MARYLAND

Summary: This 2019-20 profile of Maryland’s public K-12 school finance system focuses on three core indicators from the School Finance Indicators Database: fiscal effort, statewide adequacy, and equal opportunity. On a weighted average of these three measures (see back), Maryland scores 49 out of 100, which ranks 22nd out of the 48 states with possible ratings.

FISCAL EFFORT

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

- MD is a medium effort state.
- In FY 2020, MD spent 3.65 percent of its economic capacity (GSP) on its K-12 public schools.
- This was 0.04 percentage points higher than the unweighted national average of 3.61 percent.
- MD’s effort level ranks #25 in the nation (out of 50).

K-12 FISCAL EFFORT TREND, 2006-20

<table>
<thead>
<tr>
<th>Period</th>
<th>MD</th>
<th>U.S.</th>
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</thead>
<tbody>
<tr>
<td>K-12 recession (2006-12)</td>
<td>3.65%</td>
<td>3.61%</td>
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<tr>
<td>Post-recession (2012-20)</td>
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<td>Full period (2006-20)</td>
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Effort trend and capacity

- MD’s 2020 effort level is 0.03 pct. points higher than it was pre-recession (2006).
- This net change in effort between 2006 and 2020 is ranked #15 in the nation.

STATEWIDE ADEQUACY

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

- Overall adequacy in MD is relatively moderate.
- By the modest standard of U.S. average scores, 36.3% of MD students attend inadequately funded districts, which ranks #29 in the nation (out of 49).
- The typical MD student’s district spends 4.9 percent above adequate levels, which ranks #30 in the nation.

PCT. OF STUDENTS IN BELOW ADEQUATE DISTRICTS

<table>
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<tr>
<th></th>
<th>MD</th>
<th>Region</th>
<th>U.S.</th>
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<tbody>
<tr>
<td>Adequate</td>
<td>63.7%</td>
<td>70.8%</td>
<td>52.2%</td>
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ADEQUATE FUNDING GAP OF TYPICAL STUDENT

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<th></th>
<th>MD</th>
<th>Region</th>
<th>U.S.</th>
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<tbody>
<tr>
<td>Below adequate</td>
<td>4.9%</td>
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<td></td>
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<tr>
<td>Above adequate</td>
<td></td>
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The data in this state profile are from the School Finance Indicators Database (SFID), a collection of public K-12 school finance and resource allocation indicators published annually by researchers from the Albert Shanker Institute, University of Miami School of Education and Human Development, and Rutgers University Graduate School of Education. The primary product of the SFID is the State Indicators Database (SID), a state-level dataset containing roughly 125 variables. This profile focuses on three types of measures included in the SID: fiscal effort, statewide adequacy, and equal opportunity. The full SID dataset, with accessible documentation of and data sources for all the measures presented in this profile, as well as other SFID datasets, tools, and reports, are freely available to download at schoolfinancedata.org. The following are some general notes about the profiles, followed by descriptions and notes pertaining to the three types of measures they present:

### Fiscal effort

Fiscal effort indicates how much of a state’s total economic capacity goes toward K-12 schools. It is calculated in the SFID by dividing direct state and local K-12 expenditures by either Gross State Product (GSP) or aggregate state personal income. Both of these are measures of a state’s economic capacity. In this sense, effort measures how much each state contributes as a percentage of how much it might contribute. The former denominator (GSP) is used in these profiles, but the two are highly correlated, and the income-based effort indicator is available in the SID. Bear in mind that high-capacity states with larger populations, such as New York and California, can put forth lower effort than lower capacity states, such as Mississippi and Alabama, but otherwise, the two are highly correlated. (The latter is reported here primarily as a means of differentiating between low/inadequate funding states that do and do not have the capacity to increase revenue.)

- **U.S. effort averages are unweighted and do not include Vermont in any year (effort not available in 2018-20 due to data irregularities), so as to keep a consistent set of states across all years.**
- In the first bullet of the left panel, we characterize each state’s effort level as low, medium, or high by sorting states into three roughly equal groups using terciles. Note that even seemingly small changes or differences in effort levels represent large revenue amounts, as the denominators are entire state economies. Note also that 2006 is the first year in which we calculate GPA-based effort, as quarterly GA estimates do not include years in which 2016-20 funding would have been lower under states’ 2006 effort levels.
- In order to provide a sense of state’s capacity, we characterize each state’s GSP per capita as small, medium, or large by sorting states into three roughly equal groups using terciles.

