkansas effort	4.20 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in AR was equivalent to 4.20% of the state's economic capacity (GSP).
- This was 0.76 percentage points **higher** than the unweighted national average of 3.45%.
- AR's effort level ranks #6 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.42 percentage points in AR's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

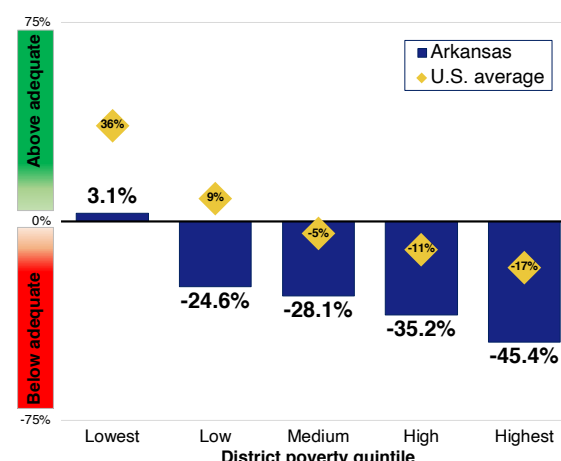
Period	AR	U.S.
2004-2007	0.48	-0.01
2012-2019	-0.42	-0.15
2004-2019	0.16	-0.30

- Effort **increased** during the three years before the recession, going from 4.04% in 2004 to 4.52% in 2007.
- AR's effort was 0.16 percentage points **higher** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

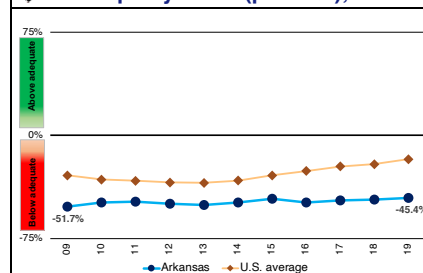
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in AR's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$9,188 PP (**\$20,225**), a difference of -45.4%.
- This ranks #44 in the U.S. (out of 49).
- Across the entire state, 74.8% of AR students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

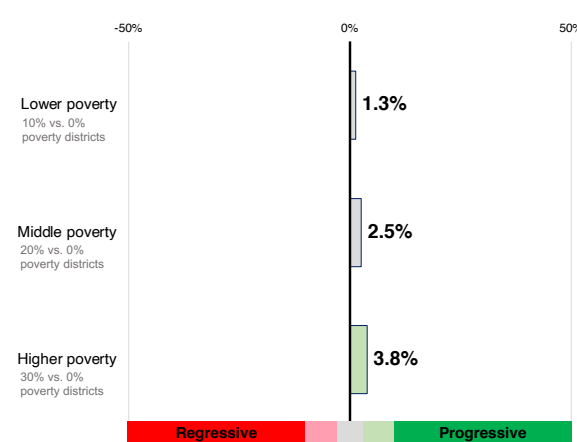


- Adequacy in AR's highest-poverty districts **improved** between 2009 (-51.7%) and 2019 (-45.4%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

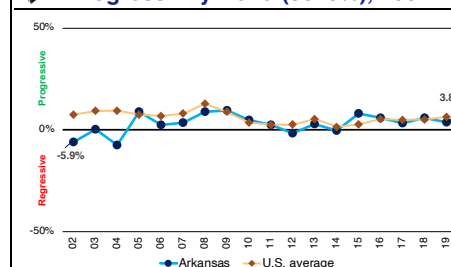
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in AR is **moderately progressive**.
- Higher-poverty (30%) districts receive 3.8% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #24 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- AR's funding was **more progressive** in 2019 (3.8%) vs. 2002 (-5.9%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## CALIFORNIA



**Summary:** This 2018-19 profile of California's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), California scores 33 out of 100, which ranks 31st out of the 48 states with possible ratings.

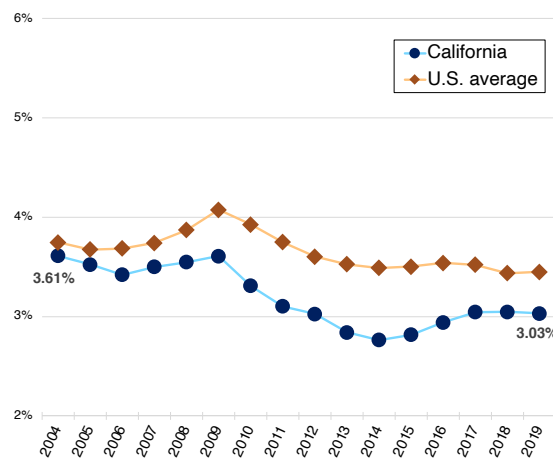
CONTEXTUAL STATS	CA	U.S.
Child (5-17yo) poverty rate (%)	15.2	15.8
Public school coverage (%)	90.1	87.6
Percent revenue from state sources	56.3	47.6
Total enrollment (U.S. rank)	6,285,300 (1)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

California effort	3.03 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in CA was equivalent to 3.03% of the state's economic capacity (GSP).
- This was 0.42 percentage points **lower** than the unweighted national average of 3.45%.
- CA's effort level ranks #37 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was an **increase** of 0.01 percentage points in CA's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

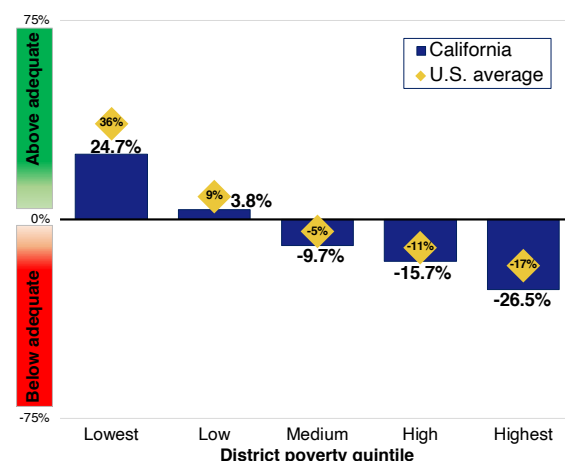
Period	CA	U.S.
2004-2007	-0.11	-0.01
2012-2019	0.01	-0.15
2004-2019	-0.58	-0.30

- Effort **decreased** during the three years before the recession, going from 3.61% in 2004 to 3.50% in 2007.
- CA's effort was 0.58 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

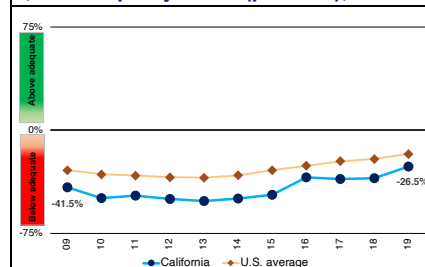
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in CA's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$5,081 PP **lower** than the adequacy target (\$19,208), a difference of -26.5%.
- This ranks #29 in the U.S. (out of 49).
- Across the entire state, 70.4% of CA students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

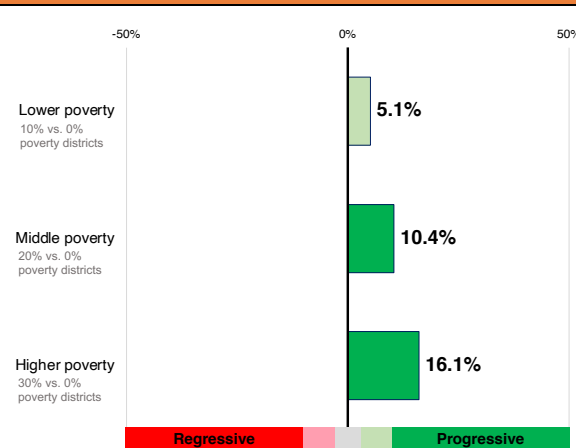


- Adequacy in CA's highest-poverty districts **improved** between 2009 (-41.5%) and 2019 (-26.5%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

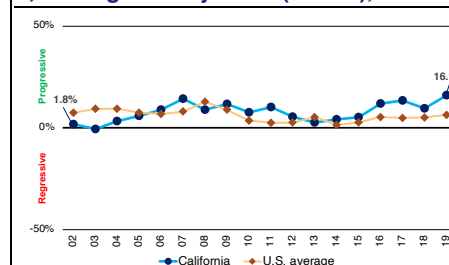
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in CA is **progressive**.
- Higher-poverty (30%) districts receive 16.1% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #11 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- CA's funding was **more progressive** in 2019 (16.1%) vs. 2002 (1.8%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/ipedsreports/2019/ipeds2019_smallareaincomeandpovertyestimates.aspx); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/ipedsreports/2019/ipeds2019_smallareaincomeandpovertyestimates.aspx); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/ipedsreports/2019/ipeds2019_smallareaincomeandpovertyestimates.aspx), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## COLORADO



**Summary:** This 2018-19 profile of Colorado's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Colorado scores 33 out of 100, which ranks 33rd out of the 48 states with possible ratings.

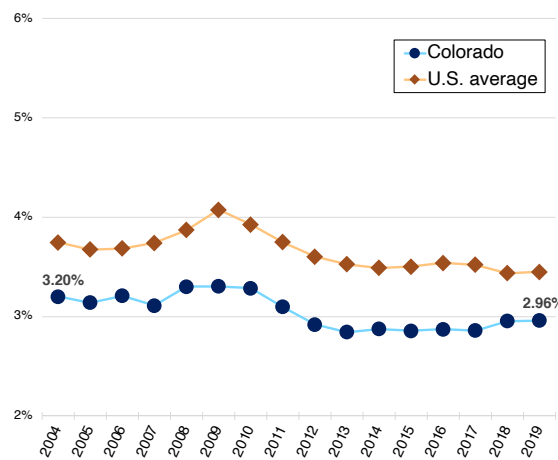
CONTEXTUAL STATS	CO	U.S.
Child (5-17yo) poverty rate (%)	10.7	15.8
Public school coverage (%)	90.3	87.6
Percent revenue from state sources	43.0	47.6
Total enrollment (U.S. rank)	912,600 (19)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Colorado effort	2.96 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in CO was equivalent to 2.96% of the state's economic capacity (GSP).
- This was 0.49 percentage points **lower** than the unweighted national average of 3.45%.
- CO's effort level ranks #40 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was an **increase** of 0.04 percentage points in CO's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

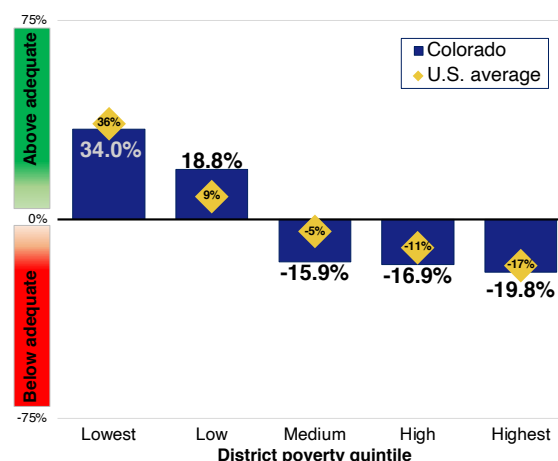
Period	CO	U.S.
2004-2007	-0.09	-0.01
2012-2019	0.04	-0.15
2004-2019	-0.24	-0.30

- Effort **decreased** during the three years before the recession, going from 3.20% in 2004 to 3.11% in 2007.
- CO's effort was 0.24 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

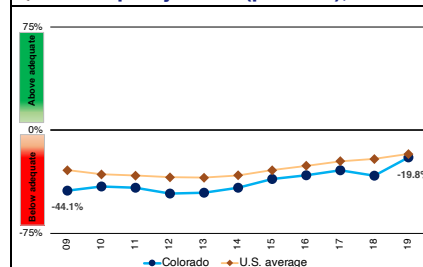
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in CO's highest poverty districts are **below adequate**.
- Spending in these districts is \$2,558 PP **lower** than the adequacy target (\$12,933), a difference of -19.8%.
- This ranks #26 in the U.S. (out of 49).
- Across the entire state, 30.9% of CO students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

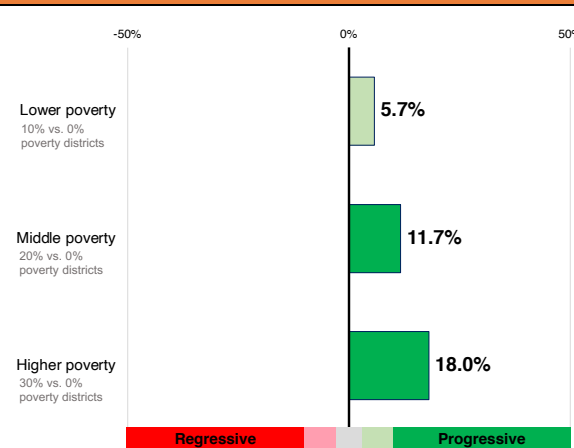


- Adequacy in CO's highest-poverty districts **improved** between 2009 (-44.1%) and 2019 (-19.8%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

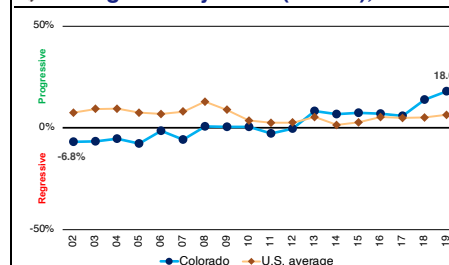
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in CO is **progressive**.
- Higher-poverty (30%) districts receive 18.0% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #10 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- CO's funding was **more progressive** in 2019 (18.0%) vs. 2002 (-6.8%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](http://www.census.gov/popest/data/states/total.html); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](http://www.nces.ed.gov/ipeds/data/ipeds_datacenter/ipeds_datacenter.asp); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](http://nces.ed.gov/ipeds/data/ipeds_datacenter/ipeds_datacenter.asp), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## CONNECTICUT



**Summary:** This 2018-19 profile of Connecticut's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Connecticut scores 77 out of 100, which ranks 8th out of the 48 states with possible ratings.

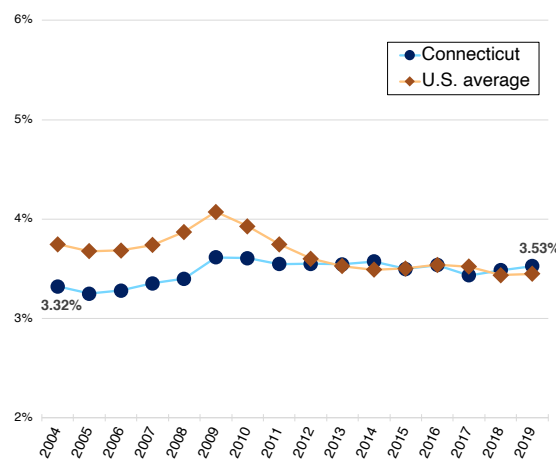
CONTEXTUAL STATS	CT	U.S.
Child (5-17yo) poverty rate (%)	12.9	15.8
Public school coverage (%)	89.4	87.6
Percent revenue from state sources	37.2	47.6
Total enrollment (U.S. rank)	524,300 (30)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Connecticut effort	3.53 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in CT was equivalent to 3.53% of the state's economic capacity (GSP).
- This was 0.08 percentage points **higher** than the unweighted national average of 3.45%.
- CT's effort level ranks #23 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.02 percentage points in CT's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

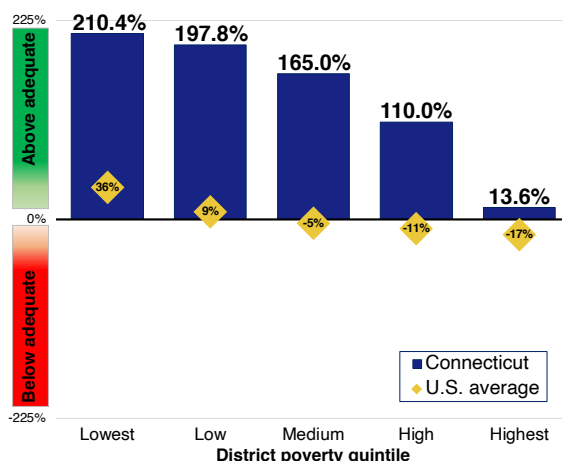
Period	CT	U.S.
2004-2007	0.03	-0.01
2012-2019	-0.02	-0.15
2004-2019	0.20	-0.30

- Effort **increased** during the three years before the recession, going from 3.32% in 2004 to 3.35% in 2007.
- CT's effort was 0.20 percentage points **higher** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

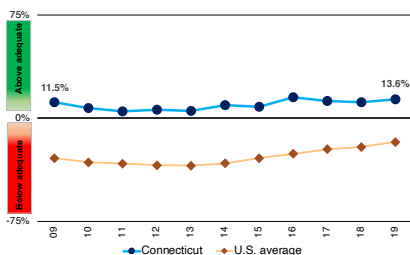
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in CT's highest poverty districts are **above adequate**.
- Spending in these districts is \$2,330 PP **higher** than the adequacy target (\$17,175), a difference of 13.6%.
- This ranks #7 in the U.S. (out of 49).
- Across the entire state, 19.2% of CT students attend districts with spending below estimated adequate levels.



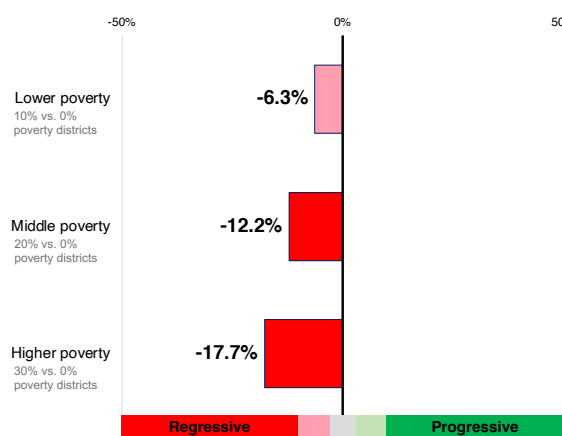
#### Adequacy trend (pov. Q5), 2009-19



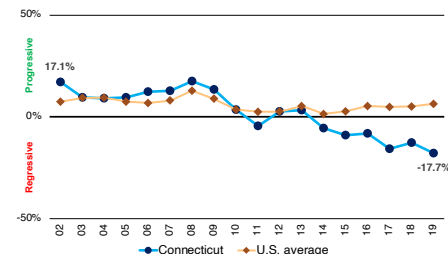
- Adequacy in CT's highest-poverty districts was **roughly similar** between 2009 (11.5%) and 2019 (13.6%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

### PROGRESSIVITY

- Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.
- School funding in CT is **regressive**.
  - Higher-poverty (30%) districts receive 17.7% **less** revenue than zero-poverty districts.
  - This level of progressivity ranks #43 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- CT's funding was **more regressive** in 2019 (-17.7%) vs. 2002 (17.1%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](http://www.census.gov/popest/data/states/total.html); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](http://www.nces.ed.gov/ipeds/data/ipeds_datacenter/ipeds_datacenter.asp); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](http://nces.ed.gov/ipeds/data/ipeds_datacenter/ipeds_datacenter.asp), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## DELAWARE



**Summary:** This 2018-19 profile of Delaware's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Delaware scores 44 out of 100, which ranks 26th out of the 48 states with possible ratings.

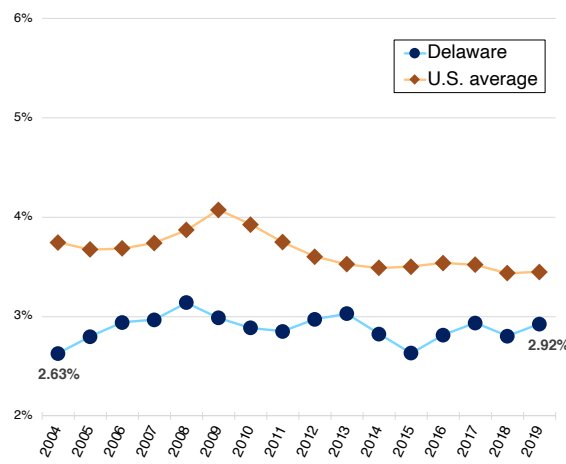
CONTEXTUAL STATS	DE	U.S.
Child (5-17yo) poverty rate (%)	15.2	15.8
Public school coverage (%)	85.8	87.6
Percent revenue from state sources	64.6	47.6
Total enrollment (U.S. rank)	136,900 (46)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Delaware effort	2.92 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in DE was equivalent to 2.92% of the state's economic capacity (GSP).
- This was 0.52 percentage points **lower** than the unweighted national average of 3.45%.
- DE's effort level ranks #41 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.05 percentage points in DE's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

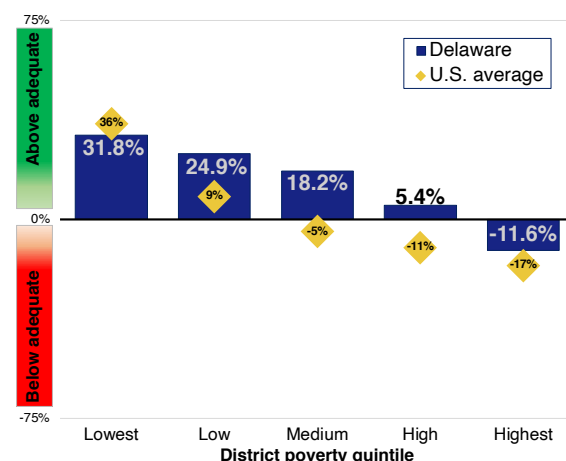
Period	DE	U.S.
2004-2007	0.34	-0.01
2012-2019	-0.05	-0.15
2004-2019	0.30	-0.30

- Effort **increased** during the three years before the recession, going from 2.63% in 2004 to 2.97% in 2007.
- DE's effort was 0.30 percentage points **higher** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

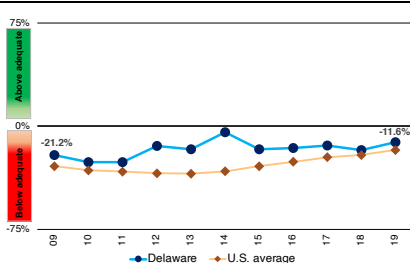
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in DE's highest poverty districts are **below adequate**.
- Spending in these districts is \$1,976 PP **lower** than the adequacy target (\$17,092), a difference of -11.6%.
- This ranks #18 in the U.S. (out of 49).
- Across the entire state, 18.6% of DE students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

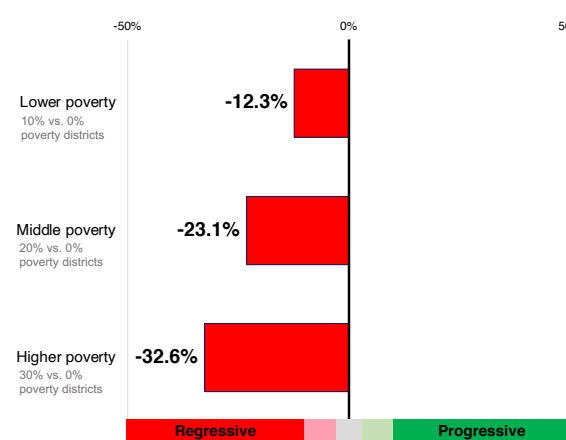


- Adequacy in DE's highest-poverty districts **improved** between 2009 (-21.2%) and 2019 (-11.6%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

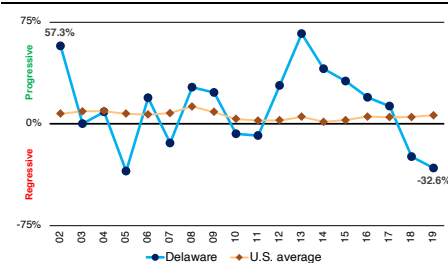
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in DE is **regressive**.
- Higher-poverty (30%) districts receive 32.6% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #48 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- DE's funding was **more regressive** in 2019 (-32.6%) vs. 2002 (57.3%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## DISTRICT OF COLUMBIA



**Summary:** This 2018-19 profile of District of Columbia's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. An overall state score is not calculated for the District of Columbia, as estimates are not available for all measures.

CONTEXTUAL STATS	DC	U.S.
Child (5-17yo) poverty rate (%)	20.1	15.8
Public school coverage (%)	81.8	87.6
Percent revenue from state sources	n/a	47.6
Total enrollment (U.S. rank)	87,200 (50)	

### FISCAL EFFORT

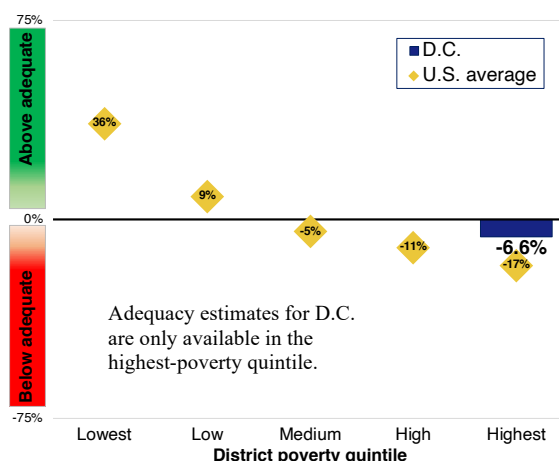
**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Fiscal effort estimates are not available for the District of Columbia.

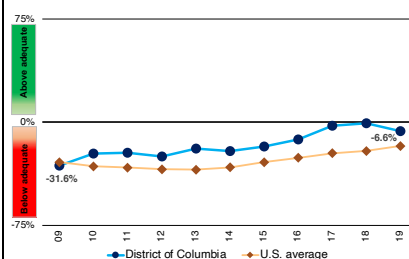
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in DC's highest poverty districts are **below adequate**.
- Spending in these districts is \$1,572 PP **lower** than the adequacy target (\$23,978), a difference of -6.6%.
- This ranks #16 in the U.S. (out of 49).



#### Adequacy trend (pov. Q5), 2009-19



- Adequacy in DC's highest-poverty districts **improved** between 2009 (-31.6%) and 2019 (-6.6%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

Progressivity estimates are not available for the District of Columbia.

## 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/collegenorms/collegenorms.asp); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/collegenorms/collegenorms.asp); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/collegenorms/collegenorms.asp), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## FLORIDA



**Summary:** This 2018-19 profile of Florida's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Florida scores 14 out of 100, which ranks 47th out of the 48 states with possible ratings.

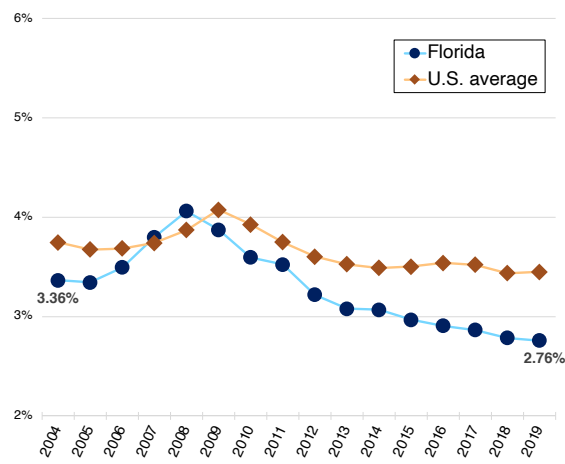
CONTEXTUAL STATS	FL	U.S.
Child (5-17yo) poverty rate (%)	16.9	15.8
Public school coverage (%)	84.7	87.6
Percent revenue from state sources	38.5	47.6
Total enrollment (U.S. rank)	2,849,400 (3)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Florida effort	2.76 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in FL was equivalent to 2.76% of the state's economic capacity (GSP).
- This was 0.69 percentage points **lower** than the unweighted national average of 3.45%.
- FL's effort level ranks #47 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.46 percentage points in FL's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

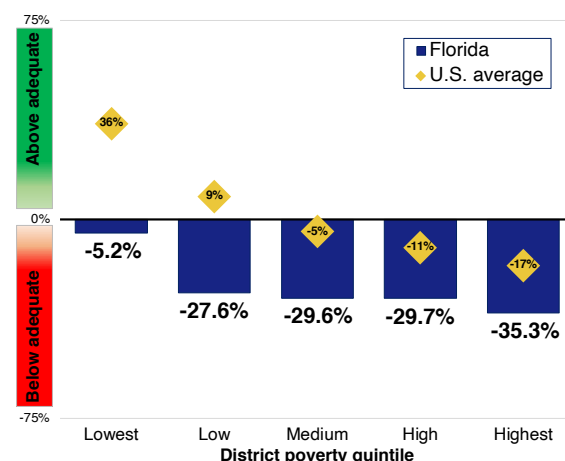
Period	FL	U.S.
2004-2007	0.44	-0.01
2012-2019	-0.46	-0.15
2004-2019	-0.61	-0.30

- Effort **increased** during the three years before the recession, going from 3.36% in 2004 to 3.80% in 2007.
- FL's effort was 0.61 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

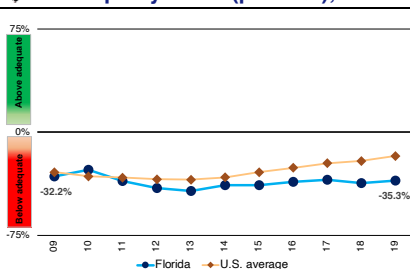
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in FL's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$5,711 PP **lower** than the adequacy target (\$16,162), a difference of -35.3%.
- This ranks #35 in the U.S. (out of 49).
- Across the entire state, 93.7% of FL students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19



- Adequacy in FL's highest-poverty districts **worsened** between 2009 (-32.2%) and 2019 (-35.3%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

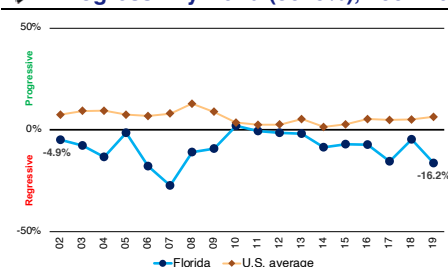
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in FL is **regressive**.
- Higher-poverty (30%) districts receive 16.2% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #41 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- FL's funding was **more regressive** in 2019 (-16.2%) vs. 2002 (-4.9%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](http://www.census.gov/popest/data/states/total.html); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](http://www.nces.ed.gov/ipeds/data/ipeds_datacenter/ipeds_datacenter.asp); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](http://nces.ed.gov/ipeds/data/ipeds_datacenter/ipeds_datacenter.asp), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## GEORGIA



**Summary:** This 2018-19 profile of Georgia's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Georgia scores 30 out of 100, which ranks 35th out of the 48 states with possible ratings.

