

# RACE COUNTS: Indicator Methodology

## City Data Refresh (October 2024)

### Table of Contents

#### **Crime & Justice**

- Use of Force
- Incarceration
- Officer-Initiated Stops

#### **Democracy**

- Diversity of Elected Officials
- Census Participation

#### **Economic Opportunity**

- Employment
- Per Capita Income
- Officials and Managers
- Internet Access

#### **Education**

- High School Graduation
- English Proficiency
- Math Proficiency
- Suspensions
- Diversity of Teachers
- Chronic Absenteeism

#### **Health Care Access**

- Health Insurance

#### **Healthy Built Environment**

- Drinking Water Contaminants
- Proximity to Hazards
- Toxic Releases from Facilities
- Lack of Greenspace

#### **Housing**

- Subprime Mortgage Loans
- Denied Mortgage Applications
- Housing Quality
- Housing Cost Burden (Renter)
- Housing Cost Burden (Owner)

Foreclosure

Eviction

Overcrowded Housing

Homeownership

A note on Racial/Ethnic Categories: Race is a social construct and a biological construct, neither of which are discussed in depth in this analysis. Thus, we use a simplified view of race to portray racial data to a broader audience. Ethnicity is also treated lightly, and while Latinx is an ethnicity, it is generally treated and spoken about as a race, even though Latinxs can be of any race. Additionally, each data source uses slightly different terminology and categorization. Considering all these factors, we use one simplified set of labels for the RACE COUNTS website and publications for consistency while maintaining fidelity to the data sources as much as possible. To find out more, please see our [Race & Ethnicity Methodology](#) documentation.

## Crime & Justice

### Use of Force

*Indicator: Average Number People Injured in Law Enforcement Use of Force Incidents per 100,000 People by Race*

Use of force incidents included are those involving the discharge of a firearm, serious bodily injury, or death. The annual average rate is calculated for all years in the range. The number of people injured is the total for all years in the range. Catalyst California excluded data for groups with *fewer than 100 people*. Data for Another Race and Multiracial populations are excluded because of mismatches in incident and population racial definitions.

Index of Disparity for this indicator is calculated using the best (highest) rate, that of people who did NOT receive force from law enforcement. We used these 'flipped' data values because so many cities had one or more racial groups with zero people receiving force. As such, the results using the 'flipped' data values paint a more accurate picture of the variation in racial disparity within and between cities.

*Source: Open Justice Data, California Department of Justice*

Year: 2016-2022

Link: <https://openjustice.doj.ca.gov/data>

*Source: American Community Survey 5-Year Estimates, Table DP05*

Year: 2018-2022

Link: <https://www.census.gov/programs-surveys/acs/>

### Racial/Ethnic Categories:

Latinx, Asian, Native Hawaiian / Pacific Islander, American Indian / Alaska Native, Black, White. For the population used as denominators, all groups except Latinx exclude Latinxs.

Note: racial-ethnic identity is determined by the officers and not the civilians stopped.

## Incarceration

### *Indicator: Incarcerated People per 100k Population*

The average number of people that are incarcerated in state prison per 100k people. Direct racial estimates of this indicator were unavailable for California cities. Catalyst California indirectly estimated total and racial group exposure values by calculating weighted averages that link area-level (census tract) population data with direct indicator estimates at tract level. Derived estimates cannot be calculated for cities containing fewer than two census tracts.

We screened out populations below 250 persons to minimize outlier impacts. Index of Disparity calculated using the best (lowest), non-zero rate, because ID cannot be calculated based on a rate of zero. Note: the data used for the city estimates differ from those used for the county/state estimates, making direct comparisons inadvisable.

*Source: Prison Policy Initiative*

Year: 2020

Link: <https://www.prisonpolicy.org/origin/ca/2020/tract.html>

*Source: Decennial Census, Tables P2 and DP1*

Year: 2020

Link: <https://www.census.gov/data/developers/data-sets/decennial-census.html>

### *Racial/Ethnic Categories:*

White alone, Black alone, Hispanic or Latinx, American Indian / Alaskan Native alone or in combination with another race, Asian alone, Native Hawaiian / Pacific Islander alone or in combination with another race, Another Race alone, Multiracial. American Indian / Alaskan Native, Native Hawaiian / Pacific Islander, and Latinx categories include Latinxs.

## Officer-Initiated Stops

### *Indicator: Officer-Initiated Stops per 1,000 People*

The number of law enforcement officer-initiated stops per 1,000 people. Data include stops made by the largest law enforcement agency in a jurisdiction, excluding California Highway Patrol (CHP). We exclude CHP stops because they are all assigned to Sacramento County in the dataset, regardless of where the stops occurred. Note that CHP stops account for a substantial percentage of all stops statewide and may comprise most stops in smaller, more rural areas. Stops are assigned to a geography based on where the law enforcement agency is based, not on where the stop was made.