### Statewide adequacy

Adequacy is typically defined as the extent to which the amount of funding for schools is sufficient for students to reach a minimum/acceptable level of educational outcomes. Our adequacy estimates compare each district’s actual spending levels to estimates from cost models of how much that district would have to spend in order to achieve national average test scores (i.e., “required” or “adequate” spending). We express statewide adequacy in terms of either: 1) the proportion of students in each state in districts with actual funding below estimated adequate spending; and 2) the adequacy gap (percentage difference between actual and estimated adequate spending) for the typical student in each state. All these estimates are from the National Education Cost Model (NECM), which is part of the SFID. The NECM calculates required spending based on the relationship between outcomes and cost factors such as regional wage variation, district size, and student characteristics. Note that this model and the data it uses are necessarily imperfect, and estimates should be viewed with appropriate caution. For more information about the NECM, see the SID user’s guide. Some of the estimates presented in this section of the profile can be calculated using SID variables, whereas others (e.g., the district-by-district estimates in the right panel) require the use of the SFID Cost Database (OCD); many but not all SID adequacy measures (all of which have variable name beginning with necm_) are aggregations of DCD estimates. The full DCD dataset (going back to 2009) is also publicly available at the SFID website (2020 estimates will be released in early 2023).

- Adequacy estimates are calculated for each state and for the U.S. Census divisions (9 groups). MD’s division is South Atlantic. Axis ranges for the bottom graph may vary by state.
- In the first bullet of the left panel, we characterize statewide adequacy as follows: high (fewer than 20 percent of students in districts with actual funding below estimated adequate funding); moderate (greater than 20 percent below adequate and statewide gap under 50 percent); low (50 percent or greater); and extremely low (above adequate funding). Note, however, that poverty quintiles are defined state by state, and so the 10th quintile (Q1) for one state may not correspond to the 10th for another.
- For each state/year combination in which 2016-2020 had that state returned to its own pre-recession (2006) effort level by 2016 (with 2012-2016 representing a reasonable time period for full recovery). For each state/year combination in which 2016-2020 exceeded the state’s 2006 level, the hypothetical additional funding spending is in this state (the hypothetical additional funding estimates do not include years in which 2016-2020 funding would have been lower under states’ 2006 effort levels).
- In order to provide a sense of state’s capacity, we characterize each state’s GSP per capita as small, medium, or large by sorting states into three roughly equal groups using terciles.

### Equal opportunity

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

- EO estimates are not available for Vermont and Hawaii (adequacy estimates not available), and cannot be calculated for D.C. (single government-run district state).
- In the first bullet of the left panel, we characterize EO in each state as follows: severely unequal (EO gap less than -75 points); highly unequal (EO gap between -30 and -75 points); moderately unequal (-50 and -30); and slightly unequal (-25 and -50). Note, however, that poverty quintiles are defined state by state, and so the 10th quintile (Q1) for one state may not correspond to the 10th for another.
- The center panel figure presents adequate funding gaps for all five quintiles in each state (although opportunity gaps as we define them for the purposes of this profile use only the highest- and lowest-poverty groups, this graph permits comparison of gaps between different combinations of groups). The state (bars) and U.S. (blue diamonds) estimates in the graph are average differences between actual and required spending (weighted by enrollment), by district poverty quintile. Note, however, that poverty quintiles are defined state by state, and so the 10th quintile (Q1) for one state may not correspond to the 10th for another.
- In the right panel of this text, the two vertical axes correspond to estimated per-pupil spending in dollars and the horizontal axis represents the difference between actual and estimated spending for the typical student in each state, adjusted for state-specific characteristics. This axis is labeled “Difference (in average enrollment),” and the units on this axis are in dollars per pupil (horizontal axis) by average student testing outcomes expressed as the difference from the national average in standard deviations (vertical axis). The other markers (circles) in the plot are other states’ district poverty groups (color coded in the same manner, but with more transparent markers to allow for clear viewing of this state’s markers). The difference in student outcomes is presented in the highest- and lowest-poverty (Q1) estimate is presented in the first bullet, below the plot, and can be interpreted as a poverty-based student achievement gap in this state.