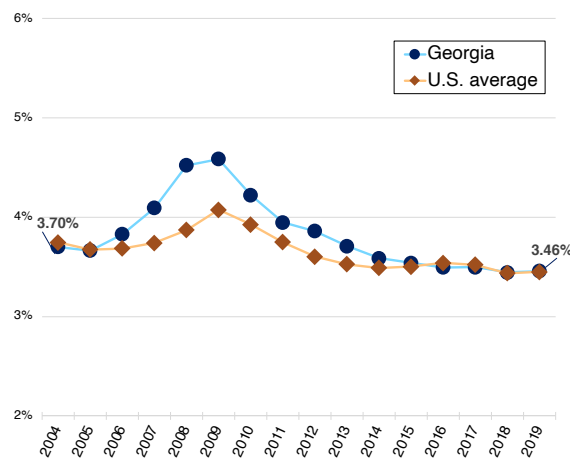
CONTEXTUAL STATS	GA	U.S.
Child (5-17yo) poverty rate (%)	18.6	15.8
Public school coverage (%)	88.3	87.6
Percent revenue from state sources	44.8	47.6
Total enrollment (U.S. rank)	1,767,200 (6)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Georgia effort	3.46 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in GA was equivalent to 3.46% of the state's economic capacity (GSP).
- This was 0.01 percentage points **higher** than the unweighted national average of 3.45%.
- GA's effort level ranks #26 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.40 percentage points in GA's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

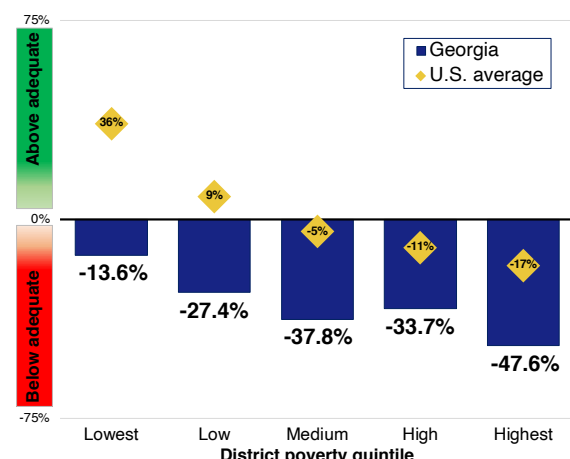
Period	GA	U.S.
2004-2007	0.39	-0.01
2012-2019	-0.40	-0.15
2004-2019	-0.24	-0.30

- Effort **increased** during the three years before the recession, going from 3.70% in 2004 to 4.09% in 2007.
- GA's effort was 0.24 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

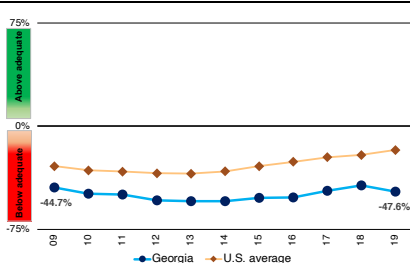
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in GA's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$10,427 PP **lower** than the adequacy target (\$21,908), a difference of -47.6%.
- This ranks #46 in the U.S. (out of 49).
- Across the entire state, 83.0% of GA students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

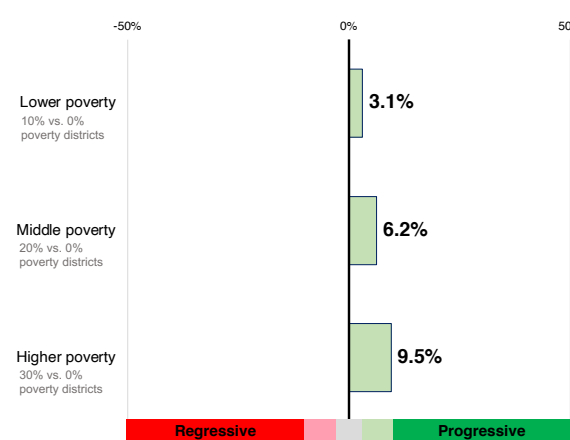


- Adequacy in GA's highest-poverty districts was **roughly similar** between 2009 (-44.7%) and 2019 (-47.6%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

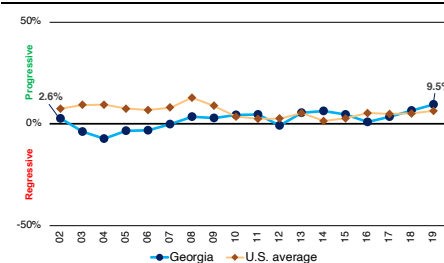
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in GA is **moderately progressive**.
- Higher-poverty (30%) districts receive 9.5% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #13 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- GA's funding was **more progressive** in 2019 (9.5%) vs. 2002 (2.6%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/collegenorms/); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/collegenorms/); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/collegenorms/), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## HAWAII



**Summary:** This 2018-19 profile of Hawaii's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: fiscal effort, adequacy, and progressivity. An overall state score is not calculated for Hawaii, as estimates are not available for all measures.

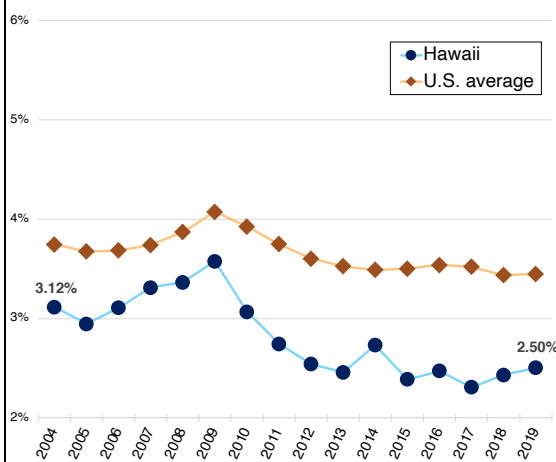
CONTEXTUAL STATS	HI	U.S.
Child (5-17yo) poverty rate (%)	10.5	15.8
Public school coverage (%)	79.3	87.6
Percent revenue from state sources	88.3	47.6
Total enrollment (U.S. rank)	180,600 (40)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Hawaii effort	2.50 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in HI was equivalent to 2.50% of the state's economic capacity (GSP).
- This was 0.95 percentage points **lower** than the unweighted national average of 3.45%.
- HI's effort level ranks #49 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.04 percentage points in HI's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

Period	HI	U.S.
2004-2007	0.20	-0.01
2012-2019	-0.04	-0.15
2004-2019	-0.61	-0.30

- Effort **increased** during the three years before the recession, going from 3.12% in 2004 to 3.31% in 2007.
- HI's effort was 0.61 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

Adequacy estimates are not available for Hawaii.

### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

Progressivity estimates are not available for Hawaii.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/nces/ipeds/datafiles/saipe/); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/nces/ipeds/datafiles/saipe/); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/nces/ipeds/datafiles/saipe/), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## IDAHO



**Summary:** This 2018-19 profile of Idaho's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Idaho scores 26 out of 100, which ranks 39th out of the 48 states with possible ratings.

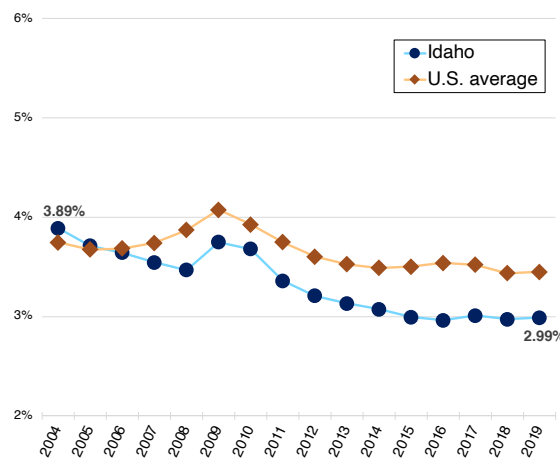
CONTEXTUAL STATS	ID	U.S.
Child (5-17yo) poverty rate (%)	11.2	15.8
Public school coverage (%)	88.6	87.6
Percent revenue from state sources	65.0	47.6
Total enrollment (U.S. rank)	303,500 (38)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Idaho effort	2.99 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in ID was equivalent to 2.99% of the state's economic capacity (GSP).
- This was 0.46 percentage points **lower** than the unweighted national average of 3.45%.
- ID's effort level ranks #39 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.22 percentage points in ID's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

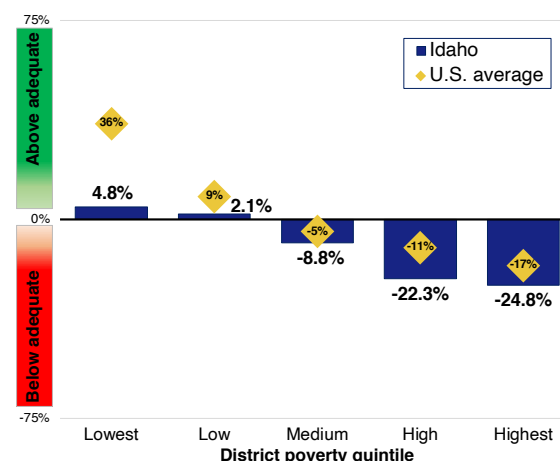
Period	ID	U.S.
2004-2007	-0.34	-0.01
2012-2019	-0.22	-0.15
2004-2019	-0.90	-0.30

- Effort **decreased** during the three years before the recession, going from 3.89% in 2004 to 3.54% in 2007.
- ID's effort was 0.90 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

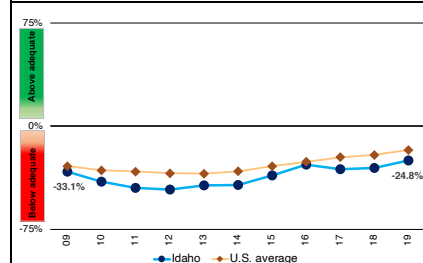
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in ID's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$3,327 PP **lower** than the adequacy target (\$13,393), a difference of -24.8%.
- This ranks #27 in the U.S. (out of 49).
- Across the entire state, 56.3% of ID students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

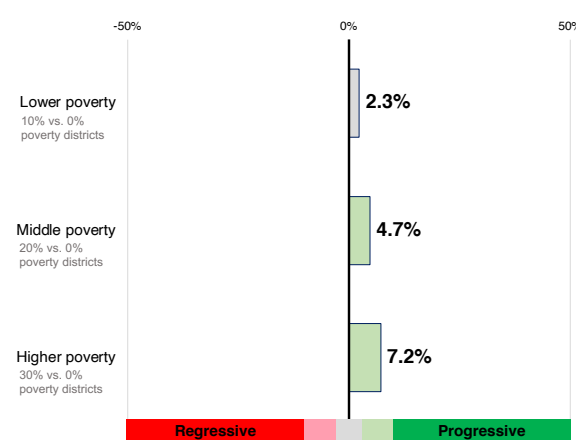


- Adequacy in ID's highest-poverty districts **improved** between 2009 (-33.1%) and 2019 (-24.8%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

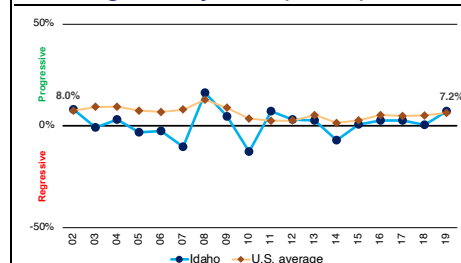
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in ID is **moderately progressive**.
- Higher-poverty (30%) districts receive 7.2% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #19 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- ID's funding was **more regressive** in 2019 (7.2%) vs. 2002 (8.0%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/nces/ipeds/datafiles/2019/SAIPE); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/nces/ipeds/datafiles/2019/SAIPE); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/nces/ipeds/datafiles/2019/SAIPE), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## ILLINOIS



**Summary:** This 2018-19 profile of Illinois's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Illinois scores 45 out of 100, which ranks 25th out of the 48 states with possible ratings.

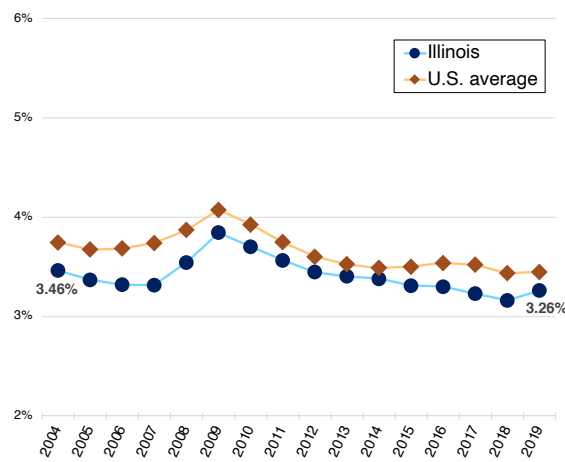
CONTEXTUAL STATS	IL	U.S.
Child (5-17yo) poverty rate (%)	14.6	15.8
Public school coverage (%)	87.4	87.6
Percent revenue from state sources	40.7	47.6
Total enrollment (U.S. rank)	2,000,200 (5)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Illinois effort	3.26 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in IL was equivalent to 3.26% of the state's economic capacity (GSP).
- This was 0.19 percentage points **lower** than the unweighted national average of 3.45%.
- IL's effort level ranks #31 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.19 percentage points in IL's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

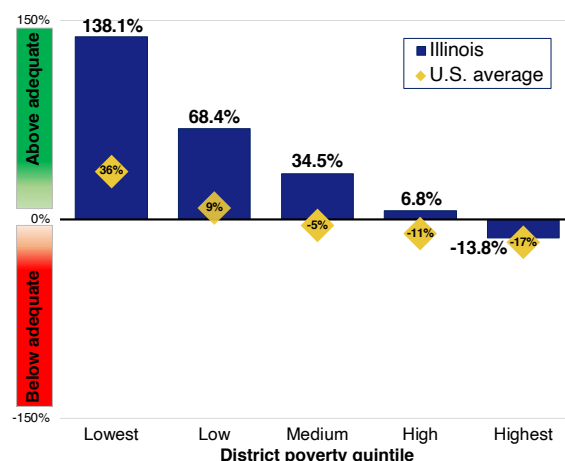
Period	IL	U.S.
2004-2007	-0.14	-0.01
2012-2019	-0.19	-0.15
2004-2019	-0.20	-0.30

- Effort **decreased** during the three years before the recession, going from 3.46% in 2004 to 3.32% in 2007.
- IL's effort was 0.20 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

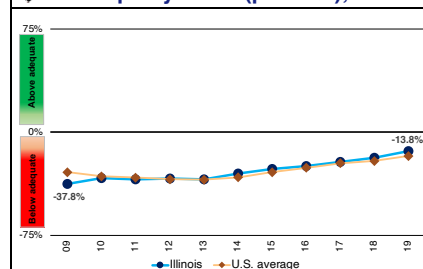
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in IL's highest poverty districts are **below adequate**.
- Spending in these districts is \$2,467 PP **lower** than the adequacy target (\$17,896), a difference of -13.8%.
- This ranks #19 in the U.S. (out of 49).
- Across the entire state, 36.7% of IL students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

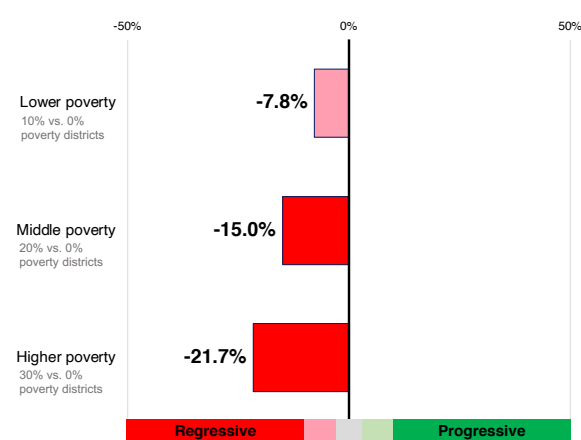


- Adequacy in IL's highest-poverty districts **improved** between 2009 (-37.8%) and 2019 (-13.8%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

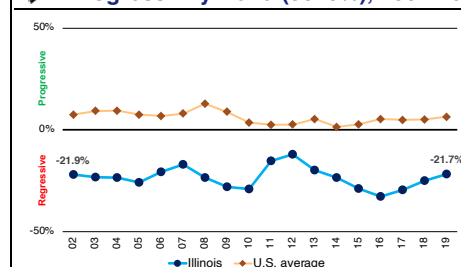
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in IL is **regressive**.
- Higher-poverty (30%) districts receive 21.7% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #45 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- IL's funding was **less regressive** in 2019 (-21.7%) vs. 2002 (-21.9%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## INDIANA



**Summary:** This 2018-19 profile of Indiana's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Indiana scores 32 out of 100, which ranks 34th out of the 48 states with possible ratings.

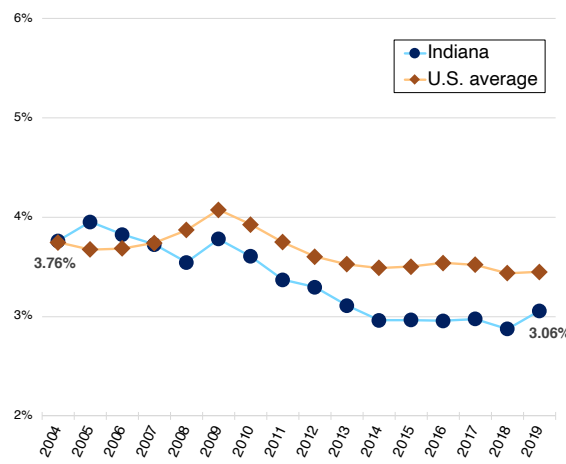
CONTEXTUAL STATS	IN	U.S.
Child (5-17yo) poverty rate (%)	13.9	15.8
Public school coverage (%)	85.8	87.6
Percent revenue from state sources	61.9	47.6
Total enrollment (U.S. rank)	1,053,400 (15)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Indiana effort	3.06 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in IN was equivalent to 3.06% of the state's economic capacity (GSP).
- This was 0.39 percentage points **lower** than the unweighted national average of 3.45%.
- IN's effort level ranks #36 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.24 percentage points in IN's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

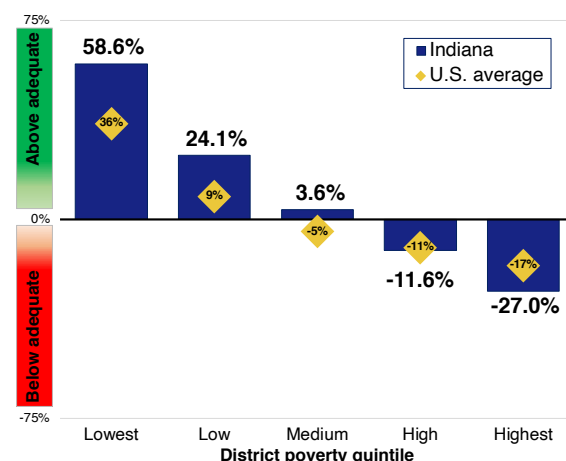
Period	IN	U.S.
2004-2007	-0.04	-0.01
2012-2019	-0.24	-0.15
2004-2019	-0.70	-0.30

- Effort **decreased** during the three years before the recession, going from 3.76% in 2004 to 3.73% in 2007.
- IN's effort was 0.70 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

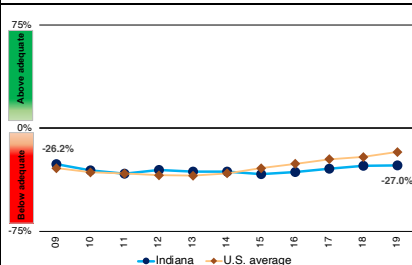
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in IN's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$4,184 PP **lower** than the adequacy target (\$15,496), a difference of -27.0%.
- This ranks #30 in the U.S. (out of 49).
- Across the entire state, 40.4% of IN students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

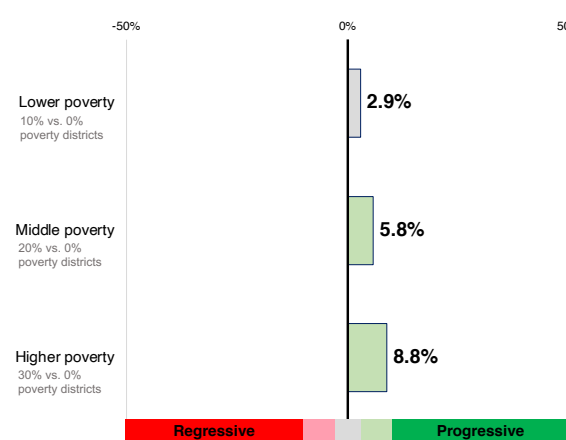


- Adequacy in IN's highest-poverty districts was **roughly similar** between 2009 (-26.2%) and 2019 (-27.0%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

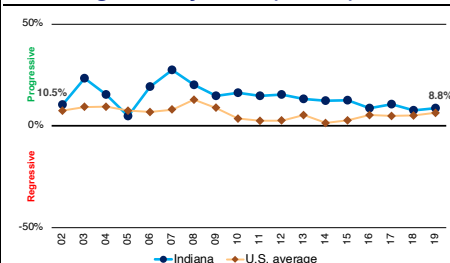
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in IN is **moderately progressive**.
- Higher-poverty (30%) districts receive 8.8% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #14 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- IN's funding was **more regressive** in 2019 (8.8%) vs. 2002 (10.5%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](https://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- |                      |   |
|----------------------|---|
| <b>Fiscal effort</b> | SID variables used in this section: <i>effort, year</i> |
|----------------------|---|

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

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the “K-12 recovery period”) is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states’ reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

**SID variables used in this section:** *necm\_predcost\_q1–necm\_predcost\_q5; necm\_ppcstot\_q1–necm\_ppcstot\_q5; necm\_enroll\_q1–necm\_enroll\_q5; year*

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 (“highest-poverty”) gaps lower than -20% are assigned the designation “severely inadequate.” The remaining designations are “below adequate” (between 0 and -20%) and “above adequate” (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the “highest-poverty” bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

**SID variables used in this section:** *predicted\_slocrev0*; *predicted\_slocrev10*; *predicted\_slocrev20*; *predicted\_slocrev30*; *year*

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## IOWA



**Summary:** This 2018-19 profile of Iowa's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Iowa scores 63 out of 100, which ranks 12th out of the 48 states with possible ratings.

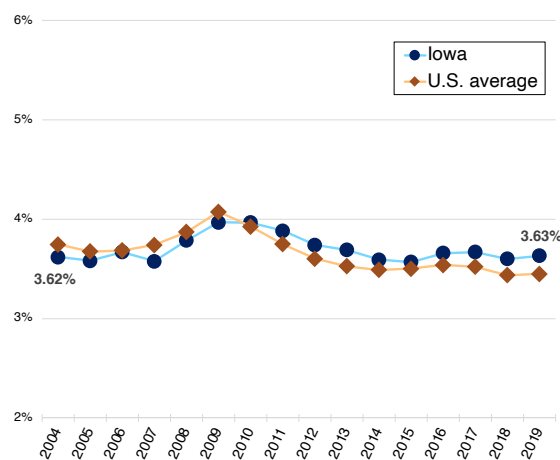
CONTEXTUAL STATS	IA	U.S.
Child (5-17yo) poverty rate (%)	11.7	15.8
Public school coverage (%)	88.9	87.6
Percent revenue from state sources	52.8	47.6
Total enrollment (U.S. rank)	511,700 (31)	

## FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Iowa effort	3.63 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in IA was equivalent to 3.63% of the state's economic capacity (GSP).
- This was 0.18 percentage points **higher** than the unweighted national average of 3.45%.
- IA's effort level ranks #15 in the nation (out of 49).



### Effort trend, 2004-2019

- There was a **decrease** of 0.11 percentage points in IA's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

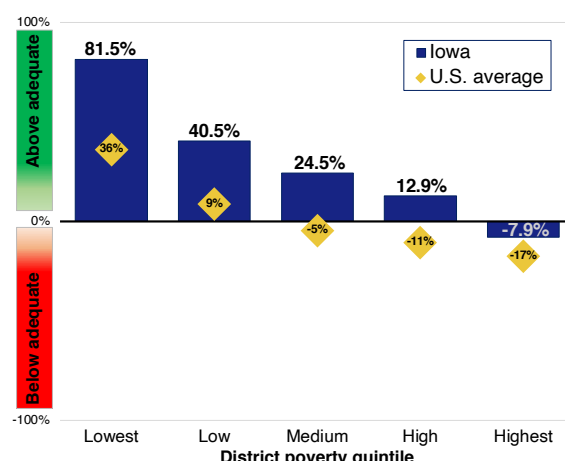
Period	IA	U.S.
2004-2007	-0.04	-0.01
2012-2019	-0.11	-0.15
2004-2019	0.02	-0.30

- Effort **decreased** during the three years before the recession, going from 3.62% in 2004 to 3.58% in 2007.
- IA's effort was 0.02 percentage points **higher** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

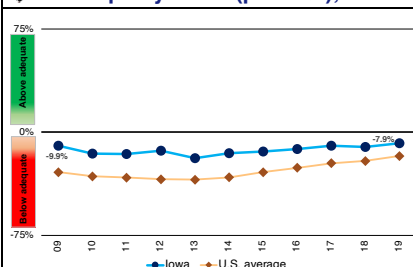
## ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in IA's highest poverty districts are **below adequate**.
- Spending in these districts is \$1,038 PP **lower** than the adequacy target (\$13,089), a difference of -7.9%.
- This ranks #17 in the U.S. (out of 49).
- Across the entire state, 24.9% of IA students attend districts with spending below estimated adequate levels.



### Adequacy trend (pov. Q5), 2009-19

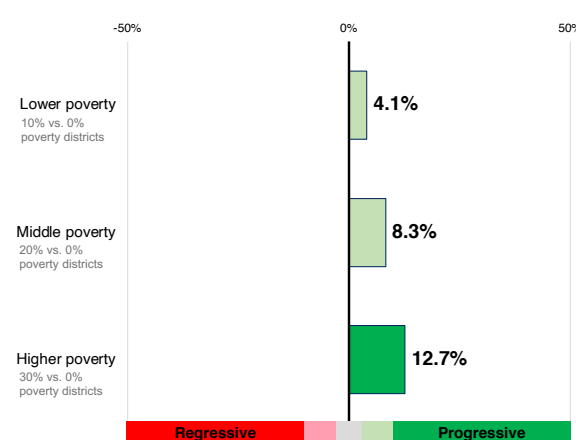


- Adequacy in IA's highest-poverty districts was **roughly similar** between 2009 (-9.9%) and 2019 (-7.9%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

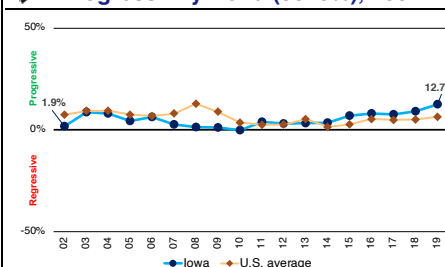
## PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in IA is **progressive**.
- Higher-poverty (30%) districts receive 12.7% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #12 in the nation (out of 49).



### Progressivity trend (30v0%), 2002-19



- IA's funding was **more progressive** in 2019 (12.7%) vs. 2002 (1.9%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](http://www.census.gov/popest/data/states/total.html); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](http://www.nces.ed.gov/ipeds/data/ipeds_datacenter/ipeds_datacenter.asp); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](http://nces.ed.gov/ipeds/data/ipeds_datacenter/ipeds_datacenter.asp), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## KANSAS



**Summary:** This 2018-19 profile of Kansas's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Kansas scores 56 out of 100, which ranks 17th out of the 48 states with possible ratings.