Index of Disparity calculated using the best (lowest) rate.

*Source: Open Justice Data, California Department of Justice*

Year: 2022

Link: <https://openjustice.doj.ca.gov/data>

*American Community Survey 5-Year Estimates, Tables DP05, B04006, B02018*

Year: 2018-2022

Link: <https://www.census.gov/programs-surveys/acs>

### *Racial/Ethnic Categories:*

Latinx, White, Black, Asian, American Indian / Alaska Native, Native Hawaiian / Pacific Islander, Southwest Asian / North African / South Asian. All groups exclude Latinxs, except for Latinx and Southwest Asian / North African / South Asian. Note: racial-ethnic identity is determined by the officers and not civilians stopped.

## Democracy

### Diversity of Elected Officials

#### *Indicator: Elected Officials of a Race per 100k People of that Race*

Number of elected officials of a race per 100k constituents of that same race.

Catalyst California selected elected officials holding office at the city (district and citywide), countywide, statewide levels for California. City offices can include the following: Mayor, City Attorney, Auditor, Clerk, Controller, Councilmember, Prosecutor, and Treasurer. Countywide offices can include some of the following: Assessor, Clerk, Recorder, Auditor, Controller, Treasurer, Tax Collector, Coroner, District Attorney, Public Administrator, Public Defender, Sheriff, and Superintendent of Schools. Statewide offices can include the following: Governor, Lieutenant Governor, Attorney General, Insurance Commissioner, State Secretary of State, Controller, Superintendent of Public Instruction, State Supreme Court Justice, Treasurer, and US Senator.

We calculated rates of elected constituents by city by race using American Community Survey data. We screened out racial groups with populations of *less than fifty people of any one racial group* to make sure that a small number did not lead to general conclusions about a racial group in a city. Additionally, while the race/ethnicity of American Indian / Alaska Native (AIAN) elected officials is alone and excludes Latinxs, the AIAN constituent population is alone and in combination with another race and does not exclude Latinx to better reflect all AIAN Californians. Note: the data used for the city estimates differ from those used for the county/state estimates, making direct comparisons inadvisable.

Index of Disparity calculated using the best (highest) rate.

#### *Source: Who Leads US Campaign*

Year: 2017, 2019, 2020

Link: <http://wholeads.us/electedofficials/>

#### *Source: American Community Survey 5-Year Estimates, Table DP05*

Year: 2016-2020

Link: <https://www.census.gov/programs-surveys/acs>

#### *Racial/Ethnic Categories:*

American Indian / Alaska Native alone, Asian American or Pacific Islander alone, Black alone, Latinx, Multiracial, White alone. Multiracial responses are from self-identification only and, as a result, multiracial elected officials are most likely under-identified in the data. All groups exclude Latinxs, except for Latinx.

## Census Participation

### *Indicator: Census Participation (%)*

Average percentage of households that filled out their 2020 Census questionnaire. Direct racial estimates of this indicator were unavailable for California cities. Catalyst California indirectly estimated total and racial group exposure values by calculating weighted averages that link population data with direct indicator estimates at tract level. Derived estimates cannot be calculated for cities containing fewer than two census tracts.

We screened out data for groups with *150 or fewer households* to make sure that small numbers did not lead to general conclusions about a racial group. Index of Disparity calculated using the best (highest) rate. Note: the data used for the city estimates differ from those used for the county/state estimates, making direct comparisons inadvisable.

*Source: U.S. Census Bureau*

Year: 2020

Link: <https://www.census.gov/library/visualizations/interactive/2020-census-self-response-rates-map.html>

*Source: U.S. Census Bureau, Tables P16, P16C/E/H/IJ/L/N/O*

Year: 2020

Link: <https://data.census.gov/cedsci/>

### *Racial/Ethnic Categories:*

White alone, Black alone, Asian alone, Another Race alone, Multiracial, Latinx, American Indian / Alaska Native alone, Native Hawaiian / Pacific Islander alone. American Indian / Alaska Native, Native Hawaiian / Pacific Islander, and Latinx include Latinxs.

## Economic Opportunity

### Employment

#### *Indicator: Employment to Population Rate (%)*

Persons Employed as a percentage of total population age 16 to 64. This category includes all civilians 16 years old and over who either (1) were "at work," that is, those who did any work at all during the reference week as paid employees, worked in their own business or profession, worked on their own farm, or worked 15 hours or more as unpaid workers on a family farm or in a family business, or (2) were "with a job but not at work," that is, those who did not work during the reference week but had jobs or businesses from which they were temporarily absent due to illness, bad weather, industrial dispute, vacation, or other personal reasons. Excluded from the employed are people whose only activity consisted of work around the house or unpaid volunteer work for religious, charitable, and similar organizations, also excluded are all institutionalized people and people on active duty in the United States Armed Forces.

