

---

# Adjusting the Prosperity Now Scorecard State Ranking Methodology to Account for Racial Disparities: Technical Documentation

January 2019

The Prosperity Now *Scorecard* ranks all 50 states and the District of Columbia on outcome measures related to household financial security and health within five issue areas: Financial Assets and Income; Businesses and Jobs; Homeownership and Housing; Health Care; and Education. Within each of these issue areas, we include measures of disparities in outcomes by race, as well as a smaller number of outcomes by income, gender and disability. Not all of these disparity measures, however, are ranked.

As Prosperity Now has increasingly focused on the racial wealth divide over the past several years, we have designed the *Scorecard* with a special emphasis on how race affects economic outcomes at the state level. This is reflected in our new methodology for ranking states according to an index of racial disparity, which we use to weight our overall rankings.

This brief examines the following: 1) the flaws of our previous ranking methodology in adequately accounting for racial inequality; and 2) how we are applying our new racial disparity index to weight our overall Scorecard ranks.

## Previous Ranking Methodology and New Outcome Rank

Our [previous overall state ranking](#) methodology ranked the states and the District of Columbia on each individual outcome measure, then averaged the sum of these ranks to obtain a state's cumulative Scorecard rank.<sup>1</sup> Each state was individually ranked for 58 of the 62 outcome measures. The state with the most desirable outcome is ranked 1<sup>st</sup>, and the least desirable is ranked 51<sup>st</sup>. For example, the state with the highest [homeownership rate](#) would be ranked 1<sup>st</sup>. Similarly, because a low level of income poverty is desirable, the state with the lowest [income poverty](#) would be ranked 1<sup>st</sup>. For measures that didn't have data available for every state, states are not ranked out of 51. Instead, they are ranked out of the total number of states for which data is available. For example, data on [liquid asset poverty](#) is available for only 42 states. Thus, the state with the least desirable outcome would be ranked 42<sup>nd</sup>.

---

<sup>1</sup> While the *Scorecard* includes data at the state and local levels (metro area, county, city, congressional district and tribal area), we only calculate ranks at the state level. Members of the Prosperity Now Community have expressed that ranks at the local level are less helpful talking points for their work.

To calculate a state’s overall outcome rank, the state’s ranks for each individual outcome measure were averaged to generate an overall score. The lower the overall score, the better the state's overall performance in the *Scorecard*. The overall score for the states was then ranked from 1 to 51.

Outcome measures disaggregated by race are individually included in this overall calculation. In the 2018 *Scorecard*, just seven of the 58 outcome measures included were measures by race. These measures by race were ranked in respect to the ratio of how the White population was faring compared to the non-White population. Whichever number was higher for any given state became the numerator and the smaller one the denominator, making this number always greater than one. Since so few disaggregated measures were included in the calculation of the overall rank, and because each measure had an equal weight in the calculation, racial equity measures only accounted for about 12.1% of a state’s overall rank.

Given the suppressed influence of the measures by race in our overall ranking, we wanted to create an index to weight our final Scorecard ranking. This index would better incorporate disparities between White residents and residents of color within a state in the overall ranking. Our previous ranking methodology is still used to determine the Outcome rank for each state, which is also incorporated into the final Scorecard rank. The Outcome rank, however, no longer includes the rankings of measures disaggregated by race as these are now accounted for in our Disparity Index rank.

### **Calculating Our Racial Disparity Ranks**

Our method of calculating the disparity index is predicated on the underlying assumption that if there was no racial disparity in outcomes within the state, both White and non-White households or individuals would have the same outcomes within the state. We calculate the extent to which this assumption is true for each measure by calculating the percent difference between outcomes experienced by White and non-White households or individuals. This technique allows us to measure the gap between outcomes while still normalizing this gap by the midpoint between the two, allowing us to put this difference in context. For example, if one state has a non-White uninsured rate of 5% but a White uninsured rate of 2%, one may believe that the overall difference between the two of 3% is relatively small. But because both rates are small to begin with, that 3% is a larger proportion of the average between the two, and thus should be thought of as a larger gap than in a state that has a White uninsured rate of 7% and a non-White uninsured rate of 10%.

More formally, the percent difference shows what percentage of the average between the two populations is the difference between them. Mathematically, it is represented as:

$$abs \left( \frac{Est_{White} - Est_{Nonwhite}}{Average(Est_{White}, Est_{Nonwhite})} \right)$$

As we are not interested in the direction of the change (i.e., if Est<sub>1</sub> would have to increase or decrease to become Est<sub>2</sub>), but simply the size of the difference, we take the absolute value of this number and use it in our final calculations.