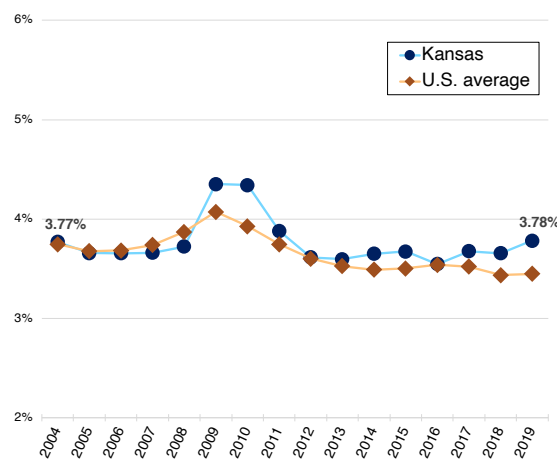
CONTEXTUAL STATS	KS	U.S.
Child (5-17yo) poverty rate (%)	12.9	15.8
Public school coverage (%)	88.0	87.6
Percent revenue from state sources	64.2	47.6
Total enrollment (U.S. rank)	495,100 (33)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Kansas effort	3.78 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in KS was equivalent to 3.78% of the state's economic capacity (GSP).
- This was 0.33 percentage points **higher** than the unweighted national average of 3.45%.
- KS's effort level ranks #12 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was an **increase** of 0.17 percentage points in KS's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

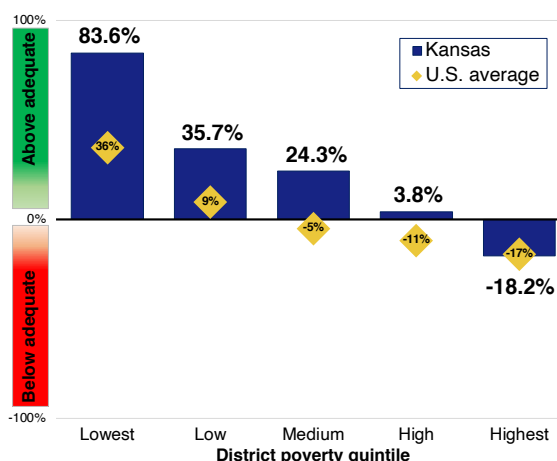
Period	KS	U.S.
2004-2007	-0.11	-0.01
2012-2019	0.17	-0.15
2004-2019	0.01	-0.30

- Effort **decreased** during the three years before the recession, going from 3.77% in 2004 to 3.66% in 2007.
- KS's effort was 0.01 percentage points **higher** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

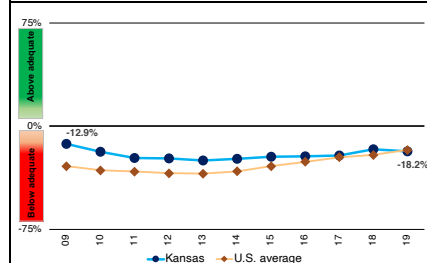
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in KS's highest poverty districts are **below adequate**.
- Spending in these districts is \$2,669 PP **lower** than the adequacy target (\$14,640), a difference of -18.2%.
- This ranks #24 in the U.S. (out of 49).
- Across the entire state, 29.9% of KS students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

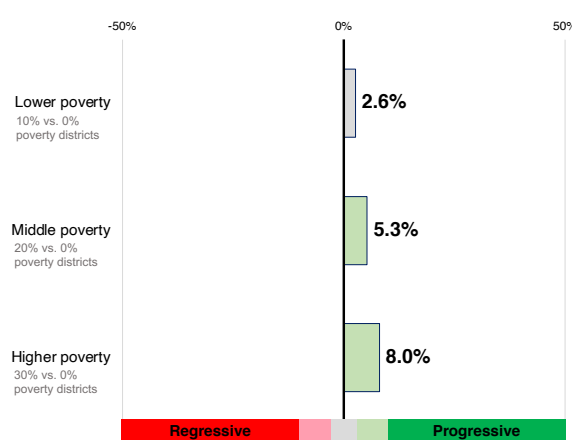


- Adequacy in KS's highest-poverty districts **worsened** between 2009 (-12.9%) and 2019 (-18.2%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

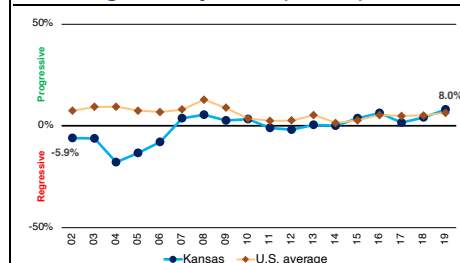
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in KS is **moderately progressive**.
- Higher-poverty (30%) districts receive 8.0% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #15 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- KS's funding was **more progressive** in 2019 (8.0%) vs. 2002 (-5.9%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/2019/ipeds_datacenter/ipeds_datacenter.asp); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/2019/ipeds_datacenter/ipeds_datacenter.asp); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/2019/ipeds_datacenter/ipeds_datacenter.asp), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## KENTUCKY



**Summary:** This 2018-19 profile of Kentucky's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Kentucky scores 40 out of 100, which ranks 27th out of the 48 states with possible ratings.

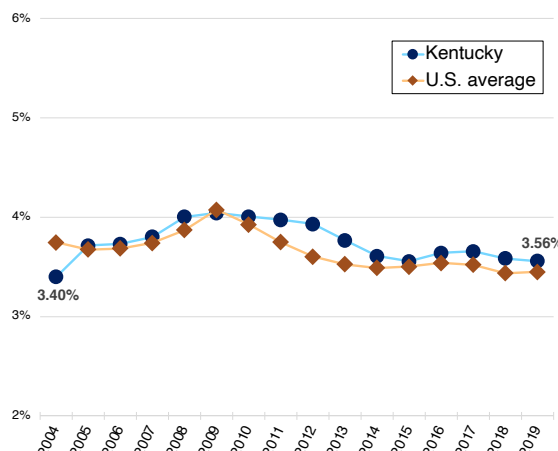
CONTEXTUAL STATS	KY	U.S.
Child (5-17yo) poverty rate (%)	19.2	15.8
Public school coverage (%)	85.5	87.6
Percent revenue from state sources	55.3	47.6
Total enrollment (U.S. rank)	678,900 (27)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Kentucky effort	3.56 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in KY was equivalent to 3.56% of the state's economic capacity (GSP).
- This was 0.11 percentage points **higher** than the unweighted national average of 3.45%.
- KY's effort level ranks #22 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.37 percentage points in KY's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

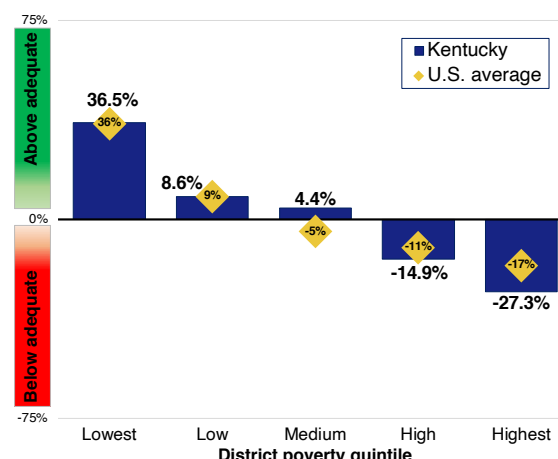
Period	KY	U.S.
2004-2007	0.40	-0.01
2012-2019	-0.37	-0.15
2004-2019	0.16	-0.30

- Effort **increased** during the three years before the recession, going from 3.40% in 2004 to 3.80% in 2007.
- KY's effort was 0.16 percentage points **higher** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

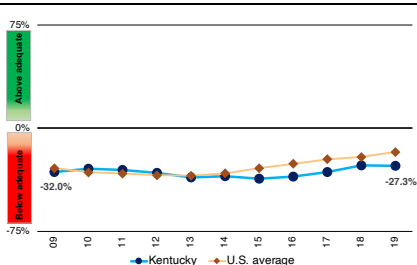
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in KY's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$4,275 PP **lower** than the adequacy target (\$15,638), a difference of -27.3%.
- This ranks #31 in the U.S. (out of 49).
- Across the entire state, 26.1% of KY students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

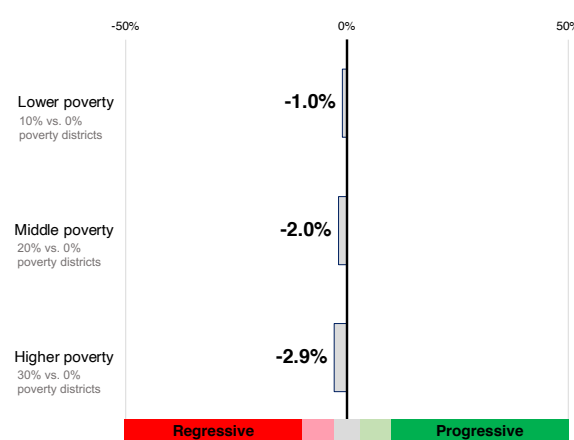


- Adequacy in KY's highest-poverty districts **improved** between 2009 (-32.0%) and 2019 (-27.3%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

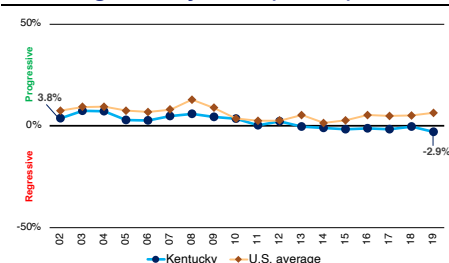
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in KY is **neither progressive nor regressive**.
- Higher-poverty (30%) districts receive 2.9% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #29 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- KY's funding was **more regressive** in 2019 (-2.9%) vs. 2002 (3.8%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## LOUISIANA



**Summary:** This 2018-19 profile of Louisiana's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Louisiana scores 24 out of 100, which ranks 41st out of the 48 states with possible ratings.

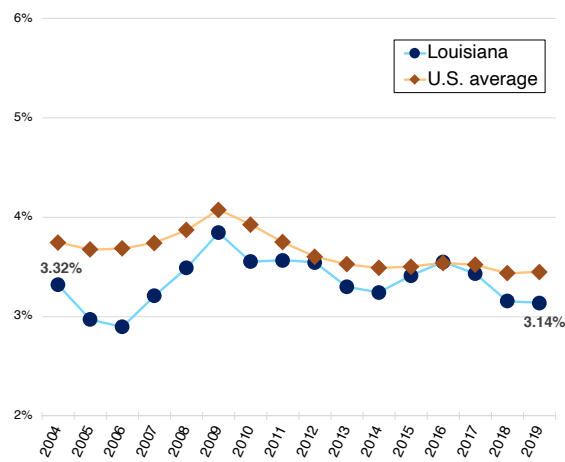
CONTEXTUAL STATS	LA	U.S.
Child (5-17yo) poverty rate (%)	25.4	15.8
Public school coverage (%)	81.6	87.6
Percent revenue from state sources	41.4	47.6
Total enrollment (U.S. rank)	710,600 (25)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Louisiana effort	3.14 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in LA was equivalent to 3.14% of the state's economic capacity (GSP).
- This was 0.31 percentage points **lower** than the unweighted national average of 3.45%.
- LA's effort level ranks #35 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.41 percentage points in LA's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

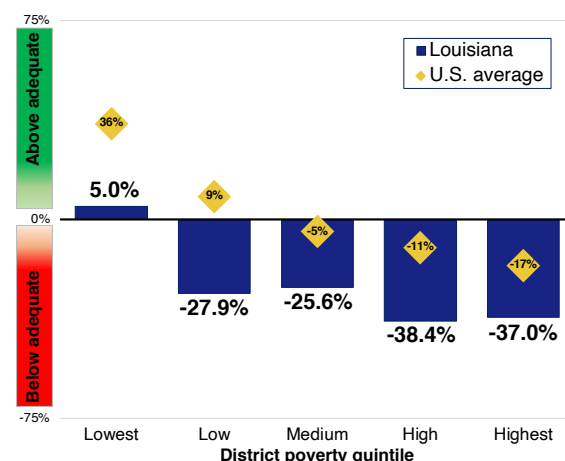
Period	LA	U.S.
2004-2007	-0.11	-0.01
2012-2019	-0.41	-0.15
2004-2019	-0.18	-0.30

- Effort **decreased** during the three years before the recession, going from 3.32% in 2004 to 3.21% in 2007.
- LA's effort was 0.18 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

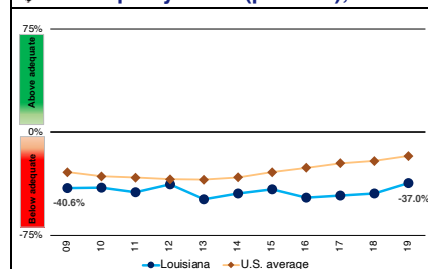
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in LA's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$8,047 PP **lower** than the adequacy target (\$21,770), a difference of -37.0%.
- This ranks #39 in the U.S. (out of 49).
- Across the entire state, 79.6% of LA students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

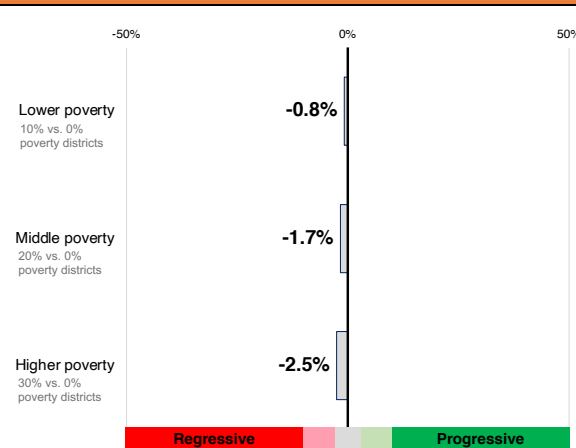


- Adequacy in LA's highest-poverty districts **improved** between 2009 (-40.6%) and 2019 (-37.0%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

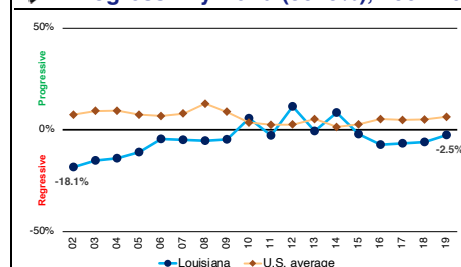
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in LA is **neither progressive nor regressive**.
- Higher-poverty (30%) districts receive 2.5% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #28 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- LA's funding was **less regressive** in 2019 (-2.5%) vs. 2002 (-18.1%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## MAINE



**Summary:** This 2018-19 profile of Maine's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Maine scores 67 out of 100, which ranks 11th out of the 48 states with possible ratings.

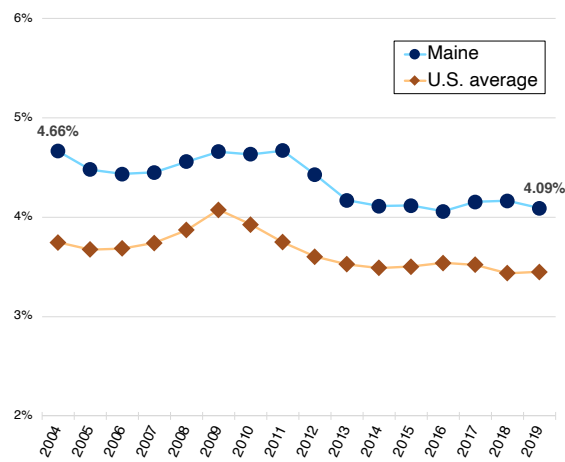
CONTEXTUAL STATS	ME	U.S.
Child (5-17yo) poverty rate (%)	12.5	15.8
Public school coverage (%)	87.0	87.6
Percent revenue from state sources	38.9	47.6
Total enrollment (U.S. rank)	179,200 (41)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Maine effort	4.09 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in ME was equivalent to 4.09% of the state's economic capacity (GSP).
- This was 0.64 percentage points **higher** than the unweighted national average of 3.45%.
- ME's effort level ranks #7 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.34 percentage points in ME's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

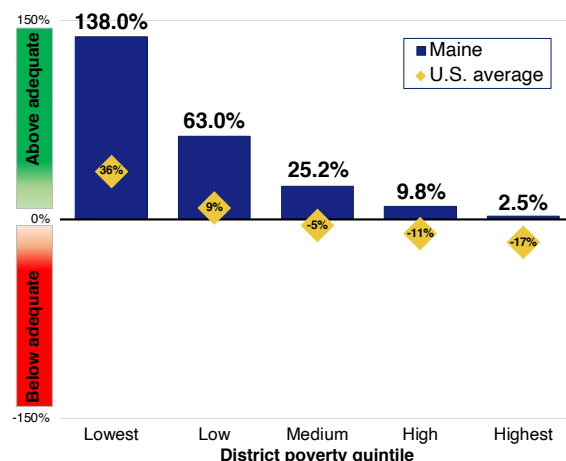
Period	ME	U.S.
2004-2007	-0.21	-0.01
2012-2019	-0.34	-0.15
2004-2019	-0.57	-0.30

- Effort **decreased** during the three years before the recession, going from 4.66% in 2004 to 4.45% in 2007.
- ME's effort was 0.57 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

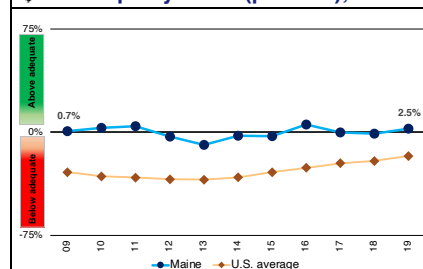
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in ME's highest poverty districts are **above adequate**.
- Spending in these districts is \$353 PP **higher** than the adequacy target (\$14,220), a difference of 2.5%.
- This ranks #11 in the U.S. (out of 49).
- Across the entire state, 11.6% of ME students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

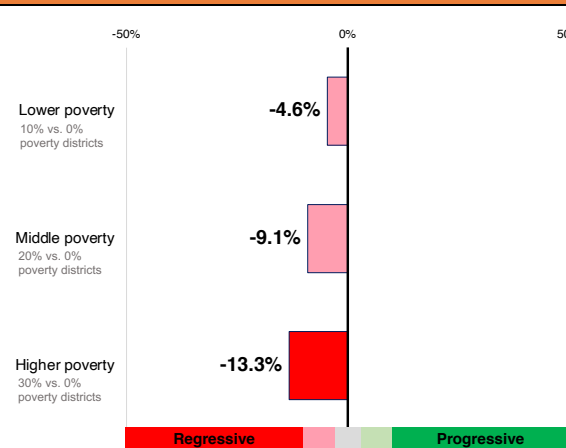


- Adequacy in ME's highest-poverty districts was **roughly similar** between 2009 (0.7%) and 2019 (2.5%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

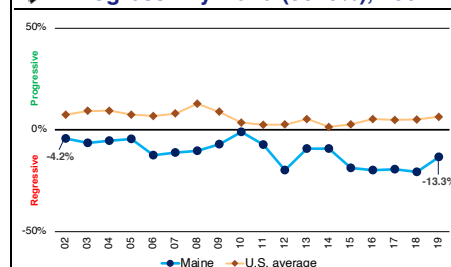
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in ME is **regressive**.
- Higher-poverty (30%) districts receive 13.3% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #37 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- ME's funding was **more regressive** in 2019 (-13.3%) vs. 2002 (-4.2%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## MARYLAND



**Summary:** This 2018-19 profile of Maryland's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Maryland scores 48 out of 100, which ranks 22nd out of the 48 states with possible ratings.

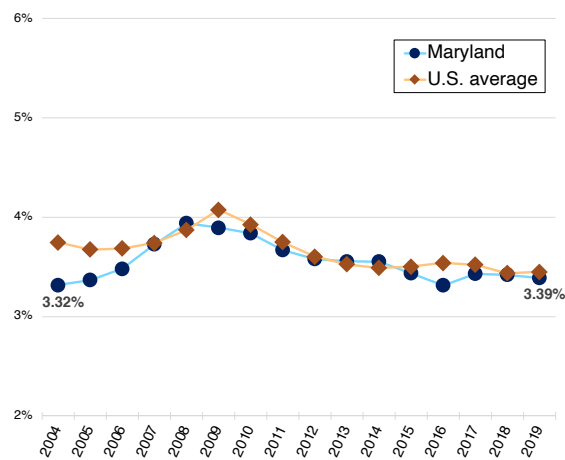
CONTEXTUAL STATS	MD	U.S.
Child (5-17yo) poverty rate (%)	11.9	15.8
Public school coverage (%)	83.1	87.6
Percent revenue from state sources	42.5	47.6
Total enrollment (U.S. rank)	898,800 (20)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Maryland effort	3.39 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in MD was equivalent to 3.39% of the state's economic capacity (GSP).
- This was 0.06 percentage points **lower** than the unweighted national average of 3.45%.
- MD's effort level ranks #27 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.19 percentage points in MD's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

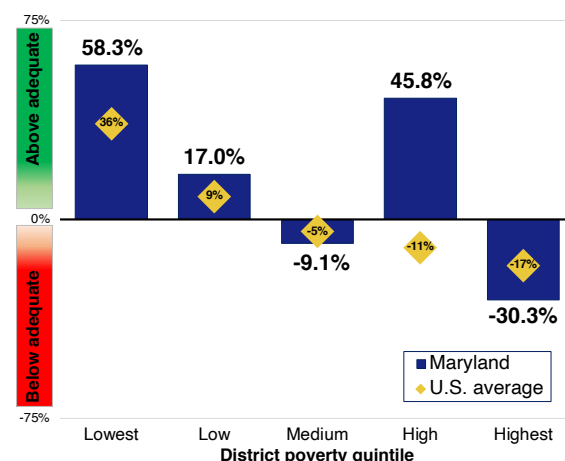
Period	MD	U.S.
2004-2007	0.41	-0.01
2012-2019	-0.19	-0.15
2004-2019	0.07	-0.30

- Effort **increased** during the three years before the recession, going from 3.32% in 2004 to 3.73% in 2007.
- MD's effort was 0.07 percentage points **higher** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

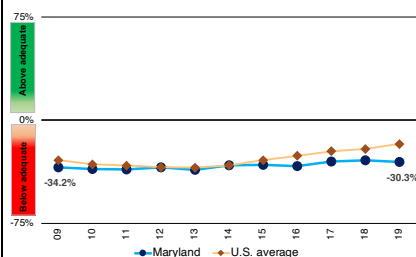
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in MD's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$6,804 PP **lower** than the adequacy target (\$22,438), a difference of -30.3%.
- This ranks #32 in the U.S. (out of 49).
- Across the entire state, 41.7% of MD students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

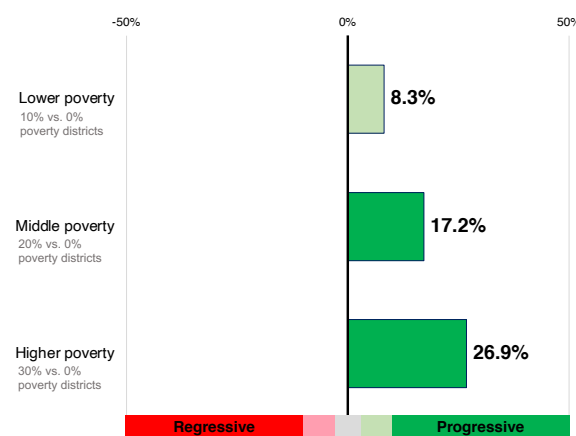


- Adequacy in MD's highest-poverty districts **improved** between 2009 (-34.2%) and 2019 (-30.3%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

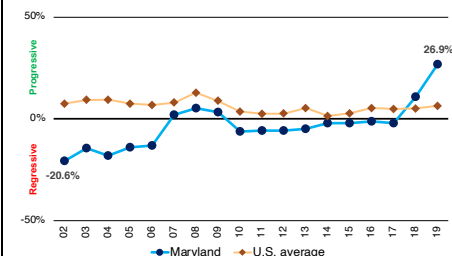
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in MD is **progressive**.
- Higher-poverty (30%) districts receive 26.9% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #8 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- MD's funding was **more progressive** in 2019 (26.9%) vs. 2002 (-20.6%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## MASSACHUSETTS



**Summary:** This 2018-19 profile of Massachusetts's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Massachusetts scores 57 out of 100, which ranks 15th out of the 48 states with possible ratings.

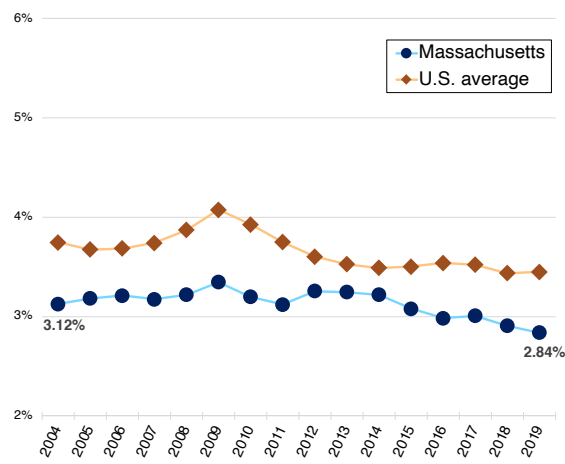
CONTEXTUAL STATS	MA	U.S.
Child (5-17yo) poverty rate (%)	11.5	15.8
Public school coverage (%)	89.5	87.6
Percent revenue from state sources	39.4	47.6
Total enrollment (U.S. rank)	963,100 (17)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Massachusetts effort	2.84 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in MA was equivalent to 2.84% of the state's economic capacity (GSP).
- This was 0.61 percentage points **lower** than the unweighted national average of 3.45%.
- MA's effort level ranks #43 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.42 percentage points in MA's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

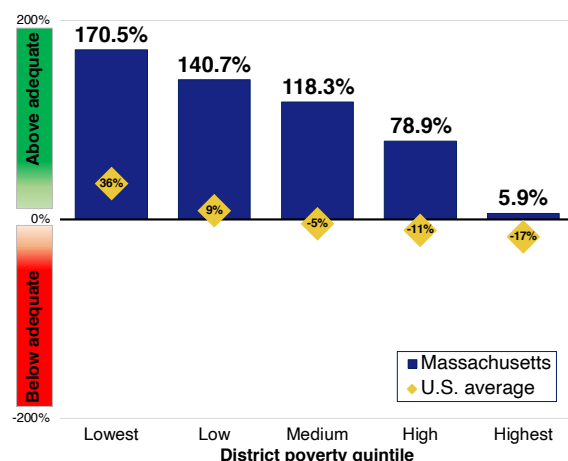
Period	MA	U.S.
2004-2007	0.05	-0.01
2012-2019	-0.42	-0.15
2004-2019	-0.29	-0.30

- Effort **increased** during the three years before the recession, going from 3.12% in 2004 to 3.17% in 2007.
- MA's effort was 0.29 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

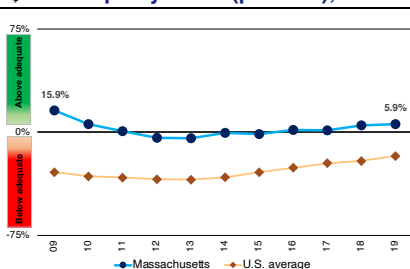
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in MA's highest poverty districts are **above adequate**.
- Spending in these districts is \$997 PP **higher** than the adequacy target (\$16,922), a difference of 5.9%.
- This ranks #10 in the U.S. (out of 49).
- Across the entire state, 14.9% of MA students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

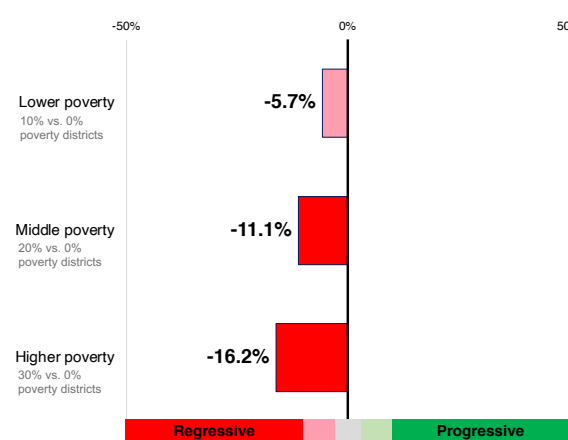


- Adequacy in MA's highest-poverty districts **worsened** between 2009 (15.9%) and 2019 (5.9%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

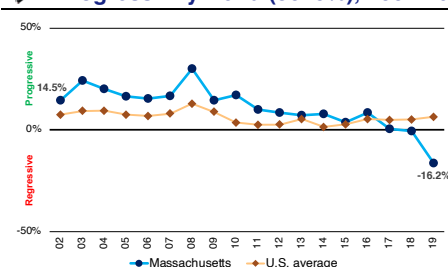
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in MA is **regressive**.
- Higher-poverty (30%) districts receive 16.2% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #42 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- MA's funding was **more regressive** in 2019 (-16.2%) vs. 2002 (14.5%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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- Due to rounding, changes and differences published in this profile may vary slightly from users' manual calculations.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## MICHIGAN



**Summary:** This 2018-19 profile of Michigan's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Michigan scores 33 out of 100, which ranks 32nd out of the 48 states with possible ratings.