Values with low reliability were excluded based on the coefficient of variation. In addition, populations below 150 were screened out to remove outlier impacts. Index of Disparity calculated using the best (highest) rate.

*Source: American Community Survey, 5-Year Estimates, Table S2301*

Year: 2018-2022

Link: <https://www.census.gov/programs-surveys/acs/>

#### *Racial/Ethnic Categories:*

White alone, Black alone, Hispanic or Latinx, Asian alone, Native Hawaiian / Pacific Islander alone, American Indian / Alaska Native alone, Another Race alone, Multiracial. White excludes Latinxs.

## Per Capita Income

### *Indicator: Per Capita Income (\$)*

Income in the past twelve months per person, regardless of age or employment status. Catalyst California excluded data for groups with data with low reliability, defined as a coefficient of variation greater than or equal to 30.

Index of Disparity calculated using the best (highest) rate.

*Source: American Community Survey 5-Year Estimates, Tables B19301B-I*

Year: 2018-2022

Link: <https://www.census.gov/programs-surveys/acs/>

### *Racial/Ethnic Categories:*

White alone, Black alone, Hispanic or Latinx, Asian alone, Native Hawaiian / Pacific Islander alone, American Indian / Alaska Native alone, Another Race alone, Multiracial. White excludes Latinxs.

## Officials and Managers

### *Indicator: Employment as Officials or Managers per 1k Persons*

Officials and managers are executive/senior level officials and managers and first/mid-level officials and managers. Values with low reliability were excluded based on the coefficient of variation. In addition, Catalyst California excluded data for groups *with fewer than 150 people*.

Index of Disparity calculated using the best (highest) rate.

*Source: Equal Employment Opportunity Tabulation of American Community Survey, 5-Year Estimates*

Year: 2014-2018

Link: <https://www.census.gov/topics/employment/equal-employment-opportunity-tabulation.html>

*Source: American Community Survey, 5-Year Estimates, Table B08301*

Year: 2017-2021

Link: <https://www.census.gov/programs-surveys/acs/>

### *Racial/Ethnic Categories:*

White alone, Black alone, American Indian / Alaska Native alone, Asian alone, Native Hawaiian / Pacific Islander alone, Hispanic or Latinx. All groups exclude Latinxs, except for Latinx.

## Internet Access

### *Indicator: Persons with Internet Access (%)*

Persons in households who owned or used a computer and accessed the Internet through a service such as a data plan for a mobile phone, a cable modem, DSL, or other type of service. Values with low reliability were excluded based on the coefficient of variation. In addition, populations below 30 were screened out to remove outlier impacts.

Index of Disparity calculated using the best (highest) rate.

*Source: American Community Survey, 5-Year Estimates, Table S2802*

Year: 2018-2022

Link: <https://www.census.gov/programs-surveys/acs/>

### *Racial/Ethnic Categories:*

White alone, Black alone, Hispanic or Latinx, Asian alone, Native Hawaiian / Pacific Islander alone, American Indian / Alaska Native alone, Another Race alone, Multiracial. White excludes Latinxs.

## Education

### High School Graduation

#### *Indicator: High School Graduation (%)*

Graduates are students who graduate with either a traditional high school diploma, an adult education high school diploma, or have passed the California High School Proficiency Exam. The four-year adjusted cohort is the group of students that could potentially graduate, adjusted for students who transfer into or out of the cohort during the four-year period.

Beginning in 2016-17, The California Department of Education (CDE) made several important changes to their methodology. The most significant changes to the methodology include the following:

- No longer removing students from the cohort who transfer to adult education programs or community college.
- No longer counting students who receive an adult education high school diploma as regular high school graduates.
- No longer counting students who pass the California High School Proficiency Exam (CHSPE) as regular high school graduates.

Graduation rates based on *fewer than 20 cohort graduating students* were excluded to remove extremely high or low percentages based on small populations. The California Department of Education excludes raw numbers where there are ten or fewer cohort students, but still provides graduation rates in these cases. We excluded figures for race Not Reported in our calculations. Index of Disparity calculated using best (highest) graduation rate.

*Source: California Department of Education*

Year: 2022-23

Link: <https://www.cde.ca.gov/ds/ad/filesacgr.asp>

#### *Racial/Ethnic Categories:*

Hispanic or Latinx (of any race), American Indian / Alaska Native alone, Asian alone, Native Hawaiian / Pacific Islander alone, Filipinx alone, African American alone, White alone, Multiracial, Not Reported. All groups exclude Latinxs, except for Latinx.

