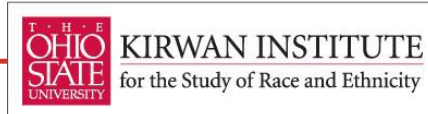


Child Opportunity Index Mapping

A partnership project of

diversitydatakids.org



How to Use and Interpret the Child Opportunity Index Maps

How to Use the Child Opportunity Index Maps

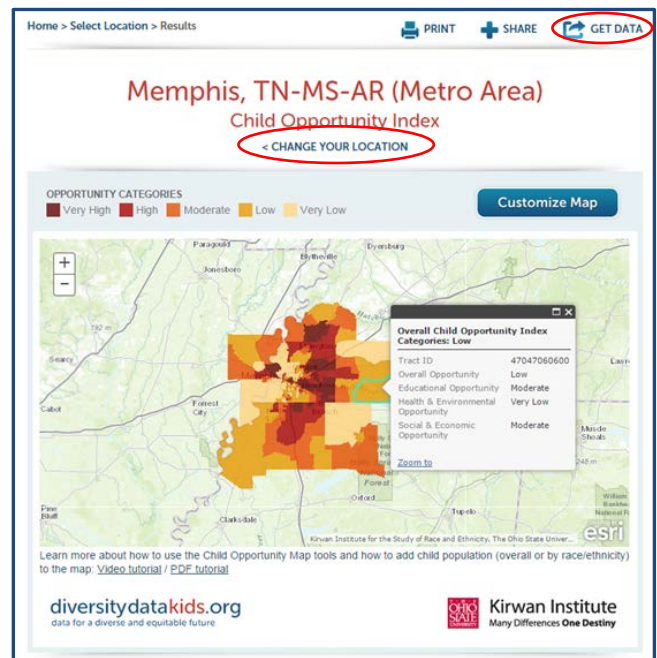
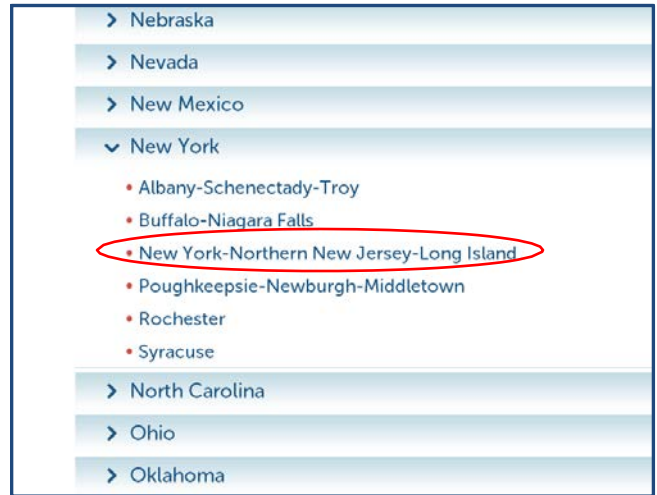
Getting Started: How to Find and Open a Child Opportunity Index Map

Child Opportunity Index Maps are available for the 100 largest metropolitan areas in the US. The maps are accessible on the [Child Opportunity Index page](#) of [diversitydatakids.org](#) and listed in alphabetical order by state name. Note that many metropolitan areas span multiple states—in this case, the metropolitan area is listed under the principal state. For example, the New York City metropolitan area includes parts of Northern New Jersey, but is listed only under New York in the map listing. Click on a metropolitan area to open a summary view of the map.

Each polygon on the map is a single Census Tract (approximately a neighborhood-sized area) that is shaded according to its Opportunity Index category (see the Legend at the top of the map). These categories represent each tract's opportunity level ranging from "very low" to "very high" relative to the other tracts in the same metropolitan area. Users can download an Excel file of source indicators and Opportunity Index values and categories for the map by clicking on the "Get Data" link to the upper right of the map. In each Excel file is a worksheet/tab named "Field Description" that contains indicator definitions.

Navigating the Summary Map

- **Pan:** Click and drag to pan around the map.
- **Zoom:** Click the plus (+) and minus (-) icons in the upper left corner of the map to zoom in and out. Alternatively, if your mouse is equipped with a scroll wheel, you can use that to zoom. As you zoom in on the map, the underlying base map will display greater detail. City boundaries and major highways give way to neighborhood streets and parks, revealing ever greater neighborhood detail.
- **Select a census tract** by clicking on it. This will reveal a pop-up window that lists the tract's ID, overall opportunity level, as well as the opportunity categories for each of the three domains that comprise the overall opportunity index (educational opportunity, health and environmental opportunity, and social and economic opportunity).
- **Use your browser's refresh button** to return the map to its default view.
- **Change your location:** Click this link to leave the current map and select another from the list.