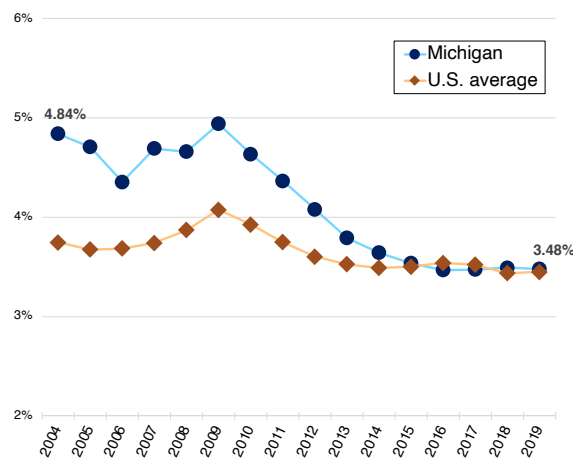
CONTEXTUAL STATS	MI	U.S.
Child (5-17yo) poverty rate (%)	16.3	15.8
Public school coverage (%)	87.6	87.6
Percent revenue from state sources	57.7	47.6
Total enrollment (U.S. rank)	1,499,800 (10)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Michigan effort	3.48 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in MI was equivalent to 3.48% of the state's economic capacity (GSP).
- This was 0.03 percentage points **higher** than the unweighted national average of 3.45%.
- MI's effort level ranks #25 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.60 percentage points in MI's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

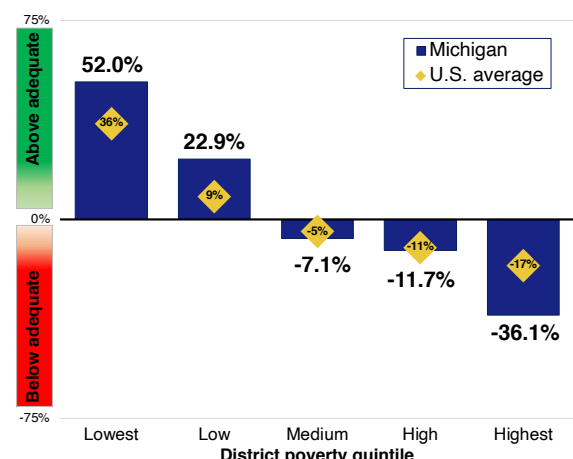
Period	MI	U.S.
2004-2007	-0.15	-0.01
2012-2019	-0.60	-0.15
2004-2019	-1.36	-0.30

- Effort **decreased** during the three years before the recession, going from 4.84% in 2004 to 4.69% in 2007.
- MI's effort was 1.36 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

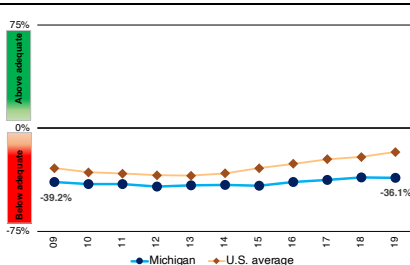
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in MI's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$7,062 PP **lower** than the adequacy target (\$19,573), a difference of -36.1%.
- This ranks #36 in the U.S. (out of 49).
- Across the entire state, 37.2% of MI students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

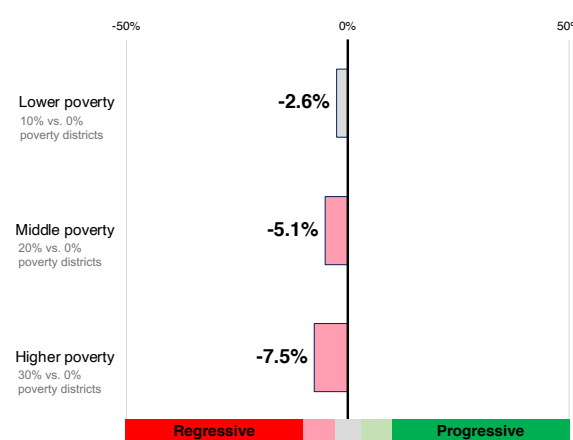


- Adequacy in MI's highest-poverty districts **improved** between 2009 (-39.2%) and 2019 (-36.1%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

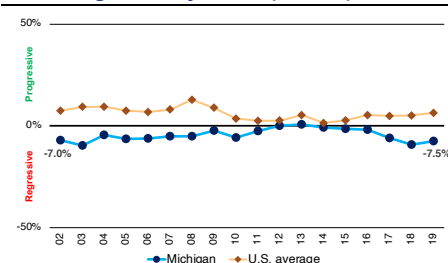
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in MI is **moderately regressive**.
- Higher-poverty (30%) districts receive 7.5% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #35 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- MI's funding was **more regressive** in 2019 (-7.5%) vs. 2002 (-7.0%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](http://www.census.gov/popest/data/totals/income_poverty.html); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](http://www.nces.ed.gov/ipeds/data/ipeds_datacenter/ipeds_datacenter.asp); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](http://nces.ed.gov/ipeds/data/ipeds_datacenter/ipeds_datacenter.asp), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## MINNESOTA



**Summary:** This 2018-19 profile of Minnesota's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Minnesota scores 57 out of 100, which ranks 14th out of the 48 states with possible ratings.

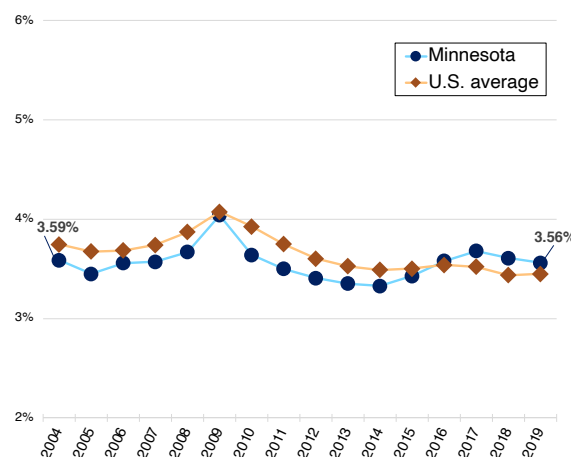
CONTEXTUAL STATS	MN	U.S.
Child (5-17yo) poverty rate (%)	10.4	15.8
Public school coverage (%)	89.2	87.6
Percent revenue from state sources	64.3	47.6
Total enrollment (U.S. rank)	892,200 (21)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Minnesota effort	3.56 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in MN was equivalent to 3.56% of the state's economic capacity (GSP).
- This was 0.11 percentage points **higher** than the unweighted national average of 3.45%.
- MN's effort level ranks #21 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was an **increase** of 0.15 percentage points in MN's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

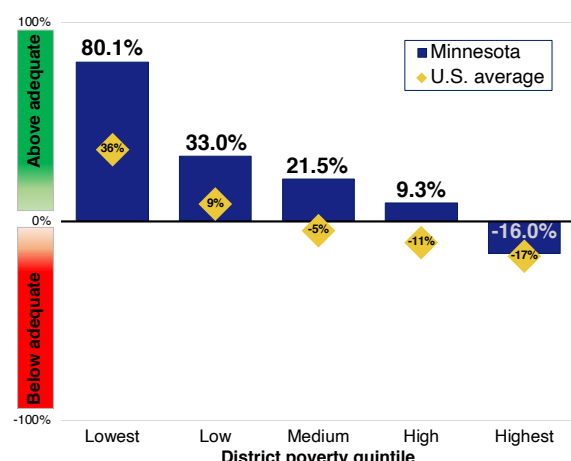
Period	MN	U.S.
2004-2007	-0.02	-0.01
2012-2019	0.15	-0.15
2004-2019	-0.03	-0.30

- Effort **decreased** during the three years before the recession, going from 3.59% in 2004 to 3.57% in 2007.
- MN's effort was 0.03 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

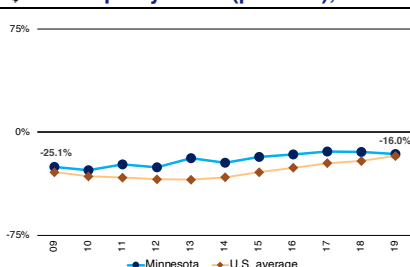
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in MN's highest poverty districts are **below adequate**.
- Spending in these districts is \$2,792 PP **lower** than the adequacy target (\$17,472), a difference of -16.0%.
- This ranks #22 in the U.S. (out of 49).
- Across the entire state, 17.7% of MN students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

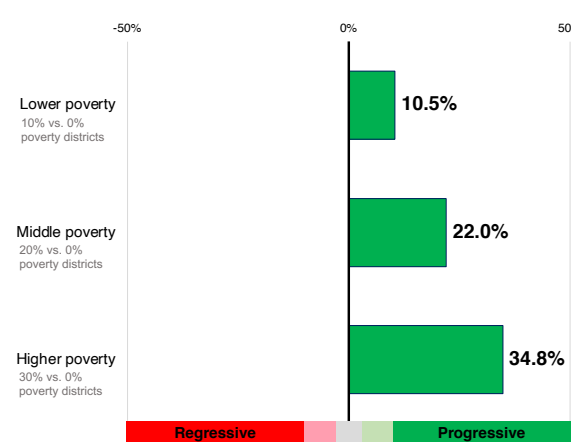


- Adequacy in MN's highest-poverty districts **improved** between 2009 (-25.1%) and 2019 (-16.0%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

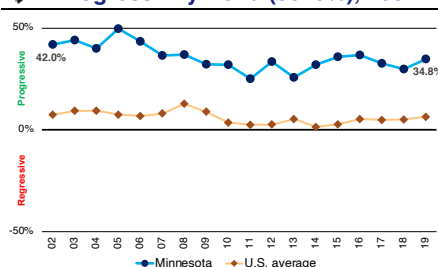
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in MN is **progressive**.
- Higher-poverty (30%) districts receive 34.8% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #6 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- MN's funding was **more regressive** in 2019 (34.8%) vs. 2002 (42.0%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/collegenorms/); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/collegenorms/); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/collegenorms/), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## MISSISSIPPI



**Summary:** This 2018-19 profile of Mississippi's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Mississippi scores 25 out of 100, which ranks 40th out of the 48 states with possible ratings.

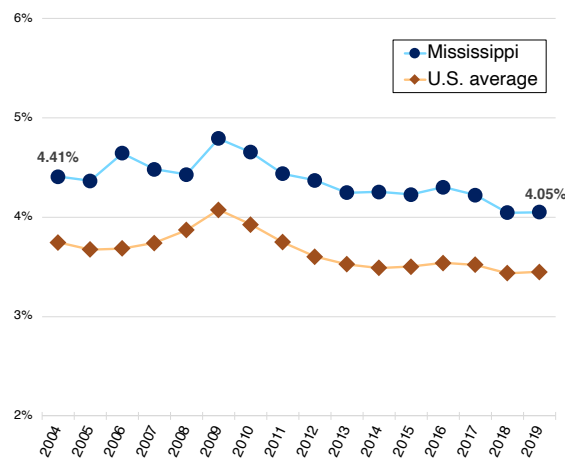
CONTEXTUAL STATS	MS	U.S.
Child (5-17yo) poverty rate (%)	26.4	15.8
Public school coverage (%)	85.6	87.6
Percent revenue from state sources	49.5	47.6
Total enrollment (U.S. rank)	471,400 (35)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Mississippi effort	4.05 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in MS was equivalent to 4.05% of the state's economic capacity (GSP).
- This was 0.60 percentage points **higher** than the unweighted national average of 3.45%.
- MS's effort level ranks #8 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.32 percentage points in MS's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

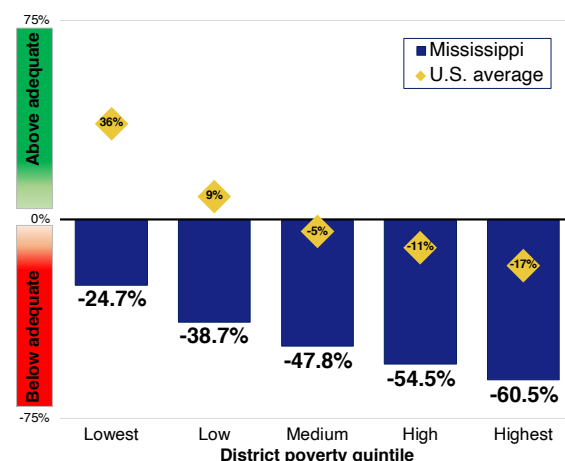
Period	MS	U.S.
2004-2007	0.07	-0.01
2012-2019	-0.32	-0.15
2004-2019	-0.36	-0.30

- Effort **increased** during the three years before the recession, going from 4.41% in 2004 to 4.48% in 2007.
- MS's effort was 0.36 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

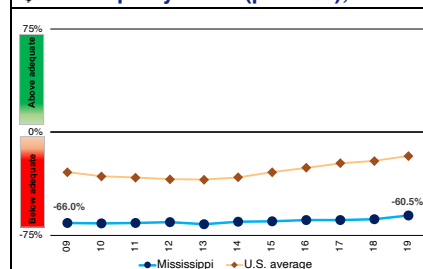
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in MS's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$16,009 PP **lower** than the adequacy target (\$26,440), a difference of -60.5%.
- This ranks #49 in the U.S. (out of 49).
- Across the entire state, 99.3% of MS students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

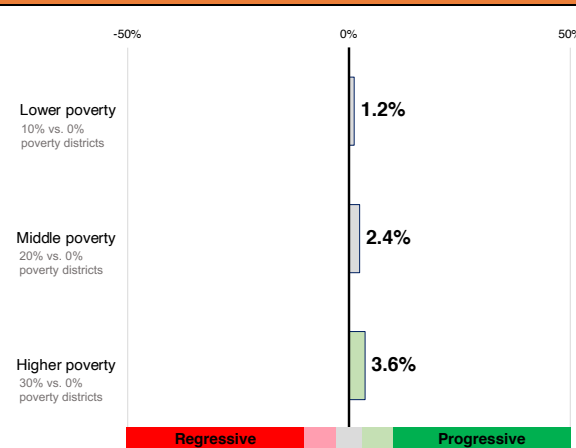


- Adequacy in MS's highest-poverty districts **improved** between 2009 (-66.0%) and 2019 (-60.5%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

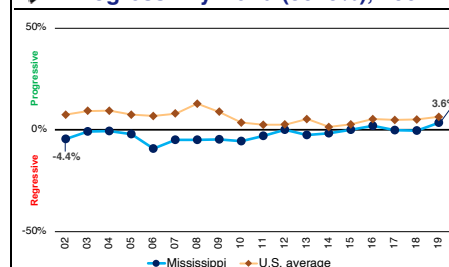
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in MS is **moderately progressive**.
- Higher-poverty (30%) districts receive 3.6% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #25 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- MS's funding was **more progressive** in 2019 (3.6%) vs. 2002 (-4.4%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## MISSOURI



**Summary:** This 2018-19 profile of Missouri's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Missouri scores 27 out of 100, which ranks 38th out of the 48 states with possible ratings.

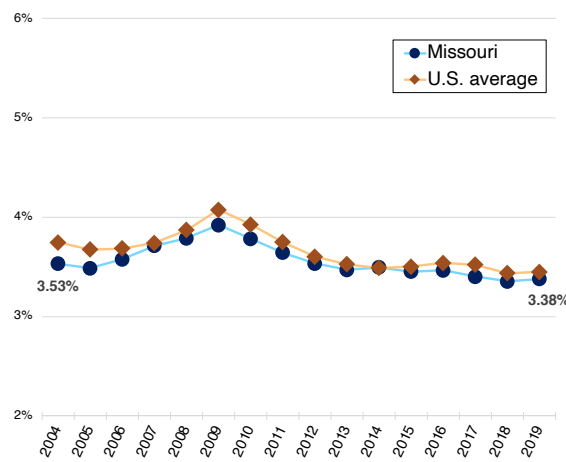
CONTEXTUAL STATS	MO	U.S.
Child (5-17yo) poverty rate (%)	15.9	15.8
Public school coverage (%)	83.9	87.6
Percent revenue from state sources	41.8	47.6
Total enrollment (U.S. rank)	913,100 (18)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Missouri effort	3.38 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in MO was equivalent to 3.38% of the state's economic capacity (GSP).
- This was 0.07 percentage points **lower** than the unweighted national average of 3.45%.
- MO's effort level ranks #28 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.16 percentage points in MO's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

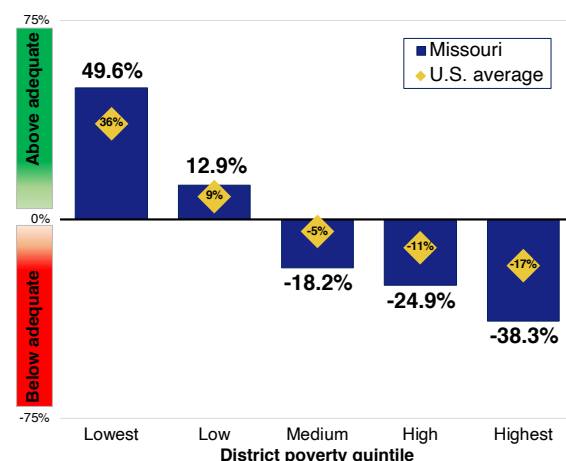
Period	MO	U.S.
2004-2007	0.18	-0.01
2012-2019	-0.16	-0.15
2004-2019	-0.15	-0.30

- Effort **increased** during the three years before the recession, going from 3.53% in 2004 to 3.71% in 2007.
- MO's effort was 0.15 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

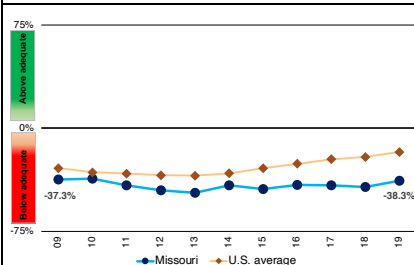
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in MO's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$7,394 PP **lower** than the adequacy target (\$19,323), a difference of -38.3%.
- This ranks #40 in the U.S. (out of 49).
- Across the entire state, 44.7% of MO students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

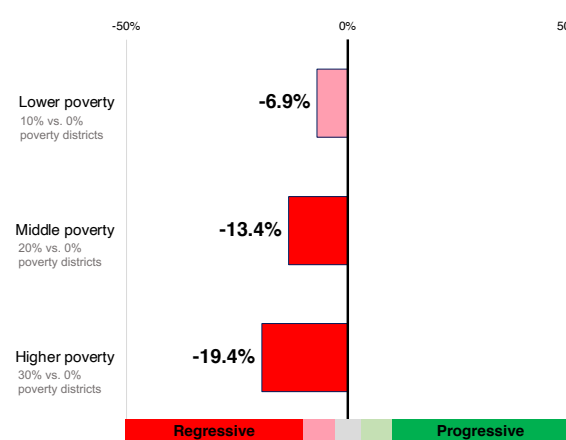


- Adequacy in MO's highest-poverty districts was **roughly similar** between 2009 (-37.3%) and 2019 (-38.3%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

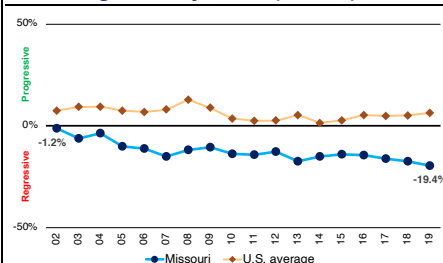
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in MO is **regressive**.
- Higher-poverty (30%) districts receive 19.4% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #44 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- MO's funding was **more regressive** in 2019 (-19.4%) vs. 2002 (-1.2%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/collegenorms/); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/collegenorms/); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/collegenorms/), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## MONTANA



**Summary:** This 2018-19 profile of Montana's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Montana scores 57 out of 100, which ranks 16th out of the 48 states with possible ratings.

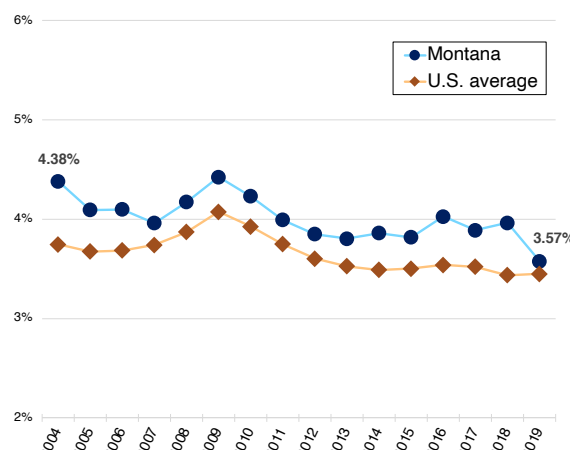
CONTEXTUAL STATS	MT	U.S.
Child (5-17yo) poverty rate (%)	14.2	15.8
Public school coverage (%)	85.4	87.6
Percent revenue from state sources	42.6	47.6
Total enrollment (U.S. rank)	150,400 (43)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Montana effort	3.57 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in MT was equivalent to 3.57% of the state's economic capacity (GSP).
- This was 0.13 percentage points **higher** than the unweighted national average of 3.45%.
- MT's effort level ranks #20 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.27 percentage points in MT's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

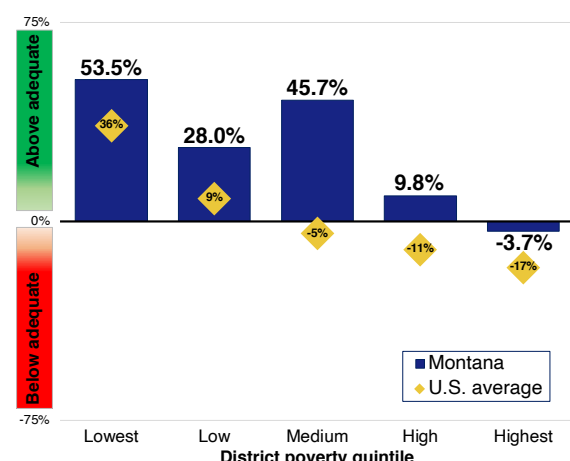
Period	MT	U.S.
2004-2007	-0.42	-0.01
2012-2019	-0.27	-0.15
2004-2019	-0.81	-0.30

- Effort **decreased** during the three years before the recession, going from 4.38% in 2004 to 3.96% in 2007.
- MT's effort was 0.81 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

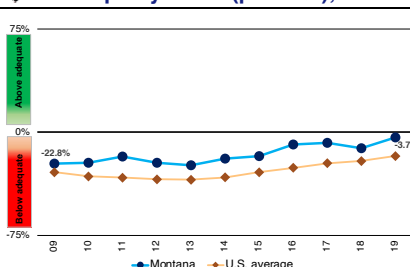
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in MT's highest poverty districts are **below adequate**.
- Spending in these districts is \$591 PP **lower** than the adequacy target (\$16,028), a difference of -3.7%.
- This ranks #13 in the U.S. (out of 49).
- Across the entire state, 19.2% of MT students attend districts with spending below estimated adequate levels.



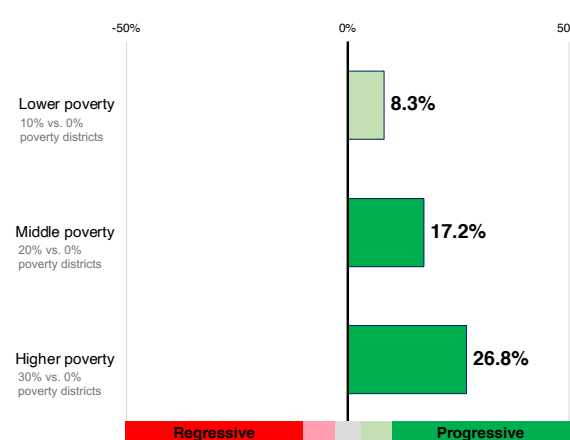
#### Adequacy trend (pov. Q5), 2009-19



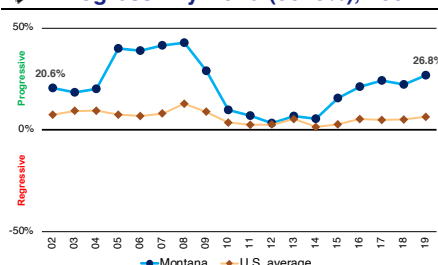
- Adequacy in MT's highest-poverty districts **improved** between 2009 (-22.8%) and 2019 (-3.7%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

### PROGRESSIVITY

- Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.
- School funding in MT is **progressive**.
  - Higher-poverty (30%) districts receive 26.8% **more** revenue than zero-poverty districts.
  - This level of progressivity ranks #9 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- MT's funding was **more progressive** in 2019 (26.8%) vs. 2002 (20.6%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/nces/ipeds/datafiles/2019/ipeds2019.csv); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/nces/ipeds/datafiles/2019/ipeds2019.csv); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/nces/ipeds/datafiles/2019/ipeds2019.csv), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## NEBRASKA



**Summary:** This 2018-19 profile of Nebraska's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Nebraska scores 81 out of 100, which ranks 6th out of the 48 states with possible ratings.

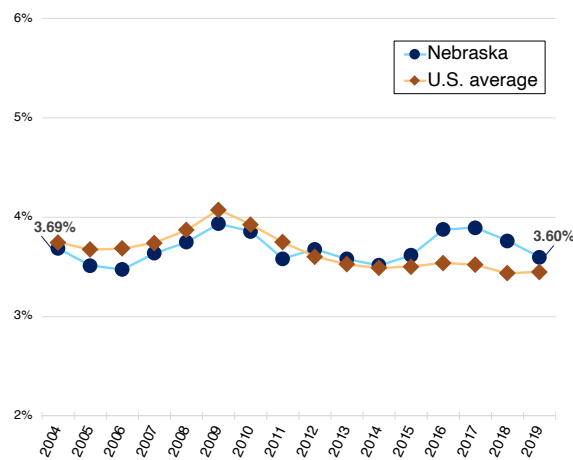
CONTEXTUAL STATS	NE	U.S.
Child (5-17yo) poverty rate (%)	10.3	15.8
Public school coverage (%)	84.1	87.6
Percent revenue from state sources	32.3	47.6
Total enrollment (U.S. rank)	325,900 (37)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Nebraska effort	3.60 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in NE was equivalent to 3.60% of the state's economic capacity (GSP).
- This was 0.15 percentage points **higher** than the unweighted national average of 3.45%.
- NE's effort level ranks #17 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.08 percentage points in NE's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

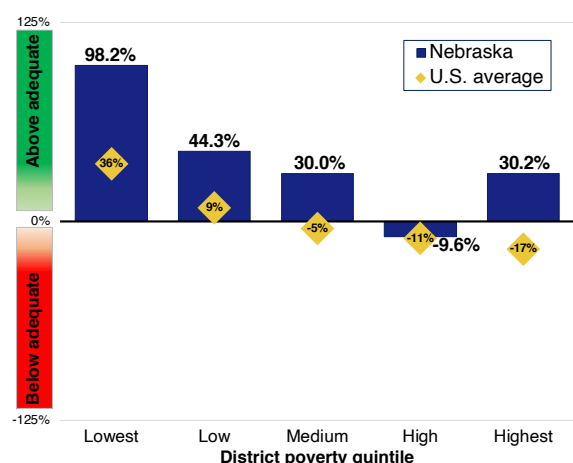
Period	NE	U.S.
2004-2007	-0.05	-0.01
2012-2019	-0.08	-0.15
2004-2019	-0.09	-0.30

- Effort **decreased** during the three years before the recession, going from 3.69% in 2004 to 3.64% in 2007.
- NE's effort was 0.09 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

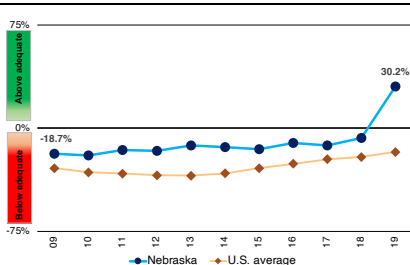
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in NE's highest poverty districts are **above adequate**.
- Spending in these districts is \$3,921 PP **higher** than the adequacy target (\$12,992), a difference of 30.2%.
- This ranks #4 in the U.S. (out of 49).
- Across the entire state, 19.1% of NE students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

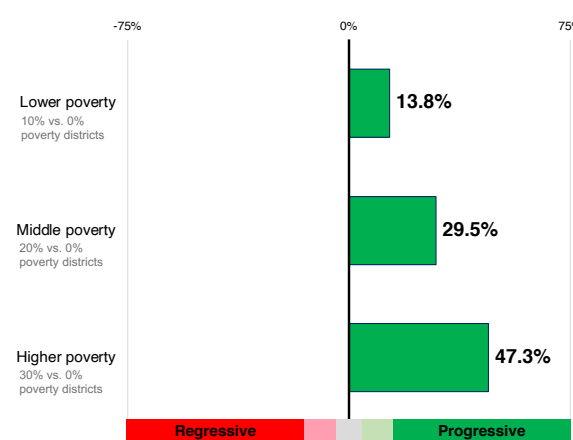


- Adequacy in NE's highest-poverty districts **improved** between 2009 (-18.7%) and 2019 (30.2%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

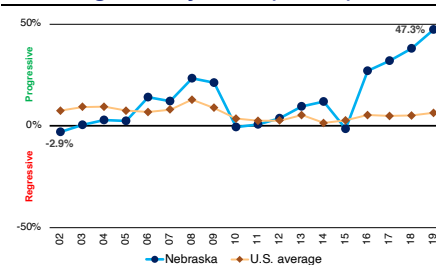
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in NE is **progressive**.
- Higher-poverty (30%) districts receive 47.3% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #5 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- NE's funding was **more progressive** in 2019 (47.3%) vs. 2002 (-2.9%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## NEVADA



**Summary:** This 2018-19 profile of Nevada's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Nevada scores 20 out of 100, which ranks 45th out of the 48 states with possible ratings.