## English Proficiency

*Indicator: 3<sup>rd</sup> Graders Scoring Proficient or Better in English Language Arts (%)*

Students scoring proficient or advanced on the third grade English Language Arts/Literacy (Smarter Balanced and California Alternate Assessment) test as a percentage of all third graders tested. Racial groups with 10 or fewer students tested in a district were excluded by the data source. We excluded figures for race Not Reported in our calculations.

Index of Disparity calculated using best (highest) proficiency rate.

*Source: California Department of Education, California Assessment of Student Performance and Progress*

Year: 2022-23

Link: <https://caaspp-elpac.ets.org/caaspp/ResearchFileListSB?ps=true&lstTestType=B&lstCounty=00&lstDistrict=00000>

*Racial/Ethnic Categories:*

Hispanic or Latinx (of any race), American Indian / Alaska Native alone, Asian alone, Native Hawaiian / Pacific Islander alone, Filipinx alone, African American alone, White alone, Multiracial, Not Reported. All groups exclude Latinxs, except for Latinx.

## Math Proficiency

*Indicator: 3<sup>rd</sup> Graders Scoring Proficient or Better in Mathematics (%)*

Students scoring proficient or advanced on the third grade Mathematics test (*Smarter Balanced and California Alternate Assessment*) as a percentage of all third graders tested. Racial groups with 10 or fewer students tested in a district were excluded by the data source. We excluded figures for race Not Reported in our calculations.

Index of Disparity calculated using best (highest) proficiency rate.

*Source: California Assessment of Student Performance and Progress*

Year: 2022-23

Link: [https://caaspp-  
elpac.ets.org/caaspp/ResearchFileListSB?ps=true&lstTestType=B&lstCounty=00&lstDistrict=  
00000](https://caaspp-elpac.ets.org/caaspp/ResearchFileListSB?ps=true&lstTestType=B&lstCounty=00&lstDistrict=00000)

### *Racial/Ethnic Categories:*

Hispanic or Latinx (of any race), American Indian / Alaska Native alone, Asian alone, Native Hawaiian / Pacific Islander alone, Filipinx alone, African American alone, White alone, Multiracial, Not Reported. All groups exclude Latinxs, except for Latinx.

## Suspensions

### *Indicator: Students Suspended per 100 Students*

Students suspended include those who were suspended for any reason, including willful defiance. This rate is calculated using enrolled students which includes all students enrolled at a point in time and does not include all students entering or existing in the cohort. This indicator could be improved by replacing enrolled students with cumulatively enrolled students, which CDE does not publish publicly.

Catalyst California divided the number of students suspended by the number of enrolled students. The California Department of Education masks some values to protect student privacy. We excluded figures for race Not Reported in our calculations.

Index of Disparity calculated using the best (lowest), non-zero rate, because ID cannot be calculated based on a rate of zero.

*Source: California Department of Education*

Year: 2022-23

Link: <http://data1.cde.ca.gov/dataquest/>

### *Racial/Ethnic Categories:*

Hispanic or Latinx (of any race), American Indian / Alaska Native alone, Asian alone, Native Hawaiian / Pacific Islander alone, Filipinx alone, African American alone, White alone, Multiracial, Not Reported. All groups exclude Latinxs, except for Latinx.

## Diversity of Teachers

### *Indicator: Teachers of a Race per 100 Students of Same Race*

Ratio of staff of a race per 100 students of the same race. Catalyst California calculated the number of teachers of a race per 100 students of the same race. Catalyst California screened out racial groups with populations of less than 100 students of any one racial group to make sure that a small number did not lead to general conclusions about a racial group in a district. We excluded figures for race Not Reported in our calculations.

Index of Disparity calculated using the best (highest) rate.

*Source: California Department of Education Staff Demographic Data*

Year: 2018-19

Link: <https://www.cde.ca.gov/ds/ad/staffdemo.asp>

*Source: California Department of Education Enrollment by School*

Year: 2018-19

Link: <https://www.cde.ca.gov/ds/sd/sd/filesenr.asp>

### *Racial/Ethnic Categories:*

Hispanic or Latinx (of any race), American Indian / Alaska Native alone, Asian alone, Native Hawaiian / Pacific Islander alone, Filipinx alone, African American alone, White alone, Multiracial, Not Reported. All groups exclude Latinxs, except for Latinx.

## Chronic Absenteeism

### *Indicator: Chronically Absent Students per 100 Students*

A chronically absent student is absent on 10 percent or more of school days per year. Catalyst California screened out racial groups with fewer than 20 chronically absent students so that small numbers did not lead to general conclusions about racial groups. We excluded figures for race Not Reported in our calculations.

Index of Disparity calculated using the best (lowest) rate.

