

Child Opportunity Index (/child-opportunity-index)

Child Opportunity Index 3.0-2023 County Data

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The Child Opportunity Index 3.0-2023 county data is available for download on this page.

To distinguish between different releases, each COI 3.0 release is labeled with the most recent year included. The initial release of COI 3.0 (published in 2024) included data from 2012 to 2021 and has been relabeled as COI 3.0-2021. The current release, COI 3.0-2023, extends data coverage through 2023. We recommend that all new users and new projects use COI 3.0-2023.

For more information on COI 3.0 releases, please see the COI Release Notes (<https://www.diversitydatakids.org/research-library/child-opportunity-index-release-notes>).

There are three sets of county estimates in separate files:

1. County-Level Child Opportunity Levels and Scores (County COI)
2. County-Average Child Opportunity Scores
3. Within-County Child Opportunity Levels

It is important to understand the difference between these files, which are described in the following paragraphs. If you are new to the COI, review the COI 3.0 technical document (<https://www.diversitydatakids.org/research-library/research-report/coi-30-technical-documentation>) to understand how the census tract COI data that the county-level estimates are based on were constructed. Here is a brief overview (<https://www.diversitydatakids.org/research-library/research-brief/what-child-opportunity>) of key terms.

The **County COI** data file contains county-level Child Opportunity Scores (1-100) and Child Opportunity Levels (very low, low, moderate, high and very high) for all counties. These metrics were created using the same protocol as the COI 3.0 census tract and ZIP code metrics. We first averaged census tract composite z-scores for the overall index, the domains and subdomains across census tracts within counties using the total child population as weights. We then computed Child Opportunity Scores and Levels based on these county average composite z-scores, using the same approach we use for census tracts, which is documented in our COI 3.0 technical documentation (<https://www.diversitydatakids.org/research-library/research-report/coi-30-technical-documentation>) (p. 31). For example, to compute Child Opportunity Levels for counties, we ranked all counties on the composite z-score (subdomain, domain or overall index) and then grouped them into five ordered groups each containing 20% of the child population.

The County COI estimates have important limitations—outlined below—that users should be aware of. Learn more about county-level limitations in our blog [Understanding county-level COI estimates](https://www.diversitydatakids.org/research-library/blog/understanding-county-level-coi-estimates) (<https://www.diversitydatakids.org/research-library/blog/understanding-county-level-coi-estimates>).

For many counties, county-level COI metrics from the County COI file sometimes obscure large inequities in access to opportunity within counties. In these counties, the county-level COI is a poor representation of the opportunities available to many children who reside in census tracts with considerably higher or lower opportunity than the county average. For example, using the County COI file, we find that Cook County in Illinois—home to the city of Chicago—is a moderate-opportunity county (2023 state-normed data). These estimates obscure considerable inequities within Cook County. Using data from the Within County-levels file, further described below, we find that 27% of children in Cook County (301,000 children) live in very low-

opportunity tracts, and 20% (227,000) live in very high-opportunity tracts. Only 15% (169,000 children) live in moderate-opportunity tracts, i.e., in census tracts with Opportunity Levels matching the county Opportunity Level.

We have quantified (<https://www.diversitydatakids.org/research-library/blog/understanding-county-level-coi-estimates>) the potential errors when using county rather than census tract Child Opportunity Levels, for example, to geographically target resources or programs for families and children. For example, in Illinois, only 22% of children residing in very low-opportunity census tracts also reside in very low-opportunity counties. If the Illinois state government used county Opportunity Levels to target resources, they would miss almost 80% of their target population.

We generally recommend the use of census tract data for applied uses, including public health surveillance and policy/program planning and implementation.

We provide two additional county-level datasets that explicitly capture within-county inequities. Both of these files can be used by themselves or in combination with the County COI data in order to better understand within-county variation in opportunity.

The **County-Average Child Opportunity Scores** data file contains average census tract Child Opportunity Scores for each county for the total child population and by race/ethnicity. This data captures racial/ethnic inequities in access to opportunity within a given county. For example, for Cook County (Illinois), we find average Child Opportunity Scores of 72 and 63 for White and Asian children, and 35 and 29 for Hispanic and Black children, respectively. The opportunity gap between White and Black children is 43 points. The estimates were computed as weighted averages of published census tract-level Child Opportunity Scores for each county, using racial/ethnic group specific child population counts as weights. For reference, we also include census tract-level Child Opportunity Scores using the total child population counts as weights. Racial/ethnic group specific Child Opportunity Scores are missing for groups with zero children in a given county and year.

