

# County Indexes Methodology

## October 2024

To promote understanding of county outcomes and racial disparities from multiple indicators, we calculate two summary measures of indicators: issue indexes of for example, Democracy or Housing indicators, and a composite index of all indicators. Both issue indexes and the composite index are calculated separately for outcomes and racial disparity. Note: these summary measures of indicators are distinct from the Index of Disparity measure we use to determine racial disparity for a single indicator.

### County Issue Index Methodology:

We create issue indexes for all seven issues on RACE COUNTS (Crime & Justice, Democracy, Economic Opportunity, Education, Health Care Access, Healthy Built Environment, and Housing). We include all indicators within an issue for that issue index. See the list of all issues and indicators at the end of this document. First, we calculate disparity and outcome z-scores<sup>1</sup> for each indicator and cap them at |3.5| to lessen the impact of outliers. A positive z-score indicates a higher than average value, while a negative z-score indicates a lower than average value. For example, 86.4% of Alameda County residents perceive their neighborhood as safe. Alameda County's perception of safety outcome z-score is -0.78, reflecting that Alameda residents are slightly less likely to perceive their neighborhood as safe than the California county average (87.6%).

Then we calculate the average disparity and outcome z-scores across indicators within each issue at county level. After this we suppress the z-scores for counties with few indicator disparity and outcome values within each issue. Each issue has its own indicator threshold as shown in the table below.

Issue	Minimum Indicator Threshold
Crime & Justice	2
Democracy	3
Economic Opportunity	3
Education	4
Health	3
Healthy Built Environment	4
Housing	5

Whether the minimum or maximum total rate is the best outcome will impact outcome z-scores. We account for that in our indicator outcome z-score calculations. The way we do that is by multiplying indicator outcome z-scores by -1 where the minimum total rate is the best outcome, so that they are consistent with the indicators where the maximum total rate is the best outcome. The adjusted indicator outcome z-scores are then used in all index calculations.

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<sup>1</sup> A z-score is a standardized number that tells you how far away a given data point is from the mean [or average]. [Source](#)

We then cap the remaining z-scores at  $|2|$  to lessen the impact of issue outliers. These capped z-scores are the issue area disparity and outcome index scores. These index scores are ranked and comprise the issue disparity and outcome ranks you see on RACE COUNTS. See the issue area index example below.

#### Alameda County: Crime & Justice Outcome Index

Indicator	Z-Score	Crime & Justice Index (Avg)
Arrests for Status Offenses	0.61	0.30
Use of Force	0.28	
Incarceration	1.11	
Perception of Safety	-0.78	

*Note: This Crime & Justice outcome index z-score of 0.30 ranks 18<sup>th</sup> best among all California counties with data.*

### County Composite Index Methodology:

We calculate one composite index across all indicators in all issues on RACE COUNTS. We do this by taking the average of outcome and disparity issue indexes. See example of the Alameda County Composite Outcome Index below.

#### Alameda County: Composite Outcome Index

Issue	Issue Index Score	Composite Index (Avg)
Crime & Justice	0.30	0.44
Democracy	0.47	
Economic Opportunity	1.00	
Education	0.77	
Health Care Access	0.43	
Healthy Built Environment	-0.16	
Housing	0.28	

*Note: This composite outcome index z-score of 0.44 ranks 10<sup>th</sup> best among all California counties with data.*

We suppress the z-scores for counties with fewer than 4 issue index disparity and outcome scores and we cap the remaining z-scores at  $|1|$  to lessen the impact of outliers. These capped z-scores are the composite index disparity and outcome scores. We rank these composite disparity and outcome scores, which become the county disparity and outcome ranks you see on RACE COUNTS.

## County/State Indicator Methodology

### Crime & Justice

Arrests for Status Offenses

Use of Force

Incarceration

Officer-Initiated Stops

Perception of Safety

### Democracy

Diversity of Elected Officials

Diversity of Candidates

Presidential Voting

Midterm Voting

Registered Voters

Census Participation

### Economic Opportunity

Employment

Per Capita Income

Cost-of-Living-Adjusted Poverty

Connected Youth

Employment as Officials and Managers

Internet Access

Living Wage

### Education

High School Graduation

3rd Grade English Proficiency

3rd Grade Math Proficiency

Suspensions

Early Childhood Education

Teacher & Staff Diversity

Chronic Absenteeism

### Health Care Access

Life Expectancy

Health Insurance

Preventable Hospitalizations

Low Birthweight

Usual Source of Care

Got Help (Mental or Behavioral Health)

### Healthy Built Environment

Drinking Water Contaminants

Food Access

Proximity to Hazards

Toxic Releases from Facilities

Asthma

Lack of Greenspace

### Housing

Subprime Mortgages

Housing Quality

Housing Cost-Burdened Renters

Housing Cost-Burdened Owners

Foreclosure Rate

Homeownership

Denied Mortgages

Homelessness (Student)

Overcrowded Housing

Evictions