*Source: California Department of Education*

Year: 2022-23

Link: <https://www.cde.ca.gov/ds/ad/filesabd.asp>

### *Racial/Ethnic Categories:*

Hispanic or Latinx (of any race), American Indian / Alaska Native alone, Asian alone, Native Hawaiian / Pacific Islander alone, Filipinx alone, African American alone, White alone, Multiracial, Not Reported. All groups exclude Latinxs, except for Latinx.

## Health Care Access

### Health Insurance

#### *Indicator: Uninsured Population (%)*

Percentage of the civilian noninstitutionalized population without health insurance. Catalyst California screened out racial groups with civilian non-institutionalized populations with fewer than 130 persons to make sure that a small number did not lead to general conclusions about a racial group in a city.

Catalyst California also excluded values with low reliability based on the coefficient of variation, one of the Census Bureau's statistical quality standard measures. Low reliability here refers to values with coefficients of variation over 40% per <https://www.esri.com/library/whitepapers/pdfs/the-american-community-survey.pdf>.

Index of Disparity calculated using the best (lowest), non-zero rate, because ID cannot be calculated based on a rate of zero.

*Source: American Community Survey, 5-Year Estimates, Table S2701*

Year: 2018-2022

Link: <https://www.census.gov/programs-surveys/acs/>

#### *Racial/Ethnic Categories:*

White alone, Black alone, American Indian / Alaska Native alone, Asian alone, Native Hawaiian / Pacific Islander alone, Another Race alone, Multiracial, Latinx (of any race). All groups besides White include Latinxs.

## Healthy Built Environment

### Drinking Water Contaminants

#### *Indicator: Drinking Water Contaminants Exposure*

This exposure indicator score is based on drinking water system boundaries and water contaminant data aggregated to census tracts. The higher the score, the more contamination exposure.

Direct racial estimates of this indicator were unavailable for all California cities. Catalyst California indirectly estimated racial group exposure values by calculating weighted averages that link area-level (census tract) population data with direct indicator estimates at the city level. We did not calculate weighted averages for single census tract cities.

Catalyst California excluded data for groups with *fewer than 250 people*.

Index of Disparity calculated using the best (lowest), non-zero rate, because ID cannot be calculated based on a rate of zero.

*Source: OESHHA Cal Enviro Screen 4.0*

Year: 2021

Link: <https://oehha.ca.gov/calenviroscreen/report/draft-calenviroscreen-40>

*Source: American Community Survey 5-Year Estimates, Tables DP05 and B04006*

Year: 2016-2020

Link: <https://www.census.gov/programs-surveys/acs/>

#### *Racial/Ethnic Categories:*

Latinx, White alone, African American or Black alone, Asian alone, American Indian / Alaska Native alone or in combination with another race, Native Hawaiian / Pacific Islander alone or in combination with another race, Southwest Asian / North African alone or in combination with another race, Another Race, Multiracial.

White, Black, Asian, Another Race, and Multiracial exclude Latinxs.

## Proximity to Hazards

### *Indicator: Proximity to Hazards within 1,000-3,000 Feet of Sensitive Land Uses*

Proximity to hazardous sites, identified using the EnviroStor Cleanup Sites Database, Department of Toxic Substances Control. The database includes: Federal Superfund, State Response, Corrective Action, School Cleanup, Voluntary Cleanup, Tiered Permit, Evaluation, Historical, and Military Evaluation sites. Hazardous substances can move off-site and impact surrounding communities through volatilization, groundwater plume migration, or windblown dust. Since the nature and the magnitude of the threat and burden posed by hazardous substances vary among the different types of sites as well as the site status, the indicator takes both into account. Weights were also adjusted based on proximity to populated census blocks. Catalyst California calculated the number of weighted EnviroStor cleanup sites within buffered distances to populated blocks of census tracts.

Direct racial estimates of this indicator were unavailable for all California cities. Catalyst California indirectly estimated racial group exposure values by calculating weighted averages that link population data and the weighted number of sites at the area-level (census tract), to derive estimates at city level. The estimates range from 0 (lowest) to 312.75 (highest). Derived estimates cannot be calculated for cities containing fewer than two census tracts.

Catalyst California excluded data for groups with *fewer than 250 people*.

Index of Disparity calculated using the best (lowest), non-zero rate, because ID cannot be calculated based on a rate of zero.

*Source: OESHHA Cal Enviro Screen 4.0*

Year: 2021

Link: <https://oehha.ca.gov/calenviroscreen/report/draft-calenviroscreen-40>

*Source: American Community Survey 5-Year Estimates, Tables DP05 and B04006*

Year: 2016-2020

Link: <https://www.census.gov/programs-surveys/acs/>

### *Racial/Ethnic Categories:*

Latinx, White alone, African American or Black alone, Asian alone, American Indian / Alaska Native alone or in combination with another race, Native Hawaiian / Pacific Islander alone or in combination with another race, Southwest Asian / North African alone or in combination with another race, Another Race, Multiracial.