The **Within-County Child Opportunity Levels** data file contains the percentage of children who reside in census tracts at each of the five Opportunity Levels, both for the overall child population and by children's race/ethnicity. In the example above, a state-level policymaker using a county-level allocation formula could use the Within-County Levels file to identify counties with the highest percentage or number of children residing in very low opportunity areas. The file only contains the percentage

of children at each of the five Opportunity Levels in a given year, but the number of children can be computed by dividing the percentage by 100 and multiplying with the population count given in the “pop” column.

The population counts used to aggregate census tract COI data to the county level were obtained from the American Community Survey (B01001 table series, children ages 0-17). Using population weighting to aggregate COI data across census tracts within a county means that census tracts with a relatively larger number of children (in a given county and year) have a greater weight in the county-level estimates.

Note: Starting in 2022, the Census Bureau replaced Connecticut’s eight counties with nine county-equivalent planning regions. To simplify trend analyses, we use planning regions in Connecticut for all years, i.e., even in years where the planning regions were not yet introduced.

County-level estimates published here are computed using 2010 census tract data as inputs from 2012 to 2019, and using 2020 census tract data as inputs from 2020 onwards. For the county-level data published in the interactive map, we computed all county-level estimates using 2020 census tracts as source files to match the census tracts displayed there.

Clicking on one of the links triggers a download of a ZIP folder including the data and data dictionary in CSV format.

By using this data, you agree to abide by [diversitydatakids.org's Terms and Conditions](https://diversitydatakids.org/terms) (<https://diversitydatakids.org/terms>).

COI 3.0-2023, county data

1. Child Opportunity Levels, Scores and composite z-scores for the overall index, three domains and 14 subdomains (County COI) ([https://g-c49abb.63b05.8540.data.globus.org/public/COI%203.0-2023/Counties%2C%20Child%20Opportunity%20Scores%20and%20Levels%2C%20overall%202023\).zip](https://g-c49abb.63b05.8540.data.globus.org/public/COI%203.0-2023/Counties%2C%20Child%20Opportunity%20Scores%20and%20Levels%2C%20overall%202023).zip)).

County COI metrics are only available as state-normed (for comparison of counties within states) and nationally-normed versions (for comparisons of counties nationwide). There are no metro-normed county estimates. Because many states

have fewer than 100 counties, we did not compute state-normed Child Opportunity Scores, which range from 1 to 100. Similarly, we did not compute state-normed Child Opportunity Levels comparing counties within states for the District of Columbia (one county), Delaware (three counties), Hawaii (four counties) or Rhode Island (five counties).

The County COI metrics are benchmarked to the 2023 opportunity distribution. For example, to construct Child Opportunity Levels at the county level, we first ordered counties in 2023 from lowest to highest in terms of their composite z-score. We then computed cut points (percentiles) that divide counties in 2023 into five ordered groups each containing 20% of the child population. We then applied the same cut points to data from other years. Because Child Opportunity Levels were defined in relation to the 2023 distribution of children across counties, we observe exactly 20% of children at each level in 2023 data only. An Opportunity Level of “very high” means “very high in 2023,” or having opportunity similar to that of the top 20% of counties in 2023, although that same Level may be observed in other years as well.

2. Distribution of children across Child Opportunity Levels within counties, by race/ethnicity and for the total child population (Within-County Child Opportunity Levels) (<https://g-c49abb.63b05.8540.data.globus.org/public/COI%203.0-2023/Counties%2C%20Percentage%20of%20children%20at%20each%20opportunity%20level%20in%202023.zip>)

3. Average Child Opportunity Scores across census tracts within counties, by race/ethnicity and for the total child population (County-Average Child Opportunity Scores) (<https://g-c49abb.63b05.8540.data.globus.org/public/COI%203.0-2023/Counties%2C%20Average%20Child%20Opportunity%20Scores%20across%20census%20tracts%20in%202023.zip>)

Suggested citation: diversitydatakids.org. 2025. “Child Opportunity Index 3.0-2023 County-Level Data.” <https://www.diversitydatakids.org/research-library/child-opportunity-index-30-2023-county-data>.

Additional Info

Version: COI 3.0-2023

Last updated: July 2025

Year(s): Data available from 2012 to 2023.

Source: The 44 indicators included in the COI are compiled from many sources. Please refer to the technical document (<https://www.diversitydatakids.org/research-library/coi-30-technical-documentation>) for details. Child population counts are taken from the American Community Survey.

Use Cases: To learn how the COI has been used by organizations and researchers, please see our impact stories (<https://www.diversitydatakids.org/impact-stories>).

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Boston University School of Social Work:
Institute for Equity in Child Opportunity
& Healthy Development

PROJECT

diversitydatakids.org is a comprehensive research program to monitor the state of wellbeing, diversity, opportunity and equity of U.S. children.

AFFILIATION

diversitydatakids.org is based at the Institute for Equity in Child Opportunity & Healthy Development (<https://www.bu.edu/ssw/research/centers/iecohd/>) at Boston University School of Social Work.

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