There are several measures in the Scorecard for which we are unable to download or calculate aggregate data for people or households of color – the source only publishes disaggregated percentages for each publication. To include these measures in the disparity index, we derived the rate for people of color from the overall state rate and the rate for White residents in order to calculate the percent difference. Since the state rate is an average of the rates for White residents and residents of color (weighted by their population sizes), we could use the rate of White residents and their population percentage to calculate the rate that residents of color must have to meet the overall state rate. Because this is an imperfect estimate, we do not publish this data.

Though ranking the states on percent difference by race or the ratio by race—as the *Scorecard* previously did by simply dividing the higher value by the lower value—results in the same ranks at the individual measure level, using the average percent difference or ratio to calculate the overall index of disparity across multiple measures produces different cumulative ranks. This is because the ratio demonstrates how one group compares to the other, whereas the percent difference shows the average percentage each group would need to change in order to attain a middle ground value between them. Using percent difference in lieu of ratios for our index measure makes intuitive sense, given that the measure is not about one group becoming the other so much as both being equivalent and how much each group would need to change to make it so.

Additionally, while we explored more mathematically sophisticated methods of calculating this index, we ultimately settled on using percent difference for its ability to be more easily understood by our majority non-research audience. Percent difference also allows us to include measures which we otherwise would not have been able to include given our inability to access the underlying data source, and, thus, the standard errors, for many measures.

After calculating the percent difference for each disaggregated measure, we average these numbers across every calculated measure by race. We then rank these final percent differences against each other to obtain the disparity index.

### **Applying the Racial Disparity Rank to the Scorecard Rank**

We determined that the best way to incorporate our index into the final rank was to have our Outcome rank account for 60% of the *Scorecard* rank and our Racial Disparity rank for 40%. We used the following formula to compute the weighted average of these ranks:

$$(\text{Outcome Rank} * 0.6) + (\text{Racial Disparity Rank} * 0.4)$$

We then re-ranked this final number to achieve the overall *Scorecard* Rank. Therefore, while intuitively one would expect the *Scorecard* rank to fall within the range of the Outcome rank and Disparity Index rank, it is possible to fall outside that range. This can be achieved if both ranks are either relatively *greater* than other states' ranks (bringing up their rank) or *lower* than other states ranks (decreasing their overall rank). See Table 1 for a limited sample of states that illustrates this effect.

	Outcome Rank	Racial Disparity Rank	Weighted Avg.	Scorecard Rank
State 1	5	1	3.4	2
State 2	3	3	3.0	1
State 3	47	33	41.4	48
State 4	30	51	38.4	47
State 5	50	39	45.6	49

State	2018 Scorecard Rank	2019 Rank (old methodology)	2019 Outcome Measure Rank (no racial disparities)	2019 Racial Disparity Rank	2019 Scorecard Rank (60/40 weight)
Alabama	46	48	47	33	48
Alaska	17	27	26	30	27
Arizona	36	36	36	14	25
Arkansas	44	45	44	12	38
California	27	25	25	24	18
Colorado	11	8	7	42	14
Connecticut	20	21	18	46	34
Delaware	28	26	27	34	36
District of Columbia	39	35	30	51	47
Florida	42	37	38	17	35
Georgia	49	49	49	20	46
Hawaii	3	2	5	1	2
Idaho	21	16	16	21	12
Illinois	29	28	28	27	27
Indiana	31	29	34	13	23
Iowa	9	6	2	37	9
Kansas	23	24	20	40	29
Kentucky	38	41	39	5	22
Louisiana	50	51	51	41	51
Maine	14	17	22	11	11
Maryland	22	19	19	36	24
Massachusetts	13	9	6	28	7
Michigan	30	23	23	25	16
Minnesota	4	3	1	44	13
Mississippi	51	50	50	39	49
Missouri	33	31	33	19	26
Montana	6	10	13	35	15
Nebraska	18	14	9	49	20
Nevada	48	44	41	9	30
New Hampshire	2	4	8	4	3
New Jersey	25	22	21	31	20
New Mexico	46	47	48	15	44
New York	32	32	32	32	40
North Carolina	43	38	37	29	41
North Dakota	10	12	11	45	18
Ohio	35	34	35	23	37
Oklahoma	40	42	43	8	32
Oregon	15	18	24	7	10
Pennsylvania	24	30	31	38	41
Rhode Island	26	33	29	47	45
South Carolina	45	46	46	48	50
South Dakota	19	20	15	50	32
Tennessee	37	40	40	18	38
Texas	41	43	42	22	43
Utah	5	5	4	26	5
Vermont	1	1	3	3	1
Virginia	16	13	17	10	6
Washington	8	6	10	2	4
West Virginia	34	39	44	6	31
Wisconsin	12	11	12	43	17
Wyoming	7	15	14	16	7