White, Black, Asian, Another Race, and Multiracial exclude Latinxs.

## Toxic Releases from Facilities

### *Indicator: Exposure to Toxic Releases from Facilities*

This exposure indicator score measures toxicity weighted concentrations of modeled chemical releases to air from facility emissions and off-site incineration. The higher the score, the more release exposure.

Direct racial estimates of this indicator were unavailable for all California cities. Catalyst California indirectly estimated racial group exposure values by calculating weighted averages that link area-level (census tract) population data with direct indicator estimates at the city level. Derived estimates cannot be calculated for cities containing fewer than two census tracts.

Catalyst California excluded data for groups with *fewer than 250 people*.

Index of Disparity calculated using the best (lowest), non-zero rate, because ID cannot be calculated based on a rate of zero.

*Source: OESHHA Cal Enviro Screen 4.0*

Year: 2021

Link: <https://oehha.ca.gov/calenviroscreen/report/draft-calenviroscreen-40>

*Source: American Community Survey 5-Year Estimates, Tables DP05 and B04006*

Year: 2016-2020

Link: <https://www.census.gov/programs-surveys/acs/>

### *Racial/Ethnic Categories:*

Latinx, White alone, African American or Black alone, Asian alone, American Indian / Alaska Native alone or in combination with another race, Native Hawaiian / Pacific Islander alone or in combination with another race, Southwest Asian / North African alone or in combination with another race, Another Race, Multiracial.

White, Black, Asian, Another Race, and Multiracial exclude Latinxs.

## Lack of Greenspace

### *Indicator: Impervious Land Cover (%)*

Percent impenetrable surface areas such as rooftops, roads or parking lots. Impervious surfaces are covered by impenetrable, artificial materials, such as brick, concrete and asphalt and includes structures such as roads, pavement, parking lots, buildings and roof tops. Access to green space is then defined as the inverse of the percentage of census tract covered by impervious surfaces.

Catalyst California indirectly estimated racial group exposure values by calculating weighted averages that link area-level (census tract) population data with direct indicator estimates to calculate exposure estimates at city level. Derived estimates cannot be calculated for cities containing fewer than two census tracts.

Catalyst California screened out data for groups with *fewer than 250 people*. We also suppressed data where rates are equal to zero since it is unlikely there are inhabited areas without any roofs, roads, or parking lots.

Index of Disparity calculated using the best (lowest), non-zero rate, because ID cannot be calculated based on a rate of zero.

### *Source: National Landcover Database (NLCD)*

Year: 2021

Link: <https://www.usgs.gov/centers/eros/science/national-land-cover-database>

### *Source: American Community Survey 5-Year Estimates, Tables DP05 and B04006*

Year: 2017-2021

Link: <https://www.census.gov/programs-surveys/acs/>

### *Racial/Ethnic Categories:*

Latinx, White alone, African American or Black alone, Asian alone, American Indian / Alaska Native alone or in combination with another race, Native Hawaiian / Pacific Islander alone or in combination with another race, Southwest Asian / North African alone or in combination with another race, Another Race, Multiracial.

White, Black, Asian, Another Race, and Multiracial exclude Latinxs.

## Housing

### Subprime Mortgage Loans

*Indicator: Subprime (Higher-priced) Loans per 1k Mortgage Loans Originated*

Number of higher-priced loans per 100 mortgage applications. Mortgage applications were for home purchases. The loan would be secured by a first lien for housing with one to four units. These are loans made to borrowers with impaired or limited credit histories, or high ratios of debt to income.

Catalyst California screened out racial groups with *fewer than 75 applications* to make sure that a small number did not lead to general conclusions about a racial group in a city.

Index of Disparity calculated using the best (lowest), non-zero rate, because ID cannot be calculated based on a rate of zero.

*Source: Home Mortgage Disclosure Act (HMDA)*

Year: 2013-2017

Link: <https://www.consumerfinance.gov/data-research/hmda/historic-data/> (data is no longer available)

#### *Racial/Ethnic Categories:*

Latinx, White alone, Black alone, Asian alone, American Indian / Alaska Native alone or in combination with another race, Native Hawaiian / Pacific Islander alone or in combination with another race, and Multiracial. American Indian / Alaska Native, Native Hawaiian / Pacific Islander, and Latinx include Latinxs.