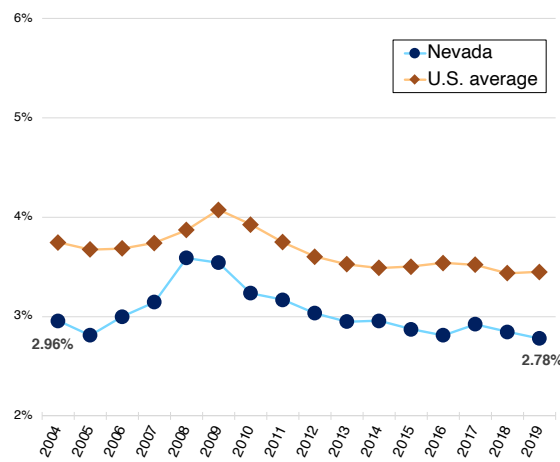
CONTEXTUAL STATS	NV	U.S.
Child (5-17yo) poverty rate (%)	16.5	15.8
Public school coverage (%)	90.2	87.6
Percent revenue from state sources	62.1	47.6
Total enrollment (U.S. rank)	492,200 (34)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Nevada effort	2.78 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in NV was equivalent to 2.78% of the state's economic capacity (GSP).
- This was 0.67 percentage points **lower** than the unweighted national average of 3.45%.
- NV's effort level ranks #45 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.26 percentage points in NV's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

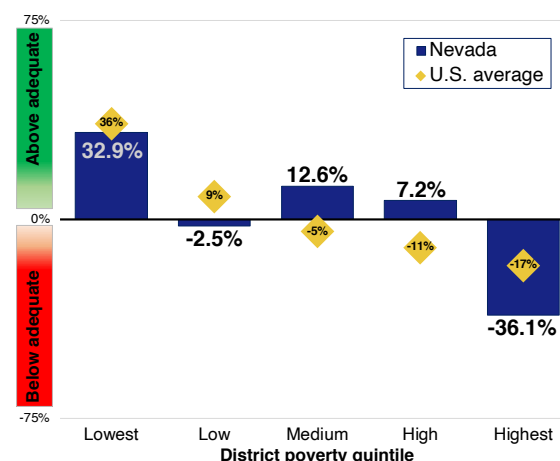
Period	NV	U.S.
2004-2007	0.19	-0.01
2012-2019	-0.26	-0.15
2004-2019	-0.18	-0.30

- Effort **increased** during the three years before the recession, going from 2.96% in 2004 to 3.14% in 2007.
- NV's effort was 0.18 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

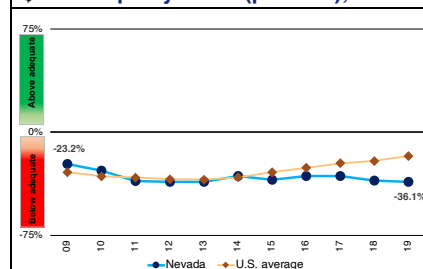
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in NV's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$5,102 PP **lower** than the adequacy target (\$14,114), a difference of -36.1%.
- This ranks #37 in the U.S. (out of 49).
- Across the entire state, 88.9% of NV students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

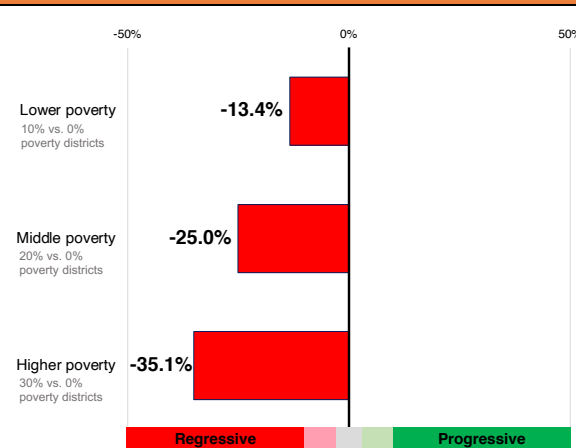


- Adequacy in NV's highest-poverty districts **worsened** between 2009 (-23.2%) and 2019 (-36.1%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

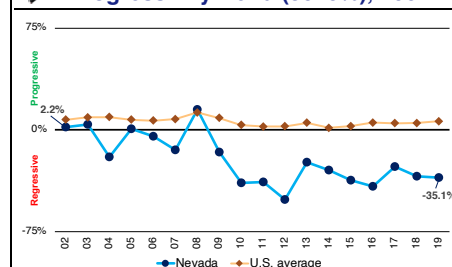
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in NV is **regressive**.
- Higher-poverty (30%) districts receive 35.1% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #49 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- NV's funding was **more regressive** in 2019 (-35.1%) vs. 2002 (2.2%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## General

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  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## NEW HAMPSHIRE



**Summary:** This 2018-19 profile of New Hampshire's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), New Hampshire scores 84 out of 100, which ranks 5th out of the 48 states with possible ratings.

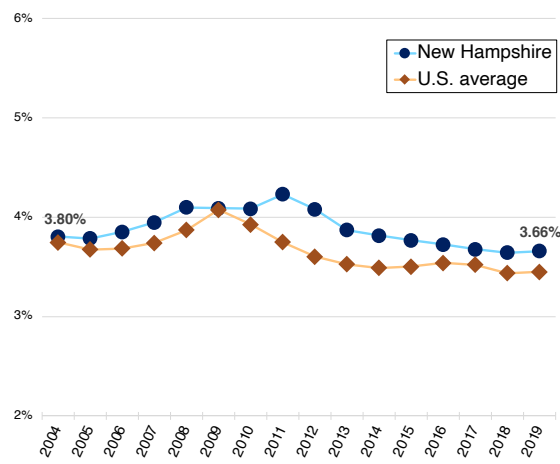
CONTEXTUAL STATS	NH	U.S.
Child (5-17yo) poverty rate (%)	7.5	15.8
Public school coverage (%)	87.8	87.6
Percent revenue from state sources	30.7	47.6
Total enrollment (U.S. rank)	177,900 (42)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

New Hampshire effort	3.66 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in NH was equivalent to 3.66% of the state's economic capacity (GSP).
- This was 0.21 percentage points **higher** than the unweighted national average of 3.45%.
- NH's effort level ranks #14 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.42 percentage points in NH's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

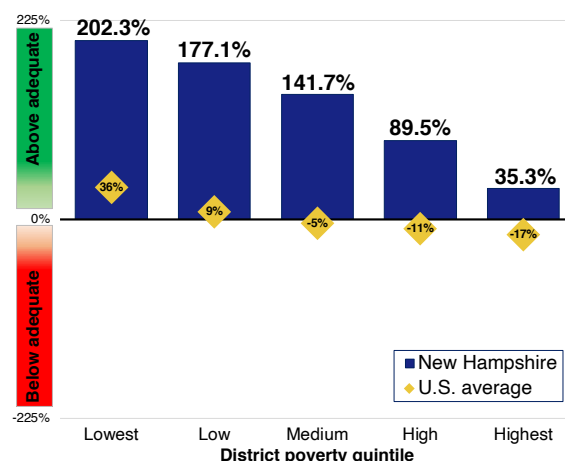
Period	NH	U.S.
2004-2007	0.14	-0.01
2012-2019	-0.42	-0.15
2004-2019	-0.15	-0.30

- Effort **increased** during the three years before the recession, going from 3.80% in 2004 to 3.95% in 2007.
- NH's effort was 0.15 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

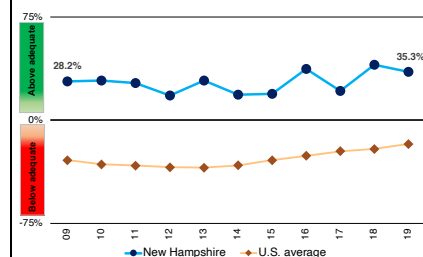
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in NH's highest poverty districts are **above adequate**.
- Spending in these districts is \$4,206 PP **higher** than the adequacy target (\$11,929), a difference of 35.3%.
- This ranks #3 in the U.S. (out of 49).
- Across the entire state, 0.1% of NH students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

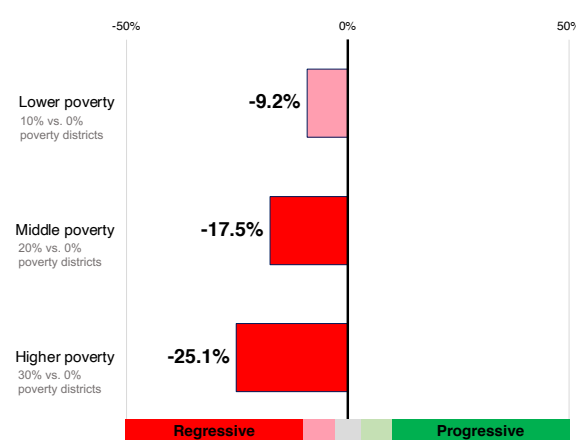


- Adequacy in NH's highest-poverty districts **improved** between 2009 (28.2%) and 2019 (35.3%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

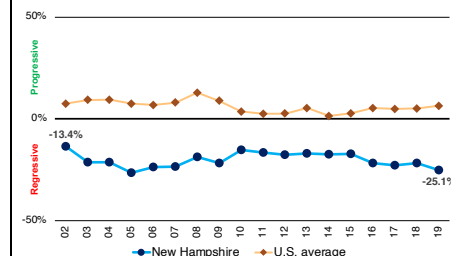
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in NH is **regressive**.
- Higher-poverty (30%) districts receive 25.1% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #47 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- NH's funding was **more regressive** in 2019 (-25.1%) vs. 2002 (-13.4%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## NEW JERSEY



**Summary:** This 2018-19 profile of New Jersey's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), New Jersey scores 88 out of 100, which ranks 4th out of the 48 states with possible ratings.

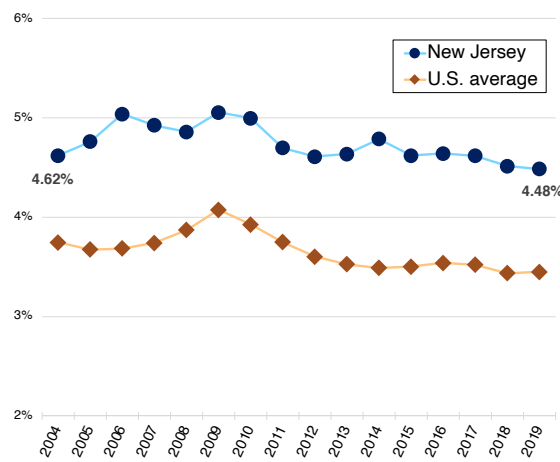
CONTEXTUAL STATS	NJ	U.S.
Child (5-17yo) poverty rate (%)	11.5	15.8
Public school coverage (%)	87.7	87.6
Percent revenue from state sources	42.6	47.6
Total enrollment (U.S. rank)	1,402,200 (11)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

New Jersey effort	4.48 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in NJ was equivalent to 4.48% of the state's economic capacity (GSP).
- This was 1.03 percentage points **higher** than the unweighted national average of 3.45%.
- NJ's effort level ranks #1 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.12 percentage points in NJ's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

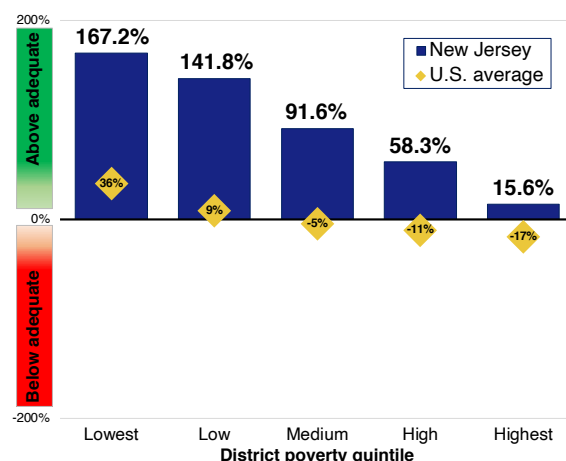
Period	NJ	U.S.
2004-2007	0.31	-0.01
2012-2019	-0.12	-0.15
2004-2019	-0.14	-0.30

- Effort **increased** during the three years before the recession, going from 4.62% in 2004 to 4.92% in 2007.
- NJ's effort was 0.14 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

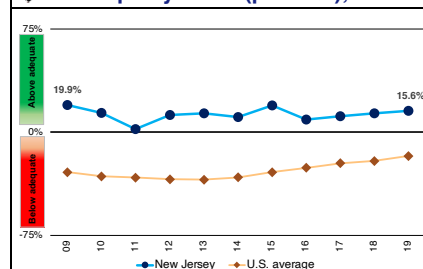
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in NJ's highest poverty districts are **above adequate**.
- Spending in these districts is \$2,656 PP **higher** than the adequacy target (\$17,018), a difference of 15.6%.
- This ranks #6 in the U.S. (out of 49).
- Across the entire state, 5.1% of NJ students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

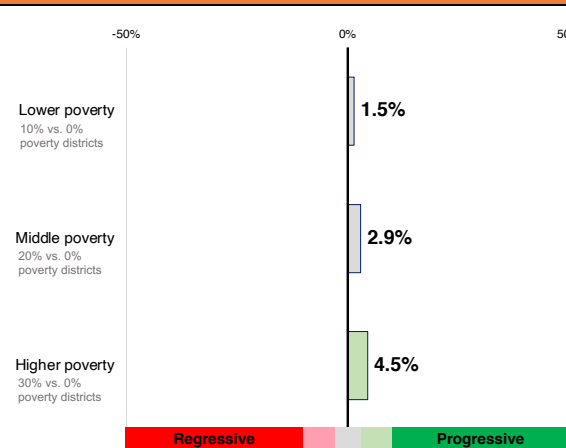


- Adequacy in NJ's highest-poverty districts **worsened** between 2009 (19.9%) and 2019 (15.6%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

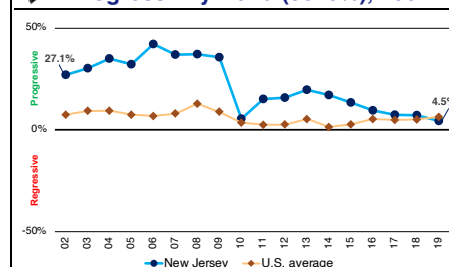
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in NJ is **moderately progressive**.
- Higher-poverty (30%) districts receive 4.5% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #22 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- NJ's funding was **more regressive** in 2019 (4.5%) vs. 2002 (27.1%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/nces/ipeds/datafiles/2019/SAIPE); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/nces/ipeds/datafiles/2019/SAIPE); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/nces/ipeds/datafiles/2019/SAIPE), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## NEW MEXICO



**Summary:** This 2018-19 profile of New Mexico's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), New Mexico scores 34 out of 100, which ranks 30th out of the 48 states with possible ratings.

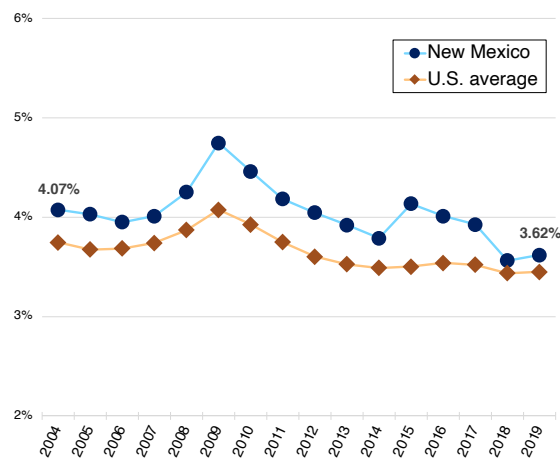
CONTEXTUAL STATS	NM	U.S.
Child (5-17yo) poverty rate (%)	22.4	15.8
Public school coverage (%)	89.6	87.6
Percent revenue from state sources	67.0	47.6
Total enrollment (U.S. rank)	330,600 (36)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

New Mexico effort	3.62 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in NM was equivalent to 3.62% of the state's economic capacity (GSP).
- This was 0.17 percentage points **higher** than the unweighted national average of 3.45%.
- NM's effort level ranks #16 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.42 percentage points in NM's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

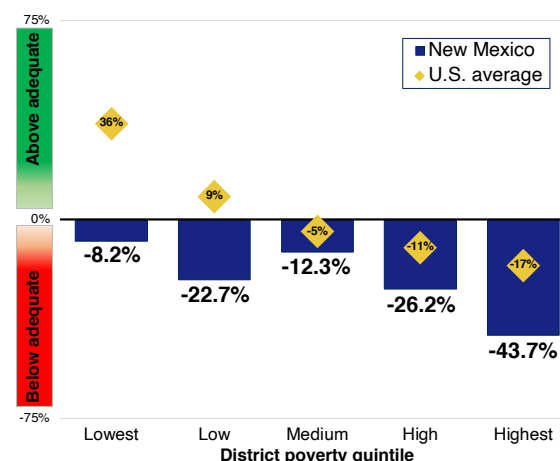
Period	NM	U.S.
2004-2007	-0.06	-0.01
2012-2019	-0.42	-0.15
2004-2019	-0.45	-0.30

- Effort **decreased** during the three years before the recession, going from 4.07% in 2004 to 4.01% in 2007.
- NM's effort was 0.45 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

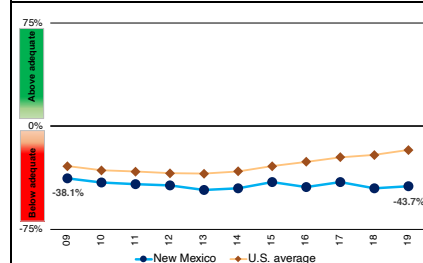
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in NM's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$9,013 PP **lower** than the adequacy target (\$20,622), a difference of -43.7%.
- This ranks #43 in the U.S. (out of 49).
- Across the entire state, 93.9% of NM students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

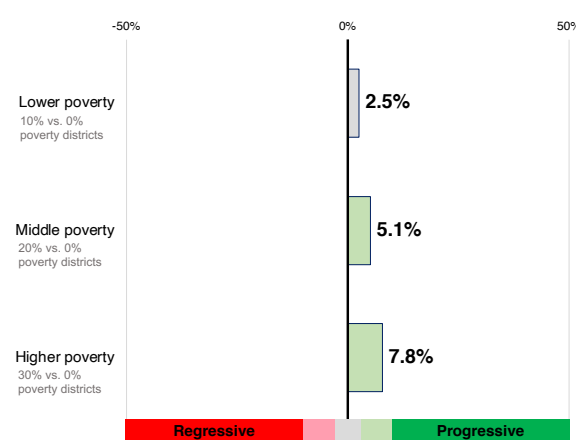


- Adequacy in NM's highest-poverty districts **worsened** between 2009 (-38.1%) and 2019 (-43.7%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

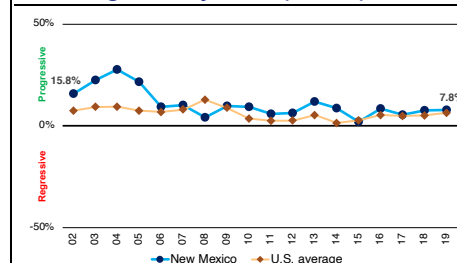
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in NM is **moderately progressive**.
- Higher-poverty (30%) districts receive 7.8% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #16 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- NM's funding was **more regressive** in 2019 (7.8%) vs. 2002 (15.8%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/ipedsreports/2019/ipeds2019_smallareaincomeandpovertyestimates.aspx); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/ipedsreports/2019/ipeds2019_smallareaincomeandpovertyestimates.aspx); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/ipedsreports/2019/ipeds2019_smallareaincomeandpovertyestimates.aspx), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## NEW YORK



**Summary:** This 2018-19 profile of New York's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), New York scores 92 out of 100, which ranks 3rd out of the 48 states with possible ratings.

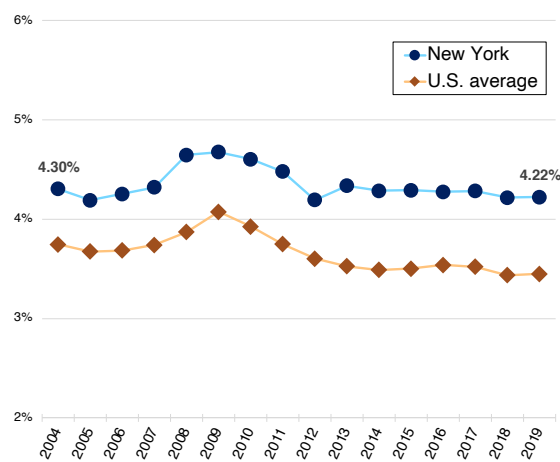
CONTEXTUAL STATS	NY	U.S.
Child (5-17yo) poverty rate (%)	17.2	15.8
Public school coverage (%)	83.4	87.6
Percent revenue from state sources	39.7	47.6
Total enrollment (U.S. rank)	2,718,900 (4)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

New York effort	4.22 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in NY was equivalent to 4.22% of the state's economic capacity (GSP).
- This was 0.77 percentage points **higher** than the unweighted national average of 3.45%.
- NY's effort level ranks #5 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was an **increase** of 0.03 percentage points in NY's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

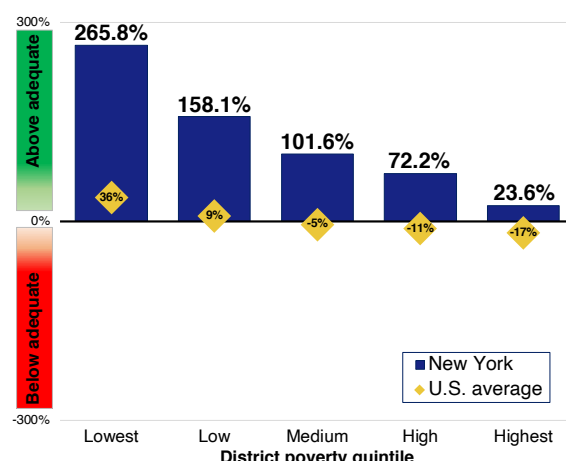
Period	NY	U.S.
2004-2007	0.02	-0.01
2012-2019	0.03	-0.15
2004-2019	-0.08	-0.30

- Effort **increased** during the three years before the recession, going from 4.30% in 2004 to 4.32% in 2007.
- NY's effort was 0.08 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

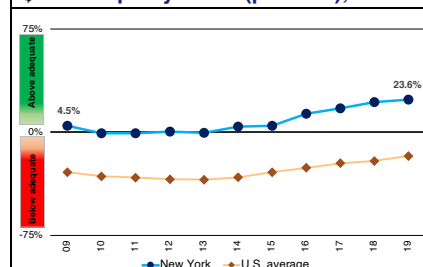
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in NY's highest poverty districts are **above adequate**.
- Spending in these districts is \$5,084 PP **higher** than the adequacy target (\$21,561), a difference of 23.6%.
- This ranks #5 in the U.S. (out of 49).
- Across the entire state, 3.7% of NY students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

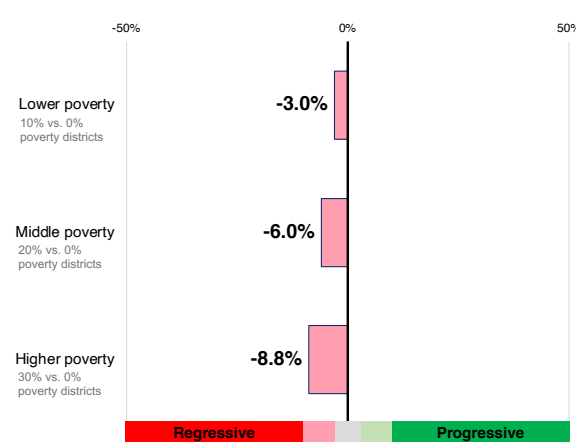


- Adequacy in NY's highest-poverty districts **improved** between 2009 (4.5%) and 2019 (23.6%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

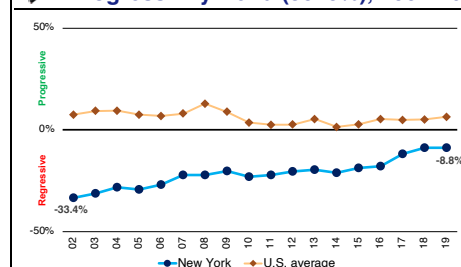
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in NY is **moderately regressive**.
- Higher-poverty (30%) districts receive 8.8% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #36 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- NY's funding was **less regressive** in 2019 (-8.8%) vs. 2002 (-33.4%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## NORTH CAROLINA



**Summary:** This 2018-19 profile of North Carolina's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), North Carolina scores 18 out of 100, which ranks 46th out of the 48 states with possible ratings.

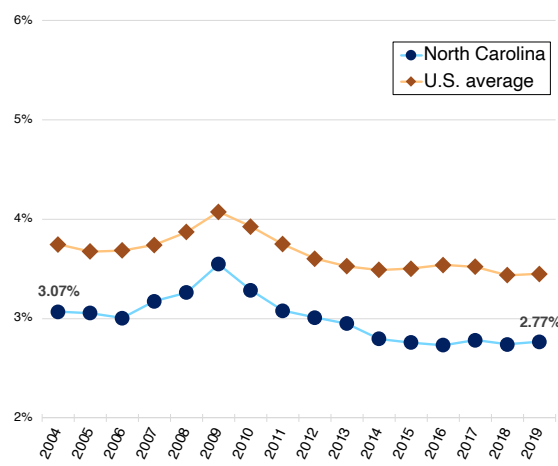
CONTEXTUAL STATS	NC	U.S.
Child (5-17yo) poverty rate (%)	18.1	15.8
Public school coverage (%)	86.9	87.6
Percent revenue from state sources	61.7	47.6
Total enrollment (U.S. rank)	1,550,400 (9)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

North Carolina effort	2.77 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in NC was equivalent to 2.77% of the state's economic capacity (GSP).
- This was 0.68 percentage points **lower** than the unweighted national average of 3.45%.
- NC's effort level ranks #46 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.24 percentage points in NC's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

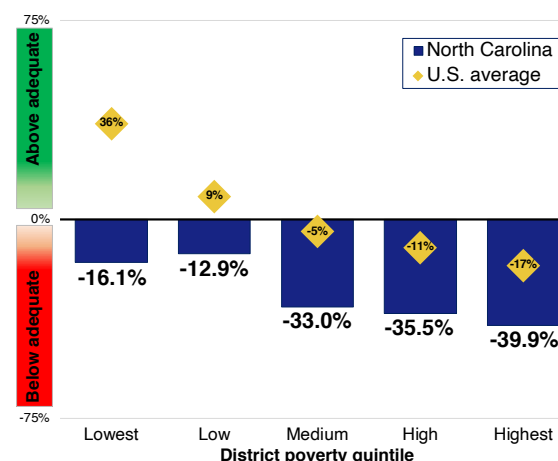
Period	NC	U.S.
2004-2007	0.11	-0.01
2012-2019	-0.24	-0.15
2004-2019	-0.30	-0.30

- Effort **increased** during the three years before the recession, going from 3.07% in 2004 to 3.17% in 2007.
- NC's effort was 0.30 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

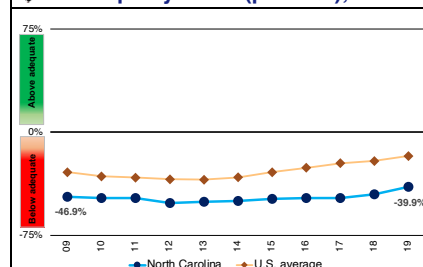
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in NC's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$7,017 PP **lower** than the adequacy target (\$17,589), a difference of -39.9%.
- This ranks #42 in the U.S. (out of 49).
- Across the entire state, 84.4% of NC students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

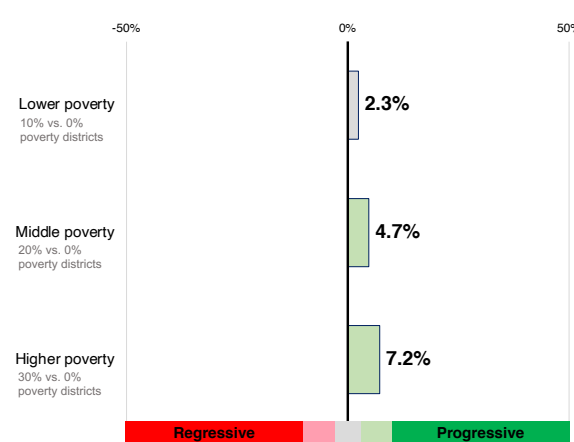


- Adequacy in NC's highest-poverty districts **improved** between 2009 (-46.9%) and 2019 (-39.9%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

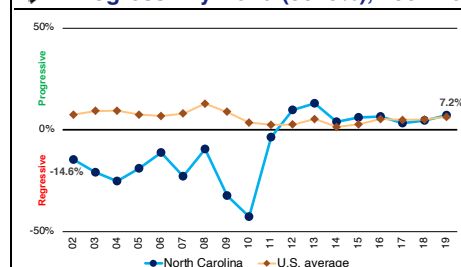
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in NC is **moderately progressive**.
- Higher-poverty (30%) districts receive 7.2% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #18 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- NC's funding was **more progressive** in 2019 (7.2%) vs. 2002 (-14.6%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/nces/ipeds/datacenter/saipe/); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/nces/ipeds/datacenter/saipe/); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/nces/ipeds/datacenter/saipe/), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## NORTH DAKOTA



**Summary:** This 2018-19 profile of North Dakota's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), North Dakota scores 70 out of 100, which ranks 10th out of the 48 states with possible ratings.

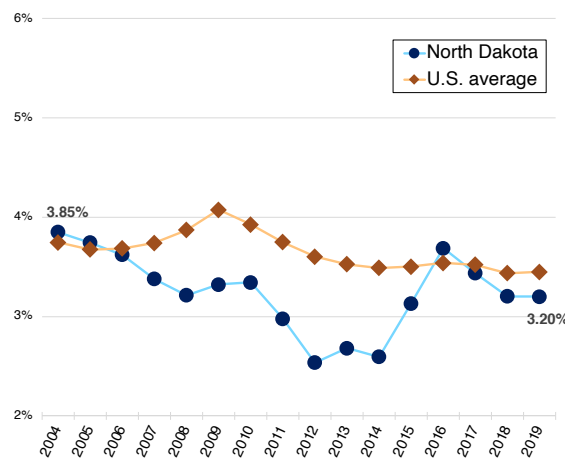
CONTEXTUAL STATS	ND	U.S.
Child (5-17yo) poverty rate (%)	10.2	15.8
Public school coverage (%)	88.0	87.6
Percent revenue from state sources	54.7	47.6
Total enrollment (U.S. rank)	111,100 (48)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

North Dakota effort	3.20 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in ND was equivalent to 3.20% of the state's economic capacity (GSP).
- This was 0.25 percentage points **lower** than the unweighted national average of 3.45%.
- ND's effort level ranks #34 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was an **increase** of 0.66 percentage points in ND's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

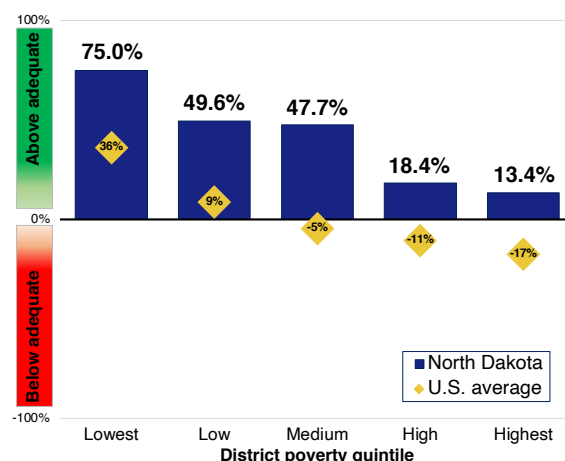
Period	ND	U.S.
2004-2007	-0.47	-0.01
2012-2019	0.66	-0.15
2004-2019	-0.65	-0.30

- Effort **decreased** during the three years before the recession, going from 3.85% in 2004 to 3.38% in 2007.
- ND's effort was 0.65 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

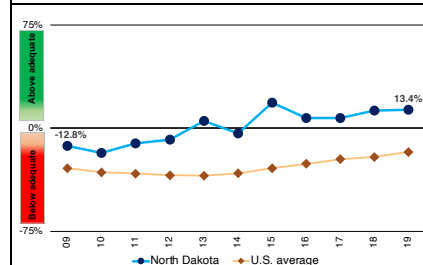
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in ND's highest poverty districts are **above adequate**.
- Spending in these districts is \$2,048 PP **higher** than the adequacy target (\$15,337), a difference of 13.4%.
- This ranks #8 in the U.S. (out of 49).
- Across the entire state, 4.7% of ND students attend districts with spending below estimated adequate levels.



