County Indexes Methodology November 2023

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 Environments, and Housing). We include all indicators within an issue for that issue index, with one exception. (See list of all issues and indicators at the end of this document). First, we calculate disparity and outcome z-scores 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. See the Crime & Justice Outcome Index for Alameda County below.

Alameda County: Crime & Justice Outcome Index

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

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

After this we suppress the z-scores for counties with missing values for more than half of the indicators in the issue. For example, Incarceration data are available for Amador County, but no data are available for Use of Force, Perception of Safety, or Arrests for Status Offenses there, so no Crime & Justice indexes are calculated for Amador County. Each issue area has its own indicator threshold, see table below.

Issue	Minimum Indicator Threshold
Crime & Justice	2
Democracy	3

Living Wage is not currently included in the Economic Opportunity index due to overlap with Per Capita Income and Cost-of-Living Adjusted Poverty.

² A z-score is a standardized number that tells you how far away a given data point is from the mean [or average]. Source

Economic Opportunity	3
Education	4
Health Care Access	3
Healthy Built Environment	4
Housing	5

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.

County Composite Index Methodology:

We calculate one composite index of all indicators in all issues on RACE COUNTS.³ 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	
Democracy	0.47	
Economic Opportunity	1.00	
Education	0.77	0.44
Health Care Access	0.43	
Healthy Built Environment	-0.16	
Housing	0.28	

Note: This composite outcome index z-score of 0.44 ranks 10th 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.

³ With the exception of Living Wage.

County/State Indicator Methodology

Crime & Justice

Arrests for Status Offenses

Use of Force

Incarceration

Perception of Safety

Democracy

Diversity of Elected Officials

Diversity of Candidates

Presidential Voting

Midterm Voting

Registered Voters

Census Participation

Economic

Employment

Per Capita Income

Cost-of-Living-Adjusted Poverty

Connected Youth

Employment as Officials and Managers

Internet Access

Education

High School Graduation

3rd Grade English Proficiency

3rd Grade Math Proficiency

Suspensions

Early Childhood Education

Teacher & Staff Diversity

Chronic Absenteeism

Health

Life Expectancy

Health Insurance

Preventable Hospitalizations

Low Birthweight

Usual Source of Care

Got Help (Mental Health Care)

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