## Denied Mortgage Applications

### *Indicator: Denied Mortgage Applications (%)*

Mortgage applications were for home purchases. The loan would be secured by a first lien for housing with one to four units. Mortgage applications that resulted in loan origination or denial by the financial institution were included. Applications that were withdrawn, approved but not accepted, or incomplete were excluded from this analysis. Catalyst California has calculated the multi-year sums of denied mortgages and the multi-year average mortgage denial rates.

Groups with fewer than 15 applications were screened out to remove outlier impacts. Index of Disparity calculated using the best (lowest), non-zero rate, because ID cannot be calculated based on a rate of zero.

*Source: Home Mortgage Disclosure Act (HMDA)*

Year: 2019-2022

Link: <https://www.consumerfinance.gov/data-research/hmda/explore>

### *Racial/Ethnic Categories:*

Latinx, White alone, Black alone, Asian alone, American Indian / Alaska Native alone or in combination with another race, Native Hawaiian / Pacific Islander alone or in combination with another race, and Two or More "Minority" Races. American Indian / Alaska Native, Native Hawaiian / Pacific Islander, and Latinx include Latinxs. Categories are based on HMDA derived race data which take into account the race and ethnicity of applicants and co-applicants.

## Housing Quality

### *Indicator: Low Quality Housing (Lack of Available Kitchen, Plumbing, and Heat)*

Average percent of housing units that lack a kitchen, plumbing, or heat in comparison to total households. Direct racial estimates of this indicator were unavailable for California cities.

Catalyst California indirectly estimated total and racial group exposure values by calculating weighted averages that link area-level (census tract) population data with direct indicator estimates at city level.

Catalyst California screened out data for cities with *fewer than 250 people*. Catalyst California also suppressed data for groups that had more than 1 missing value for either kitchen, plumbing, or heat.

Index of Disparity calculated using the best (lowest), non-zero rate, because ID cannot be calculated based on a rate of zero.

*Source: American Community Survey, 5-Year Estimates, Table B25048*

Year: 2018-2022

Link: <https://www.census.gov/programs-surveys/acs/>

*Source: American Community Survey, 5-Year Estimates, Table B25053*

Year: 2018-2022

Link: <https://www.census.gov/programs-surveys/acs/>

*Source: American Community Survey, 5-Year Estimates, Tables B25003B-1*

Year: 2018-2022

Link: <https://www.census.gov/programs-surveys/acs/>

*Source: American Community Survey, 5-Year Estimates, Table B25040*

Year: 2018-2022

Link: <https://www.census.gov/programs-surveys/acs/>

### *Racial/Ethnic Categories:*

White alone, Black alone, Hispanic or Latinx (of any race), Asian alone, Native Hawaiian / Pacific Islander alone, American Indian / Alaska Native alone, Another Race alone, Multiracial. White excludes Latinxs.

## Housing Cost Burden (Renter)

*Indicator: Housing Cost-Burdened (Renters) (%)*

Percent of renter-occupied housing units where renter spends more than 30% of income on housing and related costs, out of all renter-occupied housing units.

Catalyst California excluded groups with fewer than *100 housing units* and housing burden values with low reliability based on the coefficient of variation, one of the Census Bureau's statistical quality standard measures. Low reliability here refers to values with coefficients of variation over 35% per <https://www.esri.com/library/whitepapers/pdfs/the-american-community-survey.pdf>.

Index of Disparity calculated using the best (lowest), non-zero rate, because ID cannot be calculated based on a rate of zero.

*Source: US Department of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS) data*

Year: 2016-2020

Link: <https://www.huduser.gov/portal/datasets/cp.html>

### *Racial/Ethnic Categories:*

Latinx, White alone, Black alone, Asian alone, Another Race alone, American Indian / Alaska Native alone, Native Hawaiian / Pacific Islander alone, Another Race including Multiracial. All groups exclude Latinxs, except for Latinx.

## Housing Cost Burden (Owner)

*Indicator: Housing Cost-Burdened (Owners) (%)*

Percent of owner-occupied housing units where owner spends more than 30% of income on housing and related costs, out of all owner-occupied housing units.

Catalyst California excluded groups with *fewer than 100 housing units* and housing burden values with low reliability based on the coefficient of variation, one of the Census Bureau's statistical quality standard measures. Low reliability here refers to values with coefficients of variation over 35% per <https://www.esri.com/library/whitepapers/pdfs/the-american-community-survey.pdf>.

Index of Disparity calculated using the best (lowest), non-zero rate, because ID cannot be calculated based on a rate of zero.

*Source: US Department of Housing and Urban Development (HUD), Comprehensive Housing Affordability Strategy (CHAS) data*

Year: 2016-2020

Link: <https://www.huduser.gov/portal/datasets/cp.html>

### *Racial/Ethnic Categories:*

Latinx, White alone, Black alone, Asian alone, Another Race alone, American Indian / Alaska Native alone, Native Hawaiian / Pacific Islander alone, Another Race including Multiracial. All groups exclude Latinxs, except for Latinx.