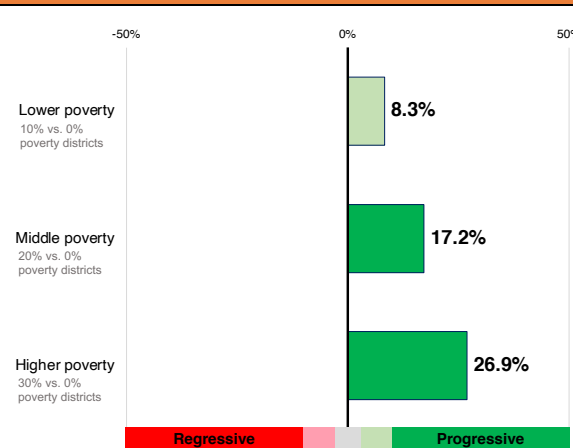
#### Adequacy trend (pov. Q5), 2009-19



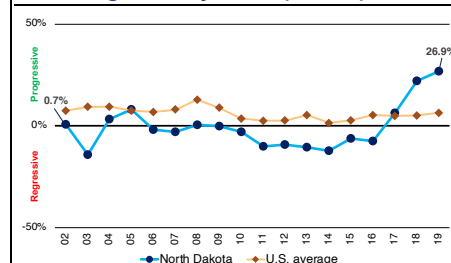
- Adequacy in ND's highest-poverty districts **improved** between 2009 (-12.8%) and 2019 (13.4%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

### PROGRESSIVITY

- Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.
- School funding in ND is **progressive**.
  - Higher-poverty (30%) districts receive 26.9% **more** revenue than zero-poverty districts.
  - This level of progressivity ranks #7 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- ND's funding was **more progressive** in 2019 (26.9%) vs. 2002 (0.7%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/2019/ipeds_datacenter/data/ipeds_datacenter_data/ipeds_datacenter_data.html); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/2019/ipeds_datacenter/data/ipeds_datacenter_data/ipeds_datacenter_data.html); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/2019/ipeds_datacenter/data/ipeds_datacenter_data/ipeds_datacenter_data.html), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## OHIO



**Summary:** This 2018-19 profile of Ohio's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Ohio scores 54 out of 100, which ranks 19th out of the 48 states with possible ratings.

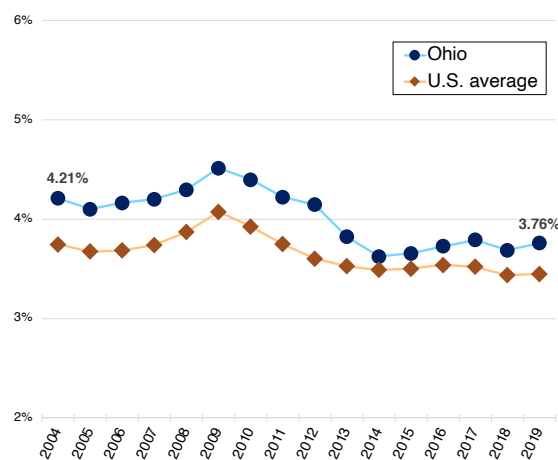
CONTEXTUAL STATS	OH	U.S.
Child (5-17yo) poverty rate (%)	16.6	15.8
Public school coverage (%)	84.0	87.6
Percent revenue from state sources	39.3	47.6
Total enrollment (U.S. rank)	1,690,900 (8)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Ohio effort	3.76 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in OH was equivalent to 3.76% of the state's economic capacity (GSP).
- This was 0.31 percentage points **higher** than the unweighted national average of 3.45%.
- OH's effort level ranks #13 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.39 percentage points in OH's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

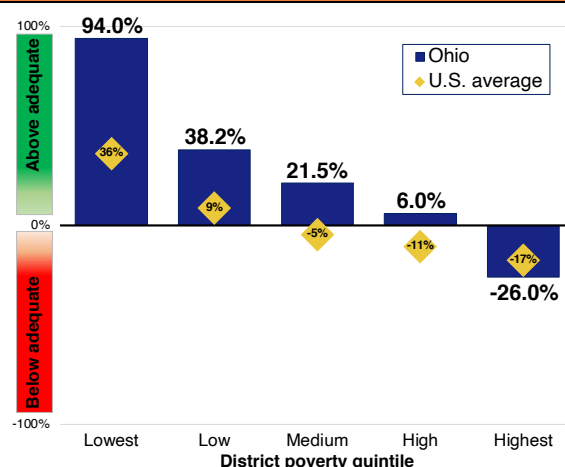
Period	OH	U.S.
2004-2007	-0.01	-0.01
2012-2019	-0.39	-0.15
2004-2019	-0.45	-0.30

- Effort **decreased** during the three years before the recession, going from 4.21% in 2004 to 4.20% in 2007.
- OH's effort was 0.45 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

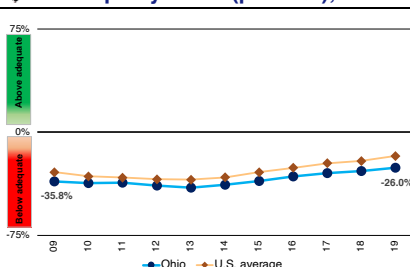
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in OH's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$5,059 PP **lower** than the adequacy target (\$19,490), a difference of -26.0%.
- This ranks #28 in the U.S. (out of 49).
- Across the entire state, 33.6% of OH students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

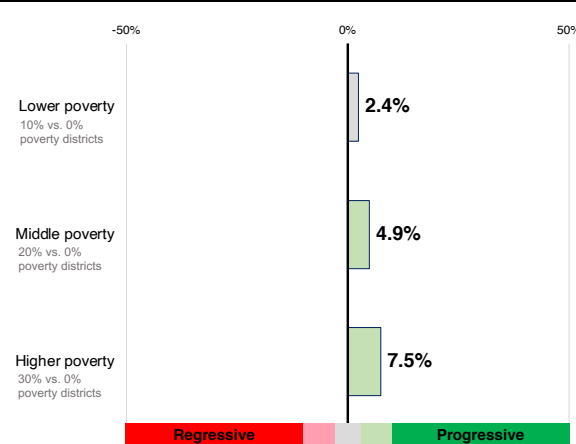


- Adequacy in OH's highest-poverty districts **improved** between 2009 (-35.8%) and 2019 (-26.0%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

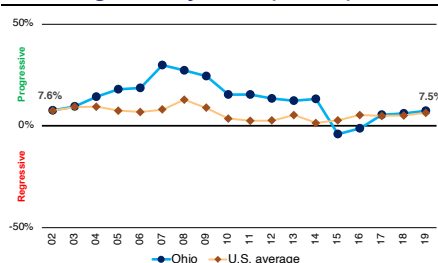
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in OH is **moderately progressive**.
- Higher-poverty (30%) districts receive 7.5% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #17 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- OH's funding was **more regressive** in 2019 (7.5%) vs. 2002 (7.6%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/collegenorms/collegenorms.asp); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/collegenorms/collegenorms.asp); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/collegenorms/collegenorms.asp), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## OKLAHOMA



**Summary:** This 2018-19 profile of Oklahoma's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Oklahoma scores 29 out of 100, which ranks 36th out of the 48 states with possible ratings.

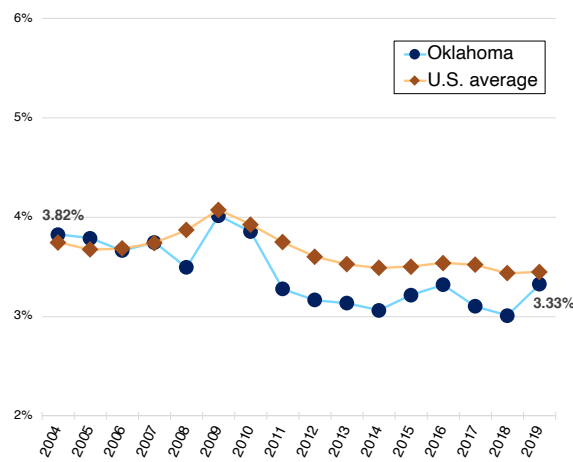
CONTEXTUAL STATS	OK	U.S.
Child (5-17yo) poverty rate (%)	18.4	15.8
Public school coverage (%)	89.3	87.6
Percent revenue from state sources	47.9	47.6
Total enrollment (U.S. rank)	697,400 (26)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Oklahoma effort	3.33 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in OK was equivalent to 3.33% of the state's economic capacity (GSP).
- This was 0.12 percentage points **lower** than the unweighted national average of 3.45%.
- OK's effort level ranks #29 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was an **increase** of 0.16 percentage points in OK's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

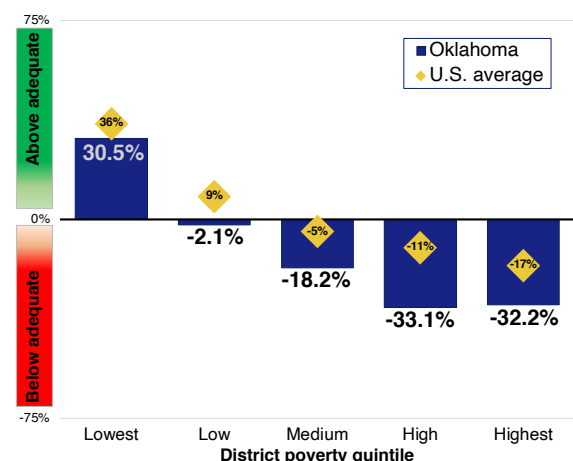
Period	OK	U.S.
2004-2007	-0.08	-0.01
2012-2019	0.16	-0.15
2004-2019	-0.50	-0.30

- Effort **decreased** during the three years before the recession, going from 3.82% in 2004 to 3.75% in 2007.
- OK's effort was 0.50 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

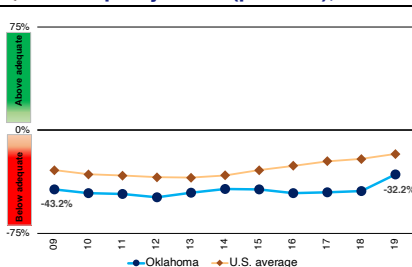
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in OK's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$4,790 PP **lower** than the adequacy target (\$14,862), a difference of -32.2%.
- This ranks #34 in the U.S. (out of 49).
- Across the entire state, 57.2% of OK students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

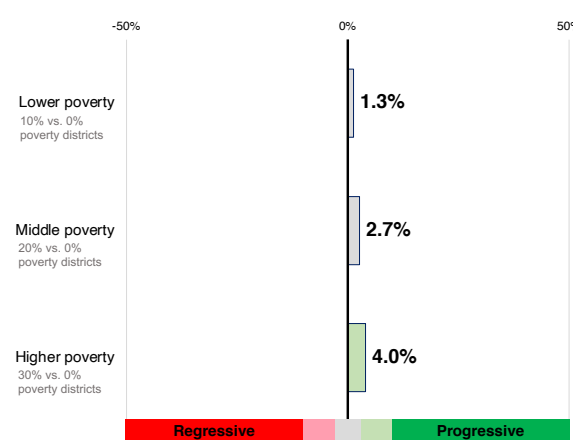


- Adequacy in OK's highest-poverty districts **improved** between 2009 (-43.2%) and 2019 (-32.2%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

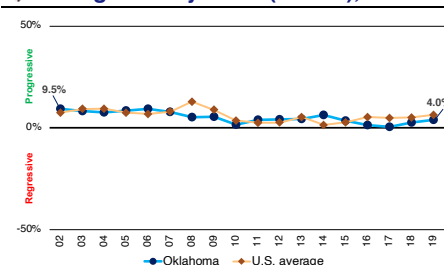
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in OK is **moderately progressive**.
- Higher-poverty (30%) districts receive 4.0% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #23 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- OK's funding was **more regressive** in 2019 (4.0%) vs. 2002 (9.5%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## OREGON



**Summary:** This 2018-19 profile of Oregon's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Oregon scores 56 out of 100, which ranks 18th out of the 48 states with possible ratings.

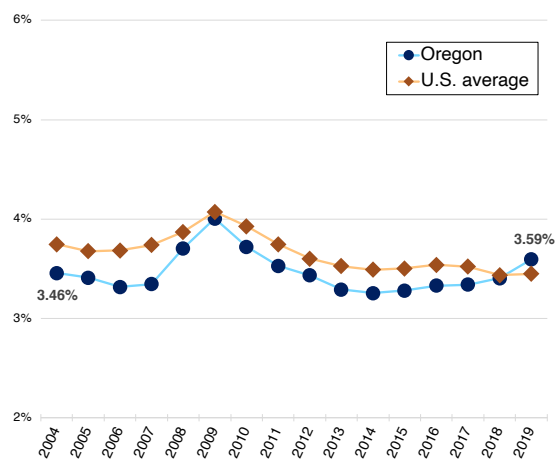
CONTEXTUAL STATS	OR	U.S.
Child (5-17yo) poverty rate (%)	12.8	15.8
Public school coverage (%)	87.9	87.6
Percent revenue from state sources	51.8	47.6
Total enrollment (U.S. rank)	610,200 (29)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Oregon effort	3.59 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in OR was equivalent to 3.59% of the state's economic capacity (GSP).
- This was 0.15 percentage points **higher** than the unweighted national average of 3.45%.
- OR's effort level ranks #18 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was an **increase** of 0.16 percentage points in OR's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

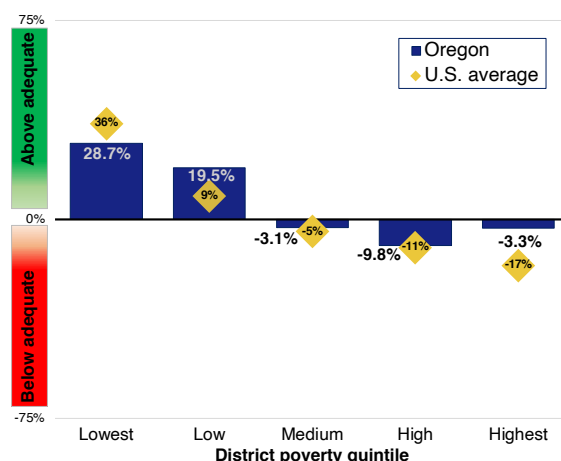
Period	OR	U.S.
2004-2007	-0.11	-0.01
2012-2019	0.16	-0.15
2004-2019	0.14	-0.30

- Effort **decreased** during the three years before the recession, going from 3.46% in 2004 to 3.35% in 2007.
- OR's effort was 0.14 percentage points **higher** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

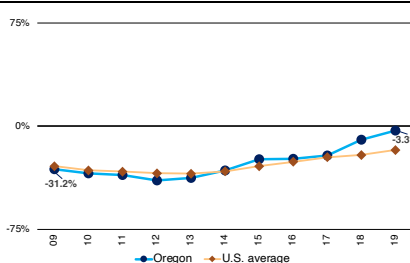
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in OR's highest poverty districts are **below adequate**.
- Spending in these districts is \$467 PP **lower** than the adequacy target (\$14,351), a difference of -3.3%.
- This ranks #12 in the U.S. (out of 49).
- Across the entire state, 34.3% of OR students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

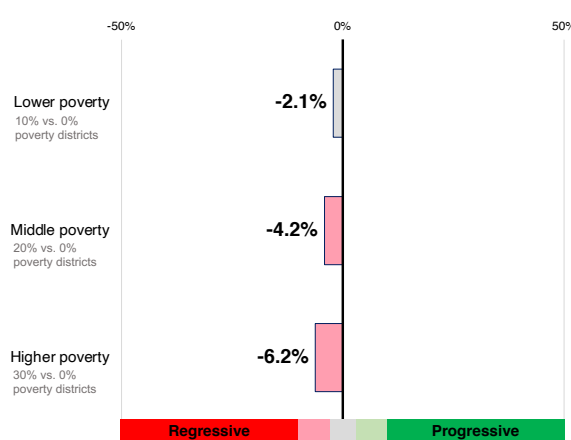


- Adequacy in OR's highest-poverty districts **improved** between 2009 (-31.2%) and 2019 (-3.3%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

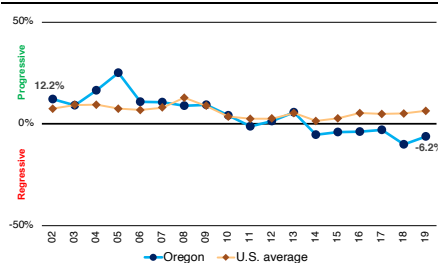
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in OR is **moderately regressive**.
- Higher-poverty (30%) districts receive 6.2% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #33 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- OR's funding was **more regressive** in 2019 (-6.2%) vs. 2002 (12.2%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/collegenorms/collegenorms.asp); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/collegenorms/collegenorms.asp); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/collegenorms/collegenorms.asp), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## PENNSYLVANIA



**Summary:** This 2018-19 profile of Pennsylvania's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Pennsylvania scores 61 out of 100, which ranks 13th out of the 48 states with possible ratings.

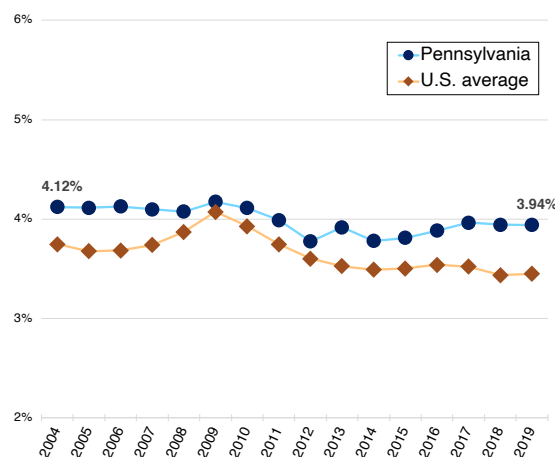
CONTEXTUAL STATS	PA	U.S.
Child (5-17yo) poverty rate (%)	15.9	15.8
Public school coverage (%)	85.1	87.6
Percent revenue from state sources	37.9	47.6
Total enrollment (U.S. rank)	1,719,900 (7)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Pennsylvania effort	3.94 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in PA was equivalent to 3.94% of the state's economic capacity (GSP).
- This was 0.49 percentage points **higher** than the unweighted national average of 3.45%.
- PA's effort level ranks #11 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was an **increase** of 0.17 percentage points in PA's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

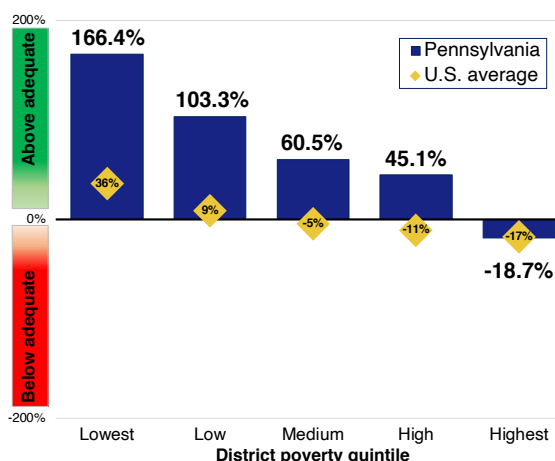
Period	PA	U.S.
2004-2007	-0.02	-0.01
2012-2019	0.17	-0.15
2004-2019	-0.18	-0.30

- Effort **decreased** during the three years before the recession, going from 4.12% in 2004 to 4.10% in 2007.
- PA's effort was 0.18 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

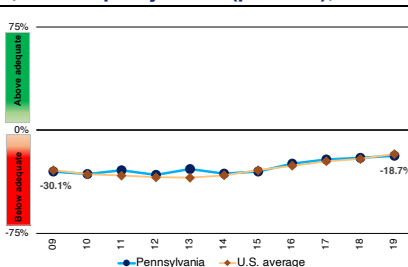
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in PA's highest poverty districts are **below adequate**.
- Spending in these districts is \$3,333 PP **lower** than the adequacy target (\$17,849), a difference of -18.7%.
- This ranks #25 in the U.S. (out of 49).
- Across the entire state, 18.5% of PA students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

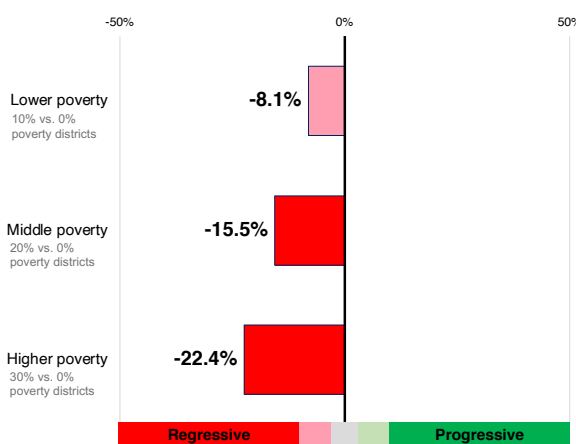


- Adequacy in PA's highest-poverty districts **improved** between 2009 (-30.1%) and 2019 (-18.7%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

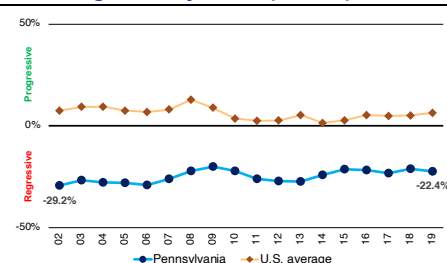
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in PA is **regressive**.
- Higher-poverty (30%) districts receive 22.4% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #46 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- PA's funding was **less regressive** in 2019 (-22.4%) vs. 2002 (-29.2%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## RHODE ISLAND



**Summary:** This 2018-19 profile of Rhode Island's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Rhode Island scores 81 out of 100, which ranks 7th out of the 48 states with possible ratings.

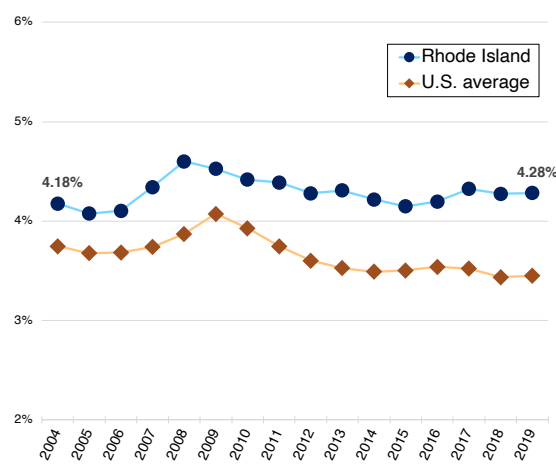
CONTEXTUAL STATS	RI	U.S.
Child (5-17yo) poverty rate (%)	15.4	15.8
Public school coverage (%)	87.5	87.6
Percent revenue from state sources	40.8	47.6
Total enrollment (U.S. rank)	143,200 (44)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Rhode Island effort	4.28 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in RI was equivalent to 4.28% of the state's economic capacity (GSP).
- This was 0.83 percentage points **higher** than the unweighted national average of 3.45%.
- RI's effort level ranks #3 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was an **increase** of 0.00 percentage points in RI's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

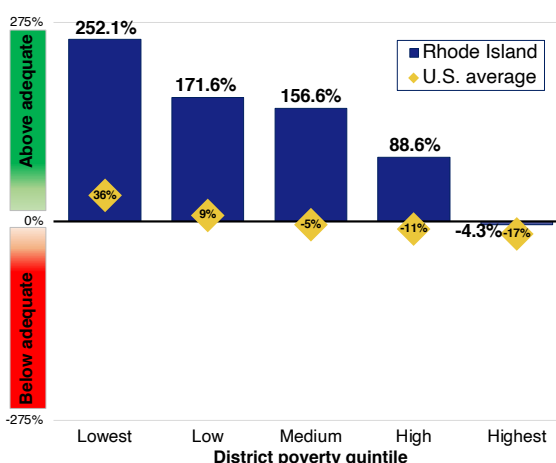
Period	RI	U.S.
2004-2007	0.16	-0.01
2012-2019		-0.15
2004-2019	0.10	-0.30

- Effort **increased** during the three years before the recession, going from 4.18% in 2004 to 4.34% in 2007.
- RI's effort was 0.10 percentage points **higher** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

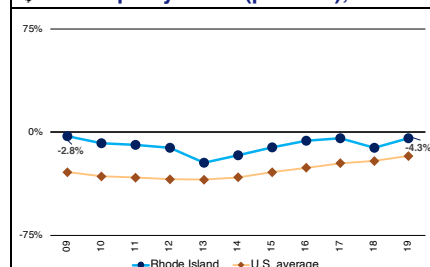
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in RI's highest poverty districts are **below adequate**.
- Spending in these districts is \$726 PP **lower** than the adequacy target (\$16,958), a difference of -4.3%.
- This ranks #14 in the U.S. (out of 49).
- Across the entire state, 31.0% of RI students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

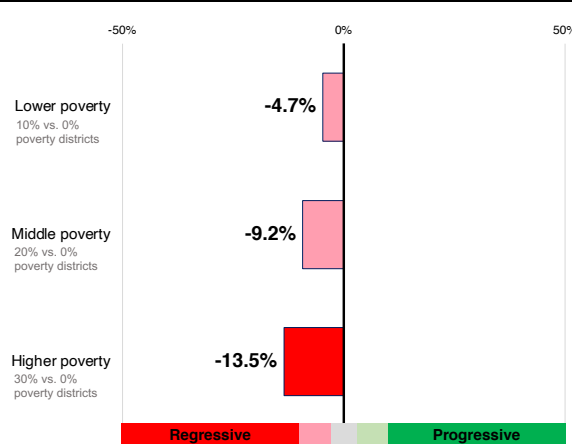


- Adequacy in RI's highest-poverty districts was **roughly similar** between 2009 (-2.8%) and 2019 (-4.3%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

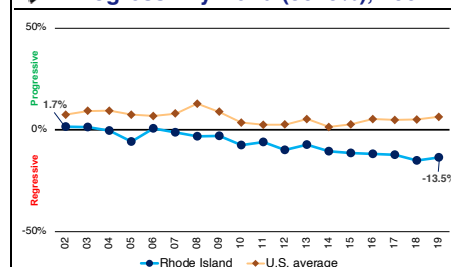
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in RI is **regressive**.
- Higher-poverty (30%) districts receive 13.5% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #38 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- RI's funding was **more regressive** in 2019 (-13.5%) vs. 2002 (1.7%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/collegenorms/); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/collegenorms/); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/collegenorms/), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## SOUTH CAROLINA



**Summary:** This 2018-19 profile of South Carolina's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), South Carolina scores 35 out of 100, which ranks 29th out of the 48 states with possible ratings.