## Foreclosure

### *Indicator: Foreclosure Rate per 10k Owner-Occupied Housing Units*

Rate per 10,000 of Foreclosed Real Estate Owned Properties (REO) in relation to racial population residing in the area. Direct racial estimates for this indicator were unavailable for all California cities. Catalyst California indirectly estimated racial group exposure values by calculating weighted averages that link area-level (census tract) population data with direct indicator estimates to calculate exposure estimates at city level.

We screened out racial groups with *fewer than 30 owner-occupied housing units* to ensure small numbers did not lead to general conclusions about a racial group in a city.

Index of Disparity using the best (lowest), non-zero rate, as IDs cannot be calculated based on a rate of zero.

*Source: DataQuick*

Year: 2017-2021

Link: <http://www.realtytrac.com/mapsearch/foreclosures/>

*Source: American Community Survey, 5-Year Estimates, Table B25003B-I*

Year: 2017-2021

Link: <https://www.census.gov/programs-surveys/acs/>

*Racial/Ethnic Categories:*

White alone, Black alone, Hispanic or Latinx (of any race), Asian alone, Native Hawaiian / Pacific Islander alone, American Indian / Alaska Native alone, Another Race alone, Multiracial. White excludes Latinxs.

## Eviction

### *Indicator: Eviction Filing Rate per 100 Renter Households*

Rate of validated eviction filings per 100 renter households in relation to racial population residing in the area. Direct racial estimates of this indicator were unavailable for California cities. Catalyst California indirectly estimated racial group exposure values by calculating weighted averages that link area-level (census tract) racial/ethnic population data with direct estimates of evictions. We screened out data for racial groups with *fewer than 200 people*, to make sure that a small number did not lead to general conclusions about a racial group in a city. Derived estimates could not be calculated for cities containing fewer than 2 census tracts.

The Index of Disparity calculated used the best (lowest), non-zero rate, because IDs cannot be calculated based on a rate of zero.

*Source: The Eviction Lab at Princeton University*

Year: 2014-2017

Link: <https://evictionlab.org/get-the-data/>

*Source: American Community Survey 5-Year Estimates, Tables B25003B-I*

Year: 2013-2017

Link: <https://www.census.gov/programs-surveys/acs/>

### *Racial/Ethnic Categories:*

Latinx, White alone, African American or Black alone, Asian alone, American Indian / Alaska Native alone or in combination with another race, Native Hawaiian / Pacific Islander alone or in combination with another race, Another Race, Multiracial. American Indian / Alaska Native, Native Hawaiian / Pacific Islander, and Latinx include Latinxs.

## Overcrowded Housing

### *Indicator: Overcrowded Housing Units (%)*

Percentage of housing units with more than one occupant per room out of all occupied units. Catalyst California excluded values with low reliability based on the coefficient of variation, one of the Census Bureau's statistical quality standard measures. Low reliability here refers to values with coefficients of variation over 40% per

<https://www.esri.com/library/whitepapers/pdfs/the-american-community-survey.pdf>.

Catalyst California screened out racial groups of *fewer than 100 occupied housing units* to make sure that a small number did not lead to general conclusions about a racial group in a city.

Index of Disparity calculated using the best (lowest) rate.

*Source: American Community Survey, 5-Year Estimates, Table B25014B-I*

Year: 2018-2022

Link: <https://www.census.gov/programs-surveys/acs/>

### *Racial/Ethnic Categories:*

White alone, Black alone, Latinx, Asian alone, Native Hawaiian / Pacific Islander alone, American Indian / Alaska Native alone, Another Race alone, Multiracial. White excludes Latinxs.

## Homeownership

### *Indicator: Percent of Owner-Occupied Units*

Percentage of owner-occupied housing units out of all occupied units. Catalyst California excluded values with low reliability based on the coefficient of variation, one of the Census Bureau's statistical quality standard measures. Low reliability here refers to values with coefficients of variation over 40% per <https://www.esri.com/library/whitepapers/pdfs/the-american-community-survey.pdf>.

Catalyst California screened out racial groups of *fewer than 100 owner-occupied housing units* to make sure that a small number did not lead to general conclusions about a racial group in a city. Index of Disparity calculated using the best (highest) rate.

*Source: American Community Survey, 5-Year Estimates, Table B25003B-1*

Year: 2018-2022

Link: <https://www.census.gov/programs-surveys/acs/>

### *Racial/Ethnic Categories:*

White alone, Black alone, Latinx, Asian alone, Native Hawaiian / Pacific Islander alone, American Indian / Alaska Native alone, Another Race alone, Multiracial. White excludes Latinxs.