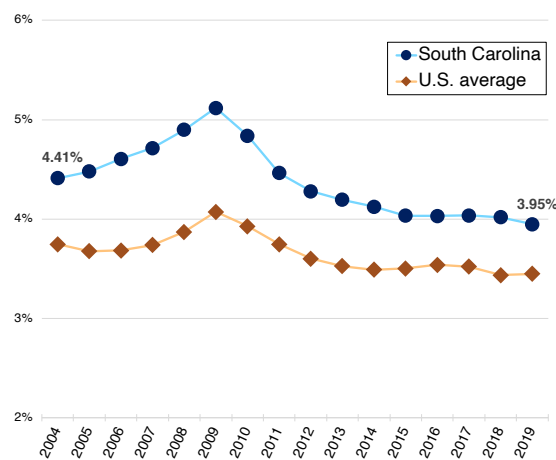
CONTEXTUAL STATS	SC	U.S.
Child (5-17yo) poverty rate (%)	19.0	15.8
Public school coverage (%)	87.6	87.6
Percent revenue from state sources	47.1	47.6
Total enrollment (U.S. rank)	780,200 (23)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

South Carolina effort	3.95 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in SC was equivalent to 3.95% of the state's economic capacity (GSP).
- This was 0.50 percentage points **higher** than the unweighted national average of 3.45%.
- SC's effort level ranks #9 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.33 percentage points in SC's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

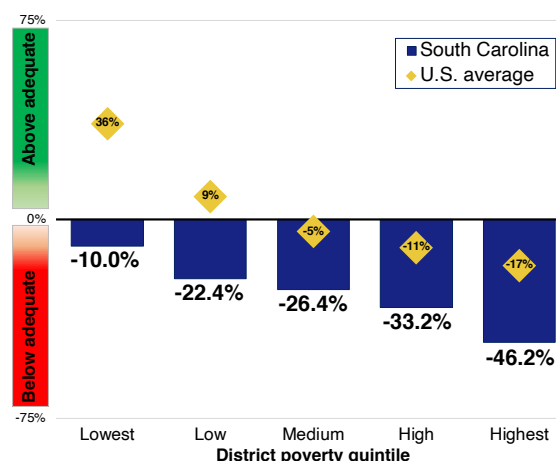
Period	SC	U.S.
2004-2007	0.30	-0.01
2012-2019	-0.33	-0.15
2004-2019	-0.46	-0.30

- Effort **increased** during the three years before the recession, going from 4.41% in 2004 to 4.72% in 2007.
- SC's effort was 0.46 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

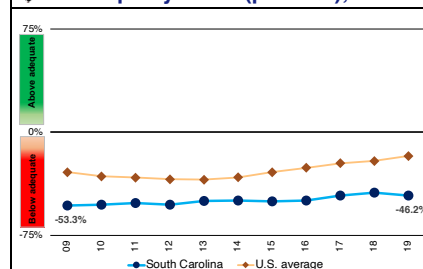
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in SC's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$10,333 PP **lower** than the adequacy target (\$22,348), a difference of -46.2%.
- This ranks #45 in the U.S. (out of 49).
- Across the entire state, 87.1% of SC students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

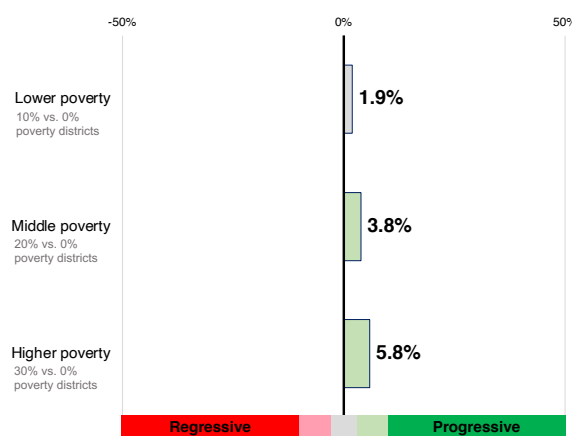


- Adequacy in SC's highest-poverty districts **improved** between 2009 (-53.3%) and 2019 (-46.2%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

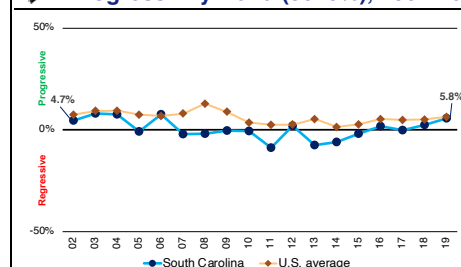
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in SC is **moderately progressive**.
- Higher-poverty (30%) districts receive 5.8% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #20 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- SC's funding was **more progressive** in 2019 (5.8%) vs. 2002 (4.7%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
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  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/2019/ipeds_datacubes/ipeds_datacube.asp); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/2019/ipeds_datacubes/ipeds_datacube.asp); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/2019/ipeds_datacubes/ipeds_datacube.asp), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## SOUTH DAKOTA



**Summary:** This 2018-19 profile of South Dakota's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), South Dakota scores 47 out of 100, which ranks 24th out of the 48 states with possible ratings.

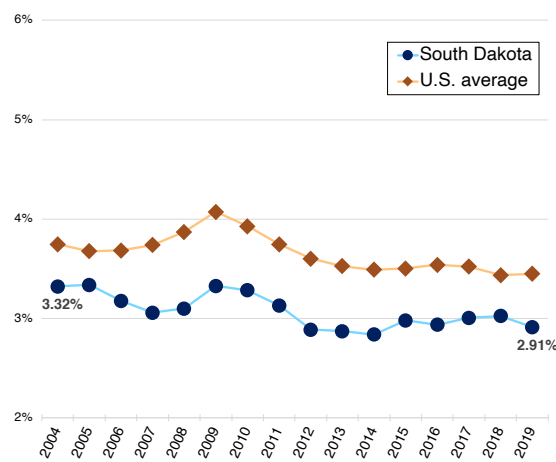
CONTEXTUAL STATS	SD	U.S.
Child (5-17yo) poverty rate (%)	13.6	15.8
Public school coverage (%)	87.0	87.6
Percent revenue from state sources	34.1	47.6
Total enrollment (U.S. rank)	139,000 (45)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

South Dakota effort	2.91 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in SD was equivalent to 2.91% of the state's economic capacity (GSP).
- This was 0.54 percentage points **lower** than the unweighted national average of 3.45%.
- SD's effort level ranks #42 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was an **increase** of 0.02 percentage points in SD's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

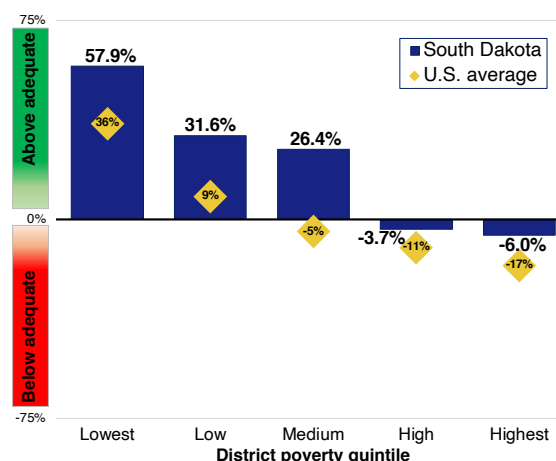
Period	SD	U.S.
2004-2007	-0.27	-0.01
2012-2019	0.02	-0.15
2004-2019	-0.41	-0.30

- Effort **decreased** during the three years before the recession, going from 3.32% in 2004 to 3.06% in 2007.
- SD's effort was 0.41 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

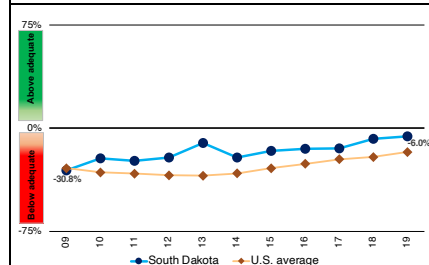
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in SD's highest poverty districts are **below adequate**.
- Spending in these districts is \$873 PP **lower** than the adequacy target (\$14,520), a difference of -6.0%.
- This ranks #15 in the U.S. (out of 49).
- Across the entire state, 15.1% of SD students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

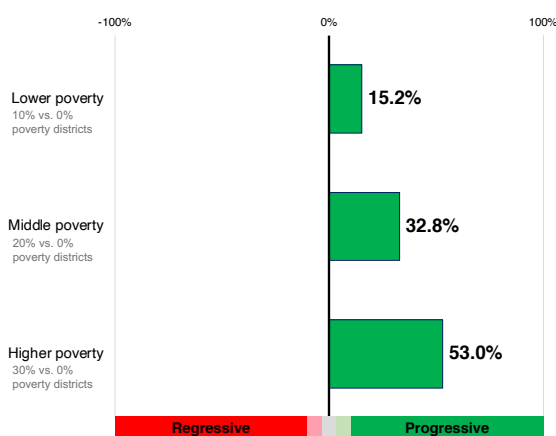


- Adequacy in SD's highest-poverty districts **improved** between 2009 (-30.8%) and 2019 (-6.0%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

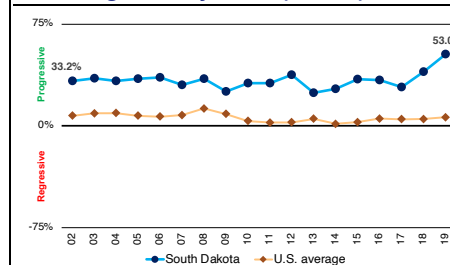
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in SD is **progressive**.
- Higher-poverty (30%) districts receive 53.0% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #4 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- SD's funding was **more progressive** in 2019 (53.0%) vs. 2002 (33.2%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## General

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  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## TENNESSEE



**Summary:** This 2018-19 profile of Tennessee's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Tennessee scores 22 out of 100, which ranks 42nd out of the 48 states with possible ratings.

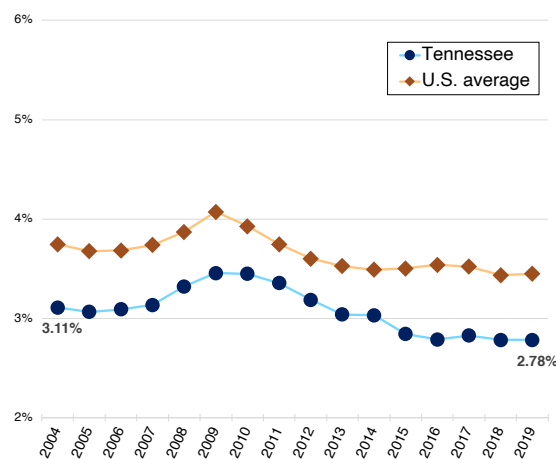
CONTEXTUAL STATS	TN	U.S.
Child (5-17yo) poverty rate (%)	18.0	15.8
Public school coverage (%)	84.0	87.6
Percent revenue from state sources	46.1	47.6
Total enrollment (U.S. rank)	1,000,200 (16)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Tennessee effort	2.78 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in TN was equivalent to 2.78% of the state's economic capacity (GSP).
- This was 0.67 percentage points **lower** than the unweighted national average of 3.45%.
- TN's effort level ranks #44 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.40 percentage points in TN's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

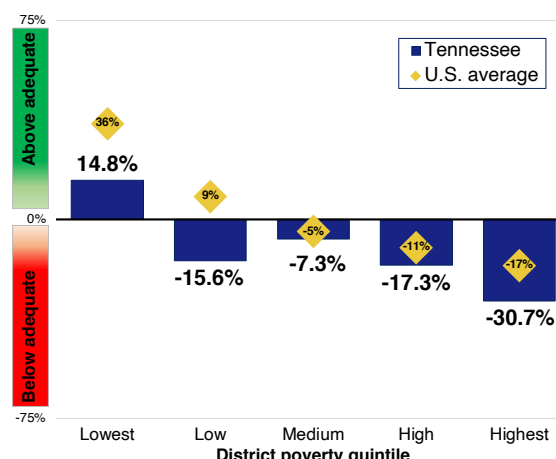
Period	TN	U.S.
2004-2007	0.03	-0.01
2012-2019	-0.40	-0.15
2004-2019	-0.33	-0.30

- Effort **increased** during the three years before the recession, going from 3.11% in 2004 to 3.14% in 2007.
- TN's effort was 0.33 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

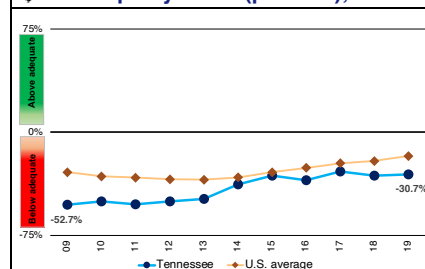
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in TN's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$4,198 PP **lower** than the adequacy target (\$13,675), a difference of -30.7%.
- This ranks #33 in the U.S. (out of 49).
- Across the entire state, 63.8% of TN students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

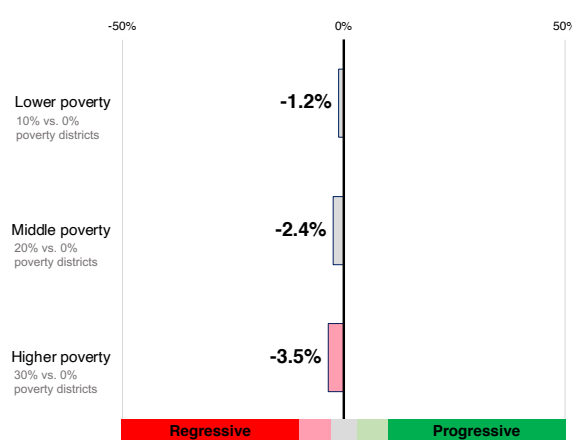


- Adequacy in TN's highest-poverty districts **improved** between 2009 (-52.7%) and 2019 (-30.7%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

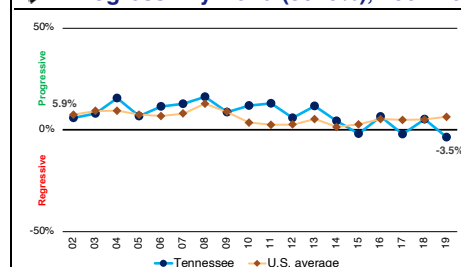
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in TN is **moderately regressive**.
- Higher-poverty (30%) districts receive 3.5% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #30 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- TN's funding was **more regressive** in 2019 (-3.5%) vs. 2002 (5.9%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## TEXAS



**Summary:** This 2018-19 profile of Texas's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Texas scores 22 out of 100, which ranks 43rd out of the 48 states with possible ratings.

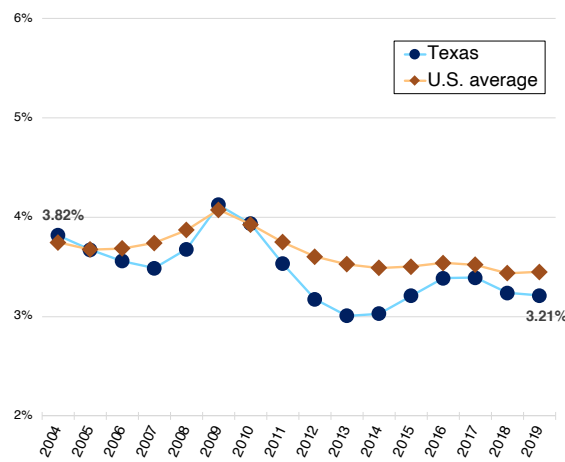
CONTEXTUAL STATS	TX	U.S.
Child (5-17yo) poverty rate (%)	18.0	15.8
Public school coverage (%)	90.8	87.6
Percent revenue from state sources	32.4	47.6
Total enrollment (U.S. rank)	5,425,200 (2)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Texas effort	3.21 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in TX was equivalent to 3.21% of the state's economic capacity (GSP).
- This was 0.24 percentage points **lower** than the unweighted national average of 3.45%.
- TX's effort level ranks #33 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was an **increase** of 0.04 percentage points in TX's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

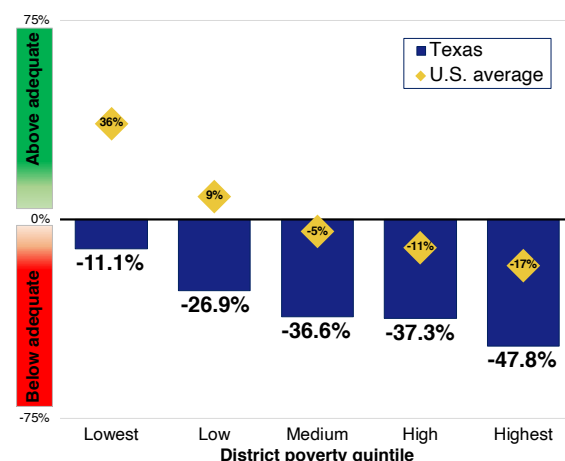
Period	TX	U.S.
2004-2007	-0.33	-0.01
2012-2019	0.04	-0.15
2004-2019	-0.61	-0.30

- Effort **decreased** during the three years before the recession, going from 3.82% in 2004 to 3.49% in 2007.
- TX's effort was 0.61 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

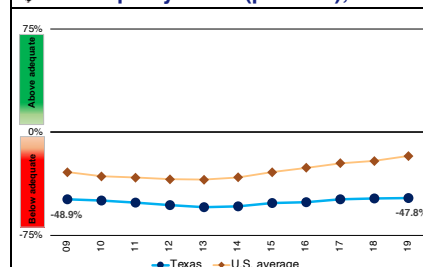
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in TX's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$9,514 PP **lower** than the adequacy target (\$19,904), a difference of -47.8%.
- This ranks #47 in the U.S. (out of 49).
- Across the entire state, 89.5% of TX students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

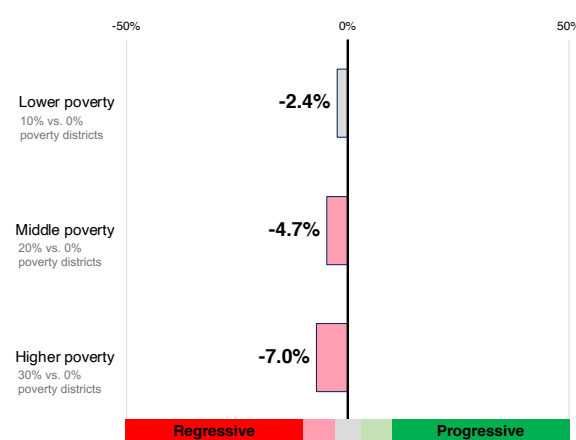


- Adequacy in TX's highest-poverty districts was **roughly similar** between 2009 (-48.9%) and 2019 (-47.8%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

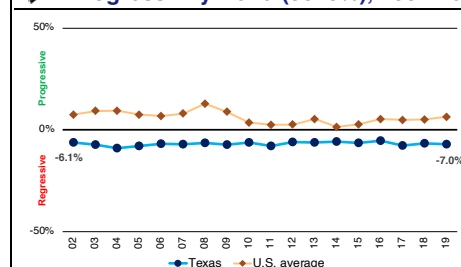
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in TX is **moderately regressive**.
- Higher-poverty (30%) districts receive 7.0% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #34 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- TX's funding was **more regressive** in 2019 (-7.0%) vs. 2002 (-6.1%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/collegenorms/collegenorms.asp); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/collegenorms/collegenorms.asp); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/collegenorms/collegenorms.asp), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## UTAH



**Summary:** This 2018-19 profile of Utah's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Utah scores 49 out of 100, which ranks 21st out of the 48 states with possible ratings.

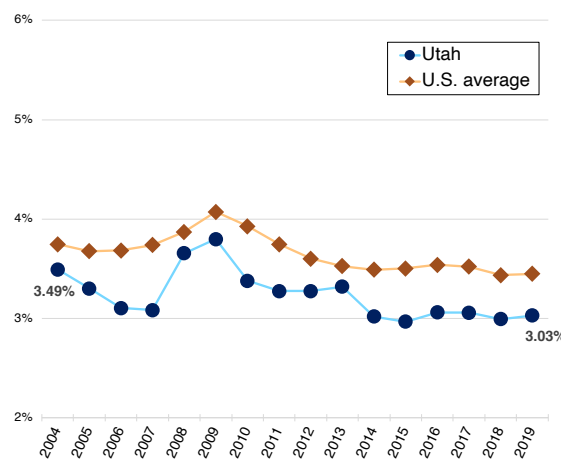
CONTEXTUAL STATS	UT	U.S.
Child (5-17yo) poverty rate (%)	8.7	15.8
Public school coverage (%)	91.7	87.6
Percent revenue from state sources	51.3	47.6
Total enrollment (U.S. rank)	675,400 (28)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Utah effort	3.03 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in UT was equivalent to 3.03% of the state's economic capacity (GSP).
- This was 0.42 percentage points **lower** than the unweighted national average of 3.45%.
- UT's effort level ranks #38 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.25 percentage points in UT's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

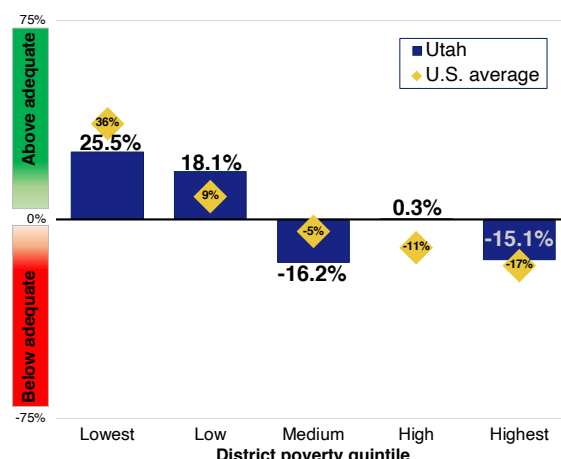
Period	UT	U.S.
2004-2007	-0.41	-0.01
2012-2019	-0.25	-0.15
2004-2019	-0.46	-0.30

- Effort **decreased** during the three years before the recession, going from 3.49% in 2004 to 3.08% in 2007.
- UT's effort was 0.46 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

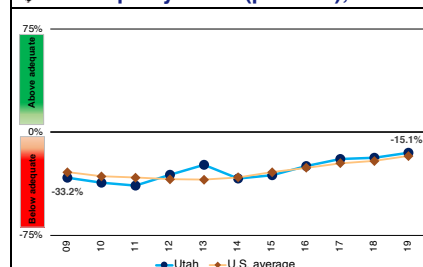
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in UT's highest poverty districts are **below adequate**.
- Spending in these districts is \$1,755 PP **lower** than the adequacy target (\$11,612), a difference of -15.1%.
- This ranks #20 in the U.S. (out of 49).
- Across the entire state, 33.0% of UT students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

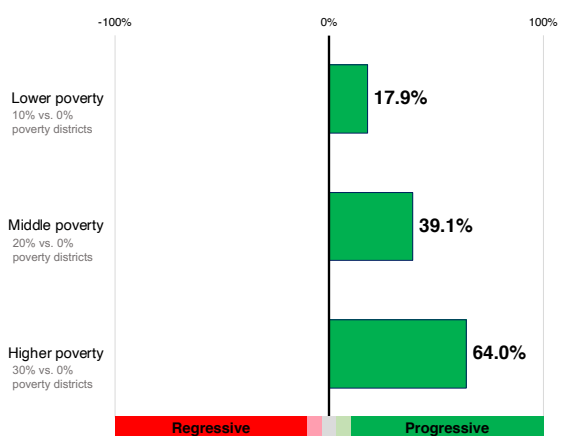


- Adequacy in UT's highest-poverty districts **improved** between 2009 (-33.2%) and 2019 (-15.1%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

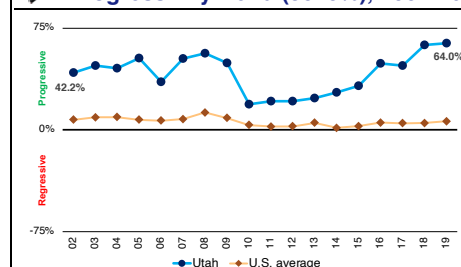
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in UT is **progressive**.
- Higher-poverty (30%) districts receive 64.0% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #3 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- UT's funding was **more progressive** in 2019 (64.0%) vs. 2002 (42.2%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/ipedsreports/2019/ipeds2019_smallareaincomeandpovertyestimates.aspx); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/ipedsreports/2019/ipeds2019_smallareaincomeandpovertyestimates.aspx); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/ipedsreports/2019/ipeds2019_smallareaincomeandpovertyestimates.aspx), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## VERMONT



**Summary:** This 2018-19 profile of Vermont's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: fiscal effort, adequacy, and progressivity. An overall state score is not calculated for Vermont, as estimates are not available for all measures.

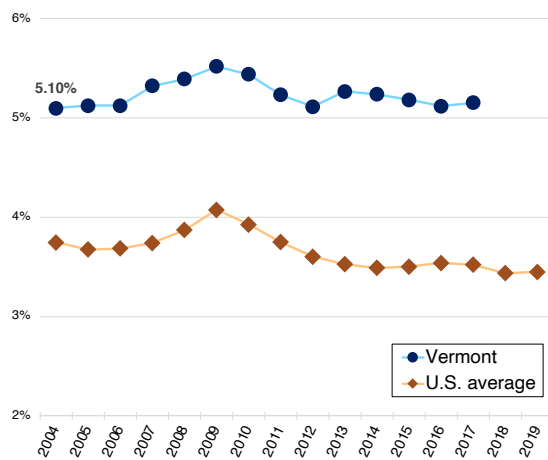
CONTEXTUAL STATS	VT	U.S.
Child (5-17yo) poverty rate (%)	9.8	15.8
Public school coverage (%)	91.8	87.6
Percent revenue from state sources	90.8	47.6
Total enrollment (U.S. rank)	87,000 (51)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Effort estimates are not available in Vermont in 2018 or 2019 due to data irregularities.

The graph to the right presents the trend in Vermont up to 2017.



#### Effort trend, 2004-2019

- Effort increased during the three years before the recession, going from 5.10% in 2004 to 5.32% in 2007.

#### Net change by period (% pts.)

Period	VT	U.S.
2004-2007	0.23	-0.01
2012-2019	n/a	-0.15
2004-2019	n/a	-0.30

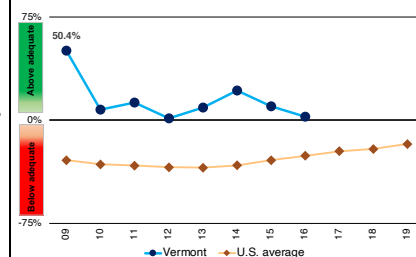
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

Adequacy estimates are not available for Vermont in 2017-19 due to data irregularities.

The graph to the right presents the trend in Vermont up to 2016.

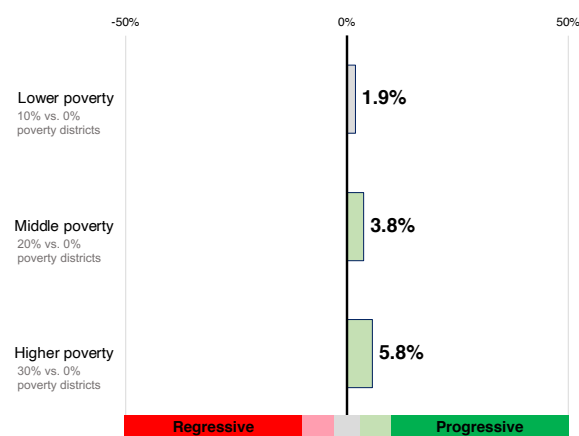
#### Adequacy trend (pov. Q5), 2009-19



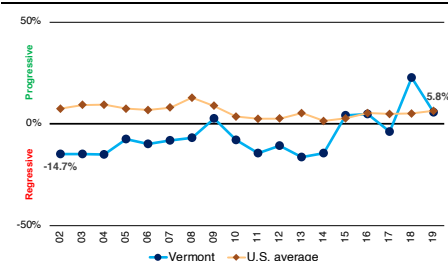
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in VT is **moderately progressive**.
- Higher-poverty (30%) districts receive 5.8% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #21 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- VT's funding was **more progressive** in 2019 (5.8%) vs. 2002 (-14.7%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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## Fiscal effort

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

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

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
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- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## VIRGINIA



**Summary:** This 2018-19 profile of Virginia's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Virginia scores 28 out of 100, which ranks 37th out of the 48 states with possible ratings.

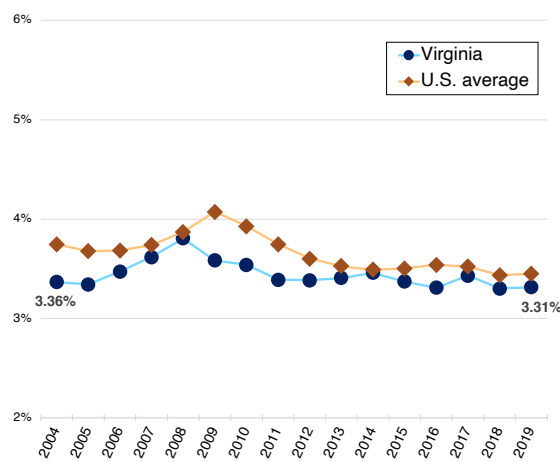
CONTEXTUAL STATS	VA	U.S.
Child (5-17yo) poverty rate (%)	12.5	15.8
Public school coverage (%)	87.8	87.6
Percent revenue from state sources	40.2	47.6
Total enrollment (U.S. rank)	1,292,600 (12)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Virginia effort	3.31 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in VA was equivalent to 3.31% of the state's economic capacity (GSP).
- This was 0.13 percentage points **lower** than the unweighted national average of 3.45%.
- VA's effort level ranks #30 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.07 percentage points in VA's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

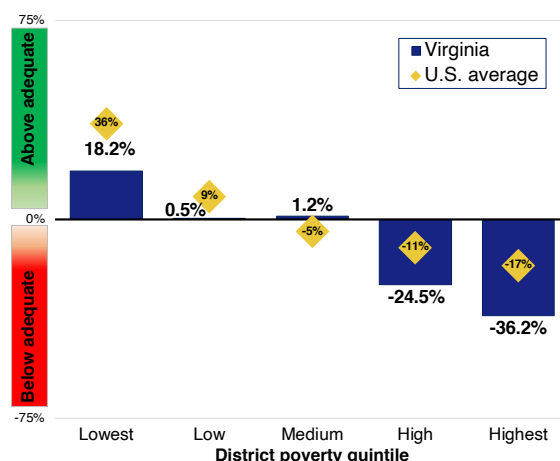
Period	VA	U.S.
2004-2007	0.25	-0.01
2012-2019	-0.07	-0.15
2004-2019	-0.05	-0.30

- Effort **increased** during the three years before the recession, going from 3.36% in 2004 to 3.62% in 2007.
- VA's effort was 0.05 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

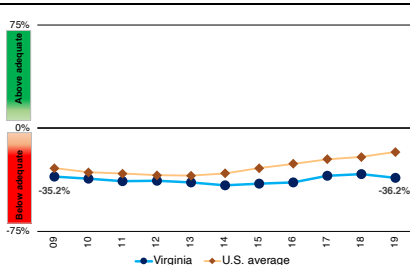
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in VA's highest poverty districts are **severely inadequate**.
- Spending in these districts is \$7,118 PP **lower** than the adequacy target (\$19,656), a difference of -36.2%.
- This ranks #38 in the U.S. (out of 49).
- Across the entire state, 45.3% of VA students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

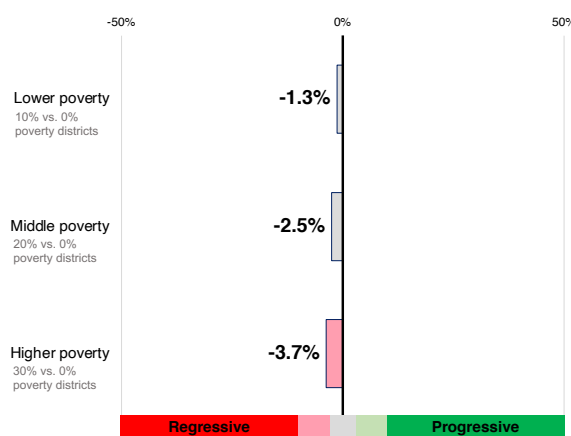


- Adequacy in VA's highest-poverty districts was **roughly similar** between 2009 (-35.2%) and 2019 (-36.2%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

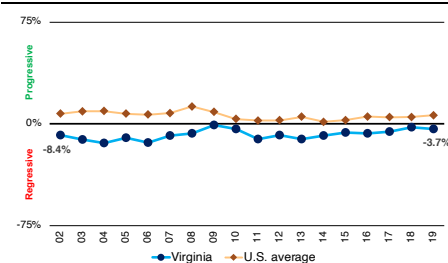
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in VA is **moderately regressive**.
- Higher-poverty (30%) districts receive 3.7% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #31 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- VA's funding was **less regressive** in 2019 (-3.7%) vs. 2002 (-8.4%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](https://nces.ed/ipeds/data/2019/ipeds_data_sums/ipeds_datatools/SAIPE.html); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](https://nces.ed/ipeds/data/2019/ipeds_data_sums/ipeds_datatools/SAIPE.html); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](https://nces.ed/ipeds/data/2019/ipeds_data_sums/ipeds_datatools/SAIPE.html), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## WASHINGTON



**Summary:** This 2018-19 profile of Washington's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Washington scores 47 out of 100, which ranks 23rd out of the 48 states with possible ratings.

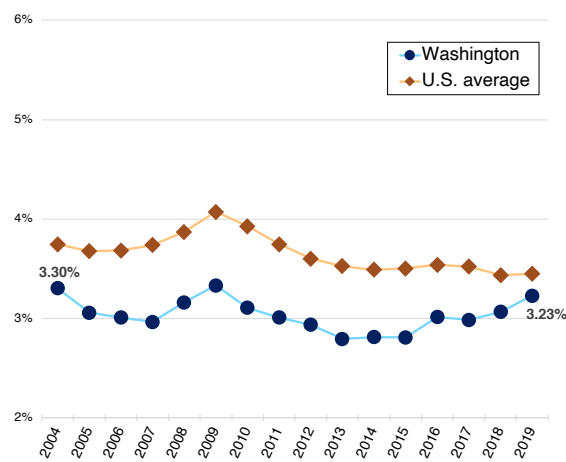
CONTEXTUAL STATS	WA	U.S.
Child (5-17yo) poverty rate (%)	11.2	15.8
Public school coverage (%)	88.1	87.6
Percent revenue from state sources	69.2	47.6
Total enrollment (U.S. rank)	1,118,400 (13)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Washington effort	3.23 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in WA was equivalent to 3.23% of the state's economic capacity (GSP).
- This was 0.22 percentage points **lower** than the unweighted national average of 3.45%.
- WA's effort level ranks #32 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was an **increase** of 0.29 percentage points in WA's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

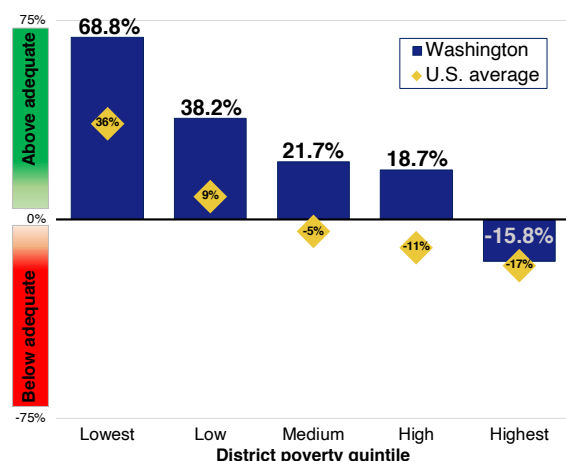
Period	WA	U.S.
2004-2007	-0.34	-0.01
2012-2019	0.29	-0.15
2004-2019	-0.08	-0.30

- Effort **decreased** during the three years before the recession, going from 3.30% in 2004 to 2.96% in 2007.
- WA's effort was 0.08 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

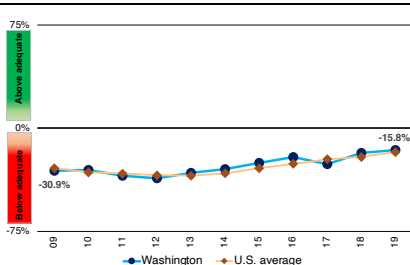
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in WA's highest poverty districts are **below adequate**.
- Spending in these districts is \$2,622 PP **lower** than the adequacy target (\$16,620), a difference of -15.8%.
- This ranks #21 in the U.S. (out of 49).
- Across the entire state, 15.6% of WA students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

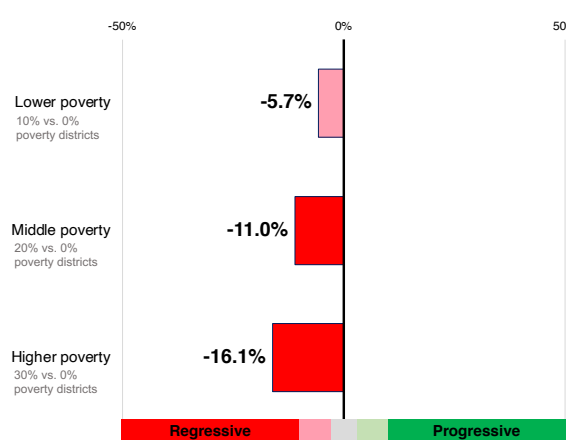


- Adequacy in WA's highest-poverty districts **improved** between 2009 (-30.9%) and 2019 (-15.8%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

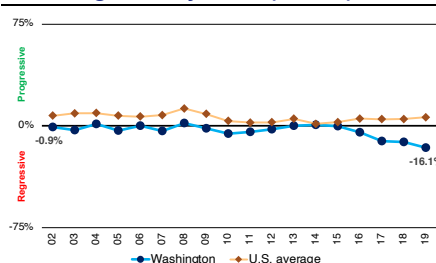
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in WA is **regressive**.
- Higher-poverty (30%) districts receive 16.1% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #40 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- WA's funding was **more regressive** in 2019 (-16.1%) vs. 2002 (-0.9%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](http://www.census.gov/popest/data/states/total.html); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](http://www.nces.ed.gov/ipeds/data/ipeds_datacenter/ipeds_datacenter.asp); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](http://nces.ed.gov/ipeds/data/ipeds_datacenter/ipeds_datacenter.asp), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## WEST VIRGINIA



**Summary:** This 2018-19 profile of West Virginia's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), West Virginia scores 72 out of 100, which ranks 9th out of the 48 states with possible ratings.

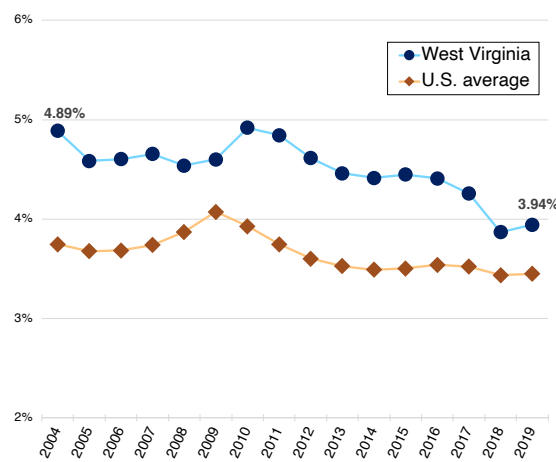
CONTEXTUAL STATS	WV	U.S.
Child (5-17yo) poverty rate (%)	19.6	15.8
Public school coverage (%)	88.8	87.6
Percent revenue from state sources	55.3	47.6
Total enrollment (U.S. rank)	269,200 (39)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

West Virginia effort	3.94 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in WV was equivalent to 3.94% of the state's economic capacity (GSP).
- This was 0.49 percentage points **higher** than the unweighted national average of 3.45%.
- WV's effort level ranks #10 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.67 percentage points in WV's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

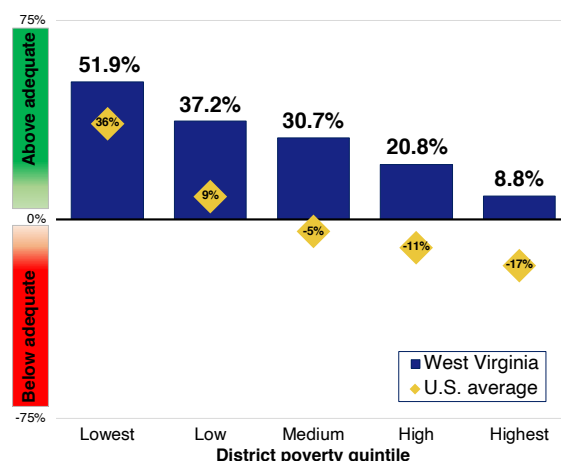
Period	WV	U.S.
2004-2007	-0.23	-0.01
2012-2019	-0.67	-0.15
2004-2019	-0.95	-0.30

- Effort **decreased** during the three years before the recession, going from 4.89% in 2004 to 4.65% in 2007.
- WV's effort was 0.95 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

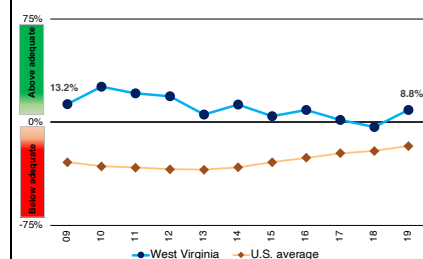
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in WV's highest poverty districts are **above adequate**.
- Spending in these districts is \$966 PP **higher** than the adequacy target (\$10,955), a difference of 8.8%.
- This ranks #9 in the U.S. (out of 49).
- Across the entire state, 5.6% of WV students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

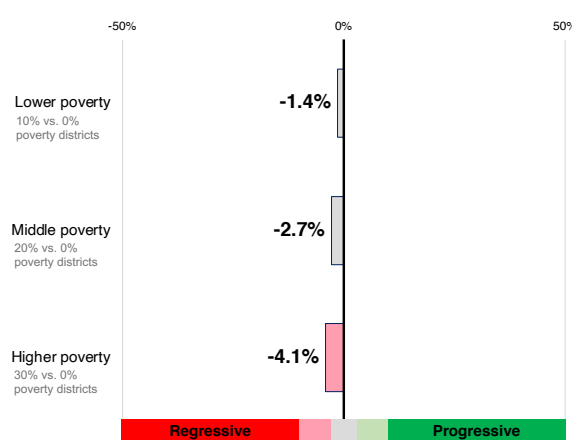


- Adequacy in WV's highest-poverty districts **worsened** between 2009 (13.2%) and 2019 (8.8%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

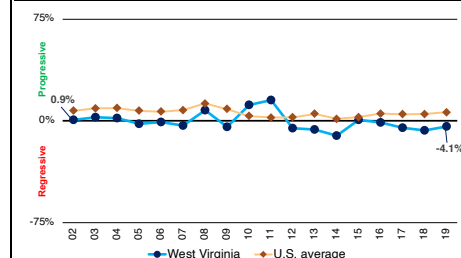
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in WV is **moderately regressive**.
- Higher-poverty (30%) districts receive 4.1% **less** revenue than zero-poverty districts.
- This level of progressivity ranks #32 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- WV's funding was **more regressive** in 2019 (-4.1%) vs. 2002 (0.9%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](http://www.census.gov/popest/data/states/total.html); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) revenue from state sources from the [U.S. Census Bureau Annual Survey of School System Finances](http://www.nces.ed.gov/ipeds/data/ipeds_datacenter/ipeds_datacenter.asp); 4) total state public elementary and secondary school enrollment (Fall 2018) from the [2019 Digest of Education Statistics](http://nces.ed.gov/ipeds/data/ipeds_datacenter/ipeds_datacenter.asp), 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## WISCONSIN



**Summary:** This 2018-19 profile of Wisconsin's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Wisconsin scores 52 out of 100, which ranks 20th out of the 48 states with possible ratings.

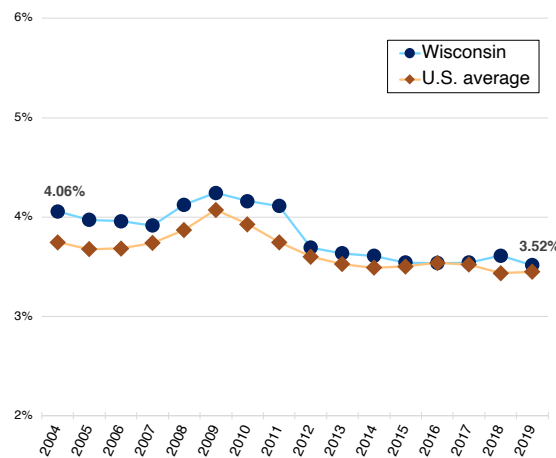
CONTEXTUAL STATS	WI	U.S.
Child (5-17yo) poverty rate (%)	12.7	15.8
Public school coverage (%)	84.6	87.6
Percent revenue from state sources	55.1	47.6
Total enrollment (U.S. rank)	855,700 (22)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Wisconsin effort	3.52 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in WI was equivalent to 3.52% of the state's economic capacity (GSP).
- This was 0.07 percentage points **higher** than the unweighted national average of 3.45%.
- WI's effort level ranks #24 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.17 percentage points in WI's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

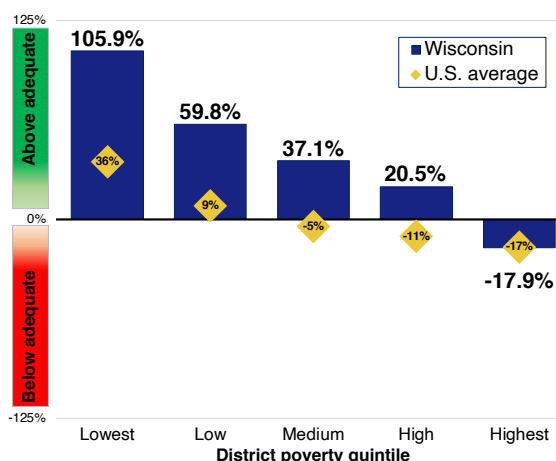
Period	WI	U.S.
2004-2007	-0.14	-0.01
2012-2019	-0.17	-0.15
2004-2019	-0.54	-0.30

- Effort **decreased** during the three years before the recession, going from 4.06% in 2004 to 3.92% in 2007.
- WI's effort was 0.54 percentage points **lower** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

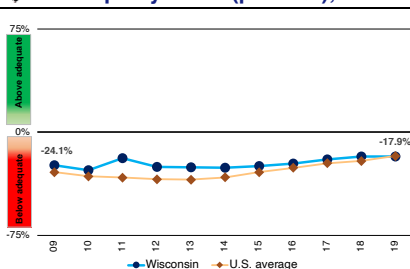
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in WI's highest poverty districts are **below adequate**.
- Spending in these districts is \$2,971 PP **lower** than the adequacy target (\$16,642), a difference of -17.9%.
- This ranks #23 in the U.S. (out of 49).
- Across the entire state, 15.1% of WI students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

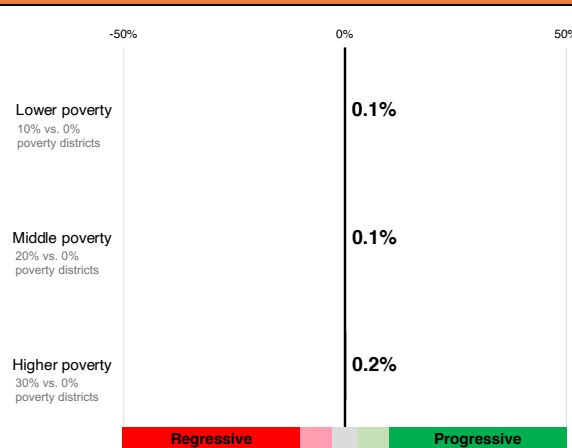


- Adequacy in WI's highest-poverty districts **improved** between 2009 (-24.1%) and 2019 (-17.9%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

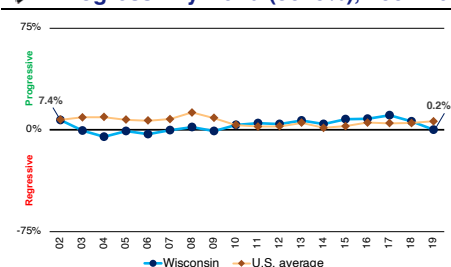
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in WI is **neither progressive nor regressive**.
- Higher-poverty (30%) districts receive 0.2% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #27 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- WI's funding was **more regressive** in 2019 (0.2%) vs. 2002 (7.4%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

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- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.

## WYOMING



**Summary:** This 2018-19 profile of Wyoming's public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: **fiscal effort**, **adequacy**, and **progressivity**. On a weighted average of these three measures (see back), Wyoming scores 99 out of 100, which ranks 2nd out of the 48 states with possible ratings.

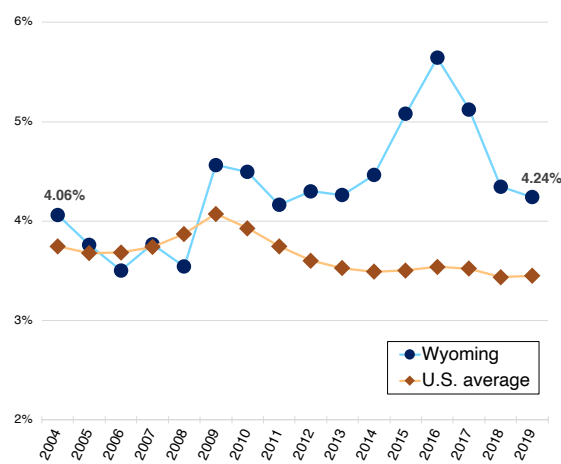
CONTEXTUAL STATS	WY	U.S.
Child (5-17yo) poverty rate (%)	10.1	15.8
Public school coverage (%)	89.4	87.6
Percent revenue from state sources	53.7	47.6
Total enrollment (U.S. rank)	93,700 (49)	

### FISCAL EFFORT

**Fiscal effort** is direct state and local K-12 expenditures in each state as a percentage of its "economic capacity," which we measure here in terms of gross state product (GSP).

Wyoming effort	4.24 %
U.S. average	3.45 %

- In FY 2019, total direct state and local K-12 spending in WY was equivalent to 4.24% of the state's economic capacity (GSP).
- This was 0.79 percentage points **higher** than the unweighted national average of 3.45%.
- WY's effort level ranks #4 in the nation (out of 49).



#### Effort trend, 2004-2019

- There was a **decrease** of 0.06 percentage points in WY's effort during the "K-12 recovery" period of 2012-2019.

#### Net change by period (% pts.)

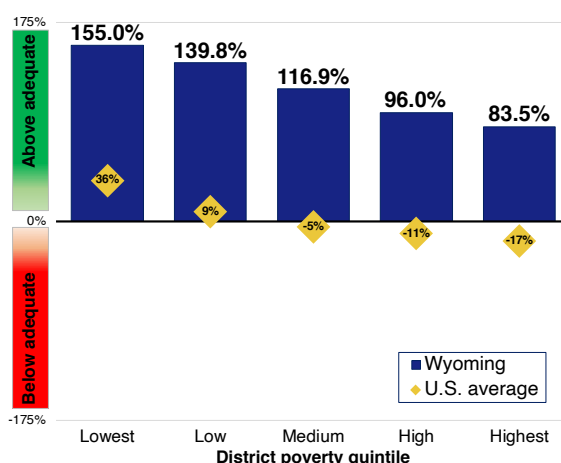
Period	WY	U.S.
2004-2007	-0.29	-0.01
2012-2019	-0.06	-0.15
2004-2019	0.18	-0.30

- Effort **decreased** during the three years before the recession, going from 4.06% in 2004 to 3.77% in 2007.
- WY's effort was 0.18 percentage points **higher** in 2019 than in 2004, compared with a U.S. average decrease of 0.30 points during this time period.

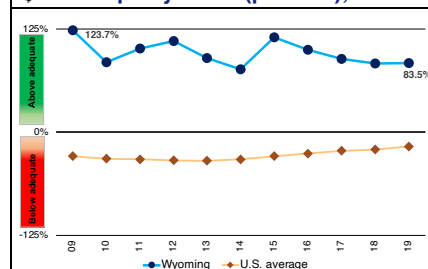
### ADEQUACY

**Adequacy** compares actual per-pupil (PP) spending in each state to cost model estimates of the amount required to achieve U.S. average test scores. These comparisons (% difference) are presented for 2019, by district poverty quintile, in the center graph (the gold diamonds represent U.S. averages).

- Resources in WY's highest poverty districts are **above adequate**.
- Spending in these districts is \$9,625 PP **higher** than the adequacy target (\$11,529), a difference of 83.5%.
- This ranks #1 in the U.S. (out of 49).
- Across the entire state, 0.0% of WY students attend districts with spending below estimated adequate levels.



#### Adequacy trend (pov. Q5), 2009-19

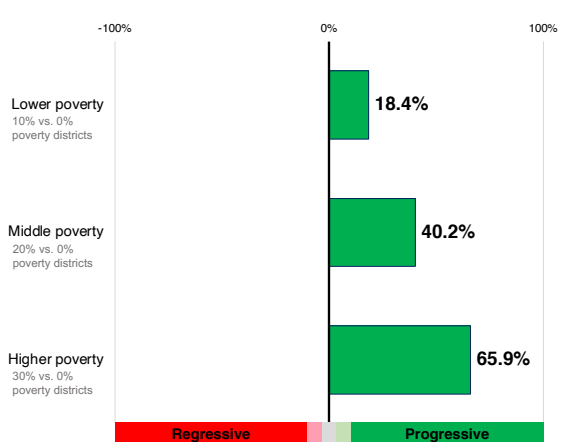


- Adequacy in WY's highest-poverty districts **worsened** between 2009 (123.7%) and 2019 (83.5%).
- During this period, U.S. average adequacy in these districts (orange line) improved from -29.1% to -17.3%.

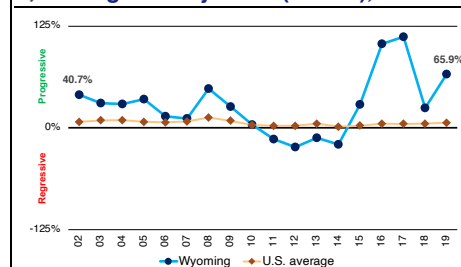
### PROGRESSIVITY

**Progressivity** is the degree to which states provide greater resources to districts serving higher-need students. The center graph is the percentage difference in 2019 state and local revenue between: 1) lower- (10% Census poverty), middle- (20%), and higher-poverty (30%) districts and; 2) zero-poverty districts, controlling for labor costs, size, and population density.

- School funding in WY is **progressive**.
- Higher-poverty (30%) districts receive 65.9% **more** revenue than zero-poverty districts.
- This level of progressivity ranks #2 in the nation (out of 49).



#### Progressivity trend (30v0%), 2002-19



- WY's funding was **more progressive** in 2019 (65.9%) vs. 2002 (40.7%).
- Since the 2007-09 recession, funding in the typical state (orange line) is generally neither progressive nor regressive.

## 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 and the 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**, **adequacy**, and **progressivity**. The full SID dataset, along with accessible documentation of all the measures presented in this profile, as well other SFID datasets, tools, and reports, are freely available to download at: [schoolfinancedata.org](http://schoolfinancedata.org). The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

- The years in the profile refer to the spring semester of the school year (e.g., 2019 is 2018-19).
- Estimates may differ slightly from previous profiles, as some measures are 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.
- The total number of states assigned rankings varies slightly by measure, as not all measures are available in D.C. and Hawaii, and we've excluded Vermont from our 2019 effort and adequacy calculations due to irregularities in that state's data.
- Overall state scores:** The overall scores provide a very simple summary of states' combined "performance" on the three core indicators featured in the profiles. They do not represent comprehensive evaluations of states' school finance systems. Each state is scored entirely relative to other states (i.e., rather than based on some absolute standard of "good" or "bad"), and the selection/weighting of components entails subjective judgments on the part of the SFID research team.
  - 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) adequacy gap (%) in highest-poverty district quintile (40%); 2) adequacy gap (%) in the high-poverty quintile (20%); 3) GSP-based fiscal effort (15%); 4) personal income-based fiscal effort (15%); and 5) 30/0% revenue progressivity (10%).
  - D.C., Hawaii, and Vermont are not included, as one or more of the measures that constitute the scores cannot be calculated for these states.
  - State rankings may reflect differences in unrounded scores.
- Non-SFID data sources** ("Contextual Stats" table): 1) Child (5-17 year old) poverty (2019) from the [U.S. Census Bureau's Small Area Income and Poverty Estimates \(SAIPE\) program](#); 2) see SID documentation for sources used for public school coverage estimates; 3) percent of total (FY 2019) 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 2018) from the [2019 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 capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state's economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it *might* contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger economies, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but still produce the same funding.

- U.S. effort averages are unweighted and do not include D.C. (effort not calculated in any year) or Vermont (effort not available in 2018/2019 due to data irregularities), so as to keep a consistent set of states across all years.
- 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 2012-19 period (the "K-12 recovery period") is highlighted in the table (rather than, say, 2009-2019) 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 also because federal stimulus funds ran out after 2011. 2012 is therefore a good starting point for assessing states' reinvestment (or lack thereof). Trends, however, vary by state.
- Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies.

## Adequacy

SID variables used in this section: *necm\_predcost\_q1—necm\_predcost\_q5; necm\_ppcstot\_q1—necm\_ppcstot\_q5; necm\_enroll\_q1—necm\_enroll\_q5; year*

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. The SFID's primary measure of adequacy compares, by poverty quintile, a state's actual spending levels to estimates from cost models of how much that state *would have to spend* in order to achieve national average test scores (i.e., "required" or "adequate" spending). The 2009-2019 estimates in this profile 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. For more information about the NECM, see the SID user's guide.

- Adequacy estimates are not available for Hawaii in all years (due to it being a geographically isolated, single-district state), and Vermont in 2018 and 2019 (due to data irregularities). Estimates for D.C. are only available for the highest-poverty quintile.
- The district poverty categories (e.g., lowest, low, medium, high, highest) are defined in terms of quintiles (i.e., 20 percentile increments in each state).
- In the first bullet of the left panel, states with Q5 ("highest-poverty") gaps lower than -20% are assigned the designation "severely inadequate." The remaining designations are "below adequate" (between 0 and -20%) and "above adequate" (greater than 0%).
- The estimate in the fourth bullet of the left panel is calculated using our District Cost Database (our state adequacy measures are aggregations of these district-level estimates). You can download or analyze this dataset at the SFID website; the 2019 estimates used for this profile will be released in early 2022.
- The U.S. averages represented by the gold diamonds in the center-panel figure are national average differences between actual and required spending (weighted by enrollment). Note, however, that poverty quintiles are defined state by state, and so the U.S. averages represent an approximation of the national situation. In addition to Hawaii and Vermont, D.C. is excluded from these averages to keep a consistent set of states across quintiles. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the same estimates as the "highest-poverty" bar (state) and diamond (U.S. average) in the center graph, but between 2009-19.

## Progressivity

SID variables used in this section: *predicted\_slcorev0; predicted\_slcorev10; predicted\_slcorev20; predicted\_slcorev30; year*

A progressive school finance system is one in which districts serving larger shares of disadvantaged students (all else equal) are allocated more resources than their counterparts serving lower proportions of these students. In this profile, progressivity is calculated by comparing adjusted state and local revenue between districts with (U.S. Census) child poverty rates of zero to those with higher poverty rates (i.e., 10, 20, and 30 percent). In addition to child poverty, revenue is also adjusted for labor market costs, population density, and district size, all of which affect the value of the education dollar.

- Progressivity estimates are not available for D.C. and Hawaii (single-district states)
- In the left panel (first bullet), the progressivity of each state's system is characterized based on the adjusted revenue gap between high (30%) and 0% poverty districts (this is also the estimate presented in the bottom bar of the center panel graph). The designations are assigned as follows: progressive (revenue in high poverty districts is at least 10% greater than that in zero poverty districts); moderately progressive (between +3% and +10%); neither progressive nor regressive (within three percentage points of zero); moderately regressive (between -3% and -10%); regressive (lower than -10%).
- The estimates in the center-panel graph are percentage differences in adjusted state and local revenue between low/medium/high (10/20/30%) poverty districts and zero-poverty districts. Note that the definitions of district poverty groups in this section, which are based on poverty rates (0, 10, 20, and 30%), vary from those in the "Adequacy" section, in which districts are sorted into quintiles by poverty. Axis ranges for this graph may vary between states.
- The graph in the right panel presents the trend in percentage difference between high (30%) and zero poverty districts, both for this state and on average across the U.S. (for each state in 2019, this is the same figure as the bottom bar in the center panel graph). The U.S. averages are unweighted (do not include D.C. or Hawaii) and can be interpreted as 30/0 progressivity in the typical state in a given year. Axis ranges for this graph may vary between states.



$$\begin{aligned}
 (\ln) \text{SCHOOL} = & b_0 + b_1 \text{State}_i + b_2 \text{LaborMarket}_{ij} + \\
 & b_3 \text{CWI}_{ij} + b_4 \text{FINANCE}_{ij} + b_5 \text{PopulationDensity}_{ij} + \\
 & b_6 \text{Enrollment}_{ij} + b_7 \text{INDICATORS}_{ij} + b_8 \text{Scale}_{ij} + \\
 & b_9 \text{Poverty}_{ij} + b_{10} \text{SchlType}_{ij} + b_{11} \text{DATABASE}_{ij} + e
 \end{aligned}$$