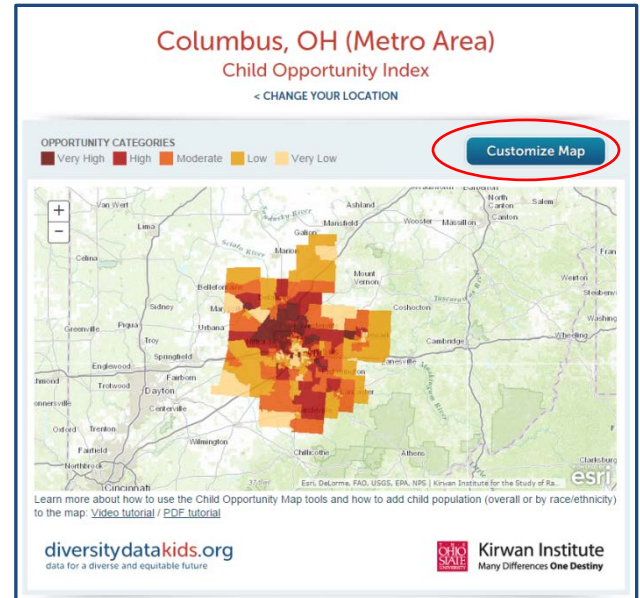


Tips for Exploring the Opportunity Map

Select as your first map the metro area of a city you know well. Compare the distribution of opportunity across the metro area with your knowledge of how people, resources and infrastructure vary from one part of the area to another. Does the opportunity distribution match your expectations? In some places, opportunity transitions gradually from one neighborhood to the next. In others, the change can be abrupt, with Very High and Very Low opportunity tracts next to one another. Why? Can you identify specific barriers (physical, historical) that divide neighborhoods?

Exploring an Opportunity Map in Greater Detail

Click on the “Customize Map” button in the top right corner of the map frame to open this map in a new window or tab. The map will open in an online map exploration tool called ArcGIS Online, which allows you to more fully explore the data and compare the geographic distribution of opportunity with the geographic distribution of the child population of different racial/ethnic groups in the metro area. Pan and zoom this new, larger map in the same way as the smaller, summary map. As before, click on a Census Tract to display the data associated with that tract.



Child Population Overlays

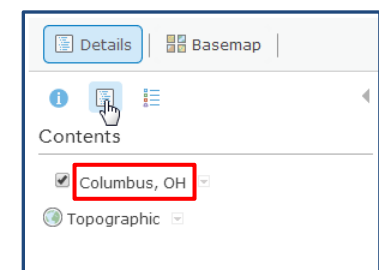
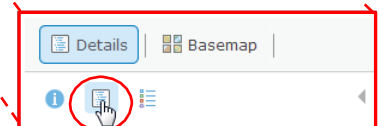
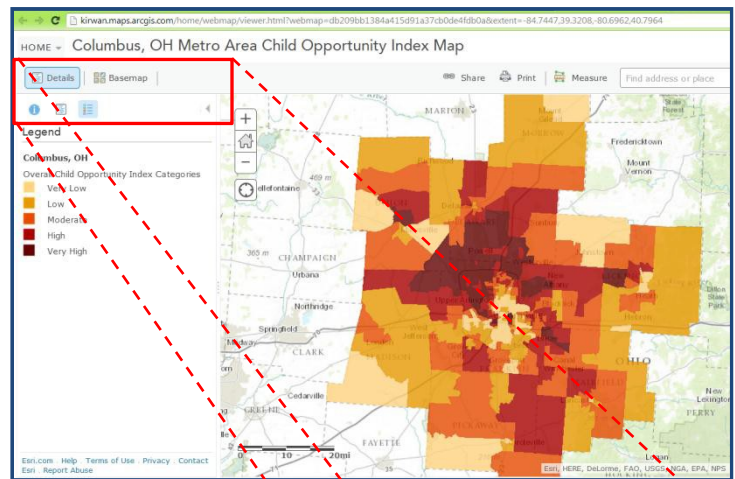
The Child Opportunity Index is a race-neutral tool; no race-specific measures have gone into the calculation of this index. However, we can use Child Opportunity Maps to explore where children of different racial/ethnic groups live and how these patterns correspond with relative levels of neighborhood opportunity across a given metropolitan area. To do this, we overlay the child population by race/ethnicity onto the neighborhood opportunity map.

How to Overlay the Child Population onto the Opportunity Map

Click the “Show Contents” button (the middle icon under “Details” on the left side of the screen) to replace the Legend with the map’s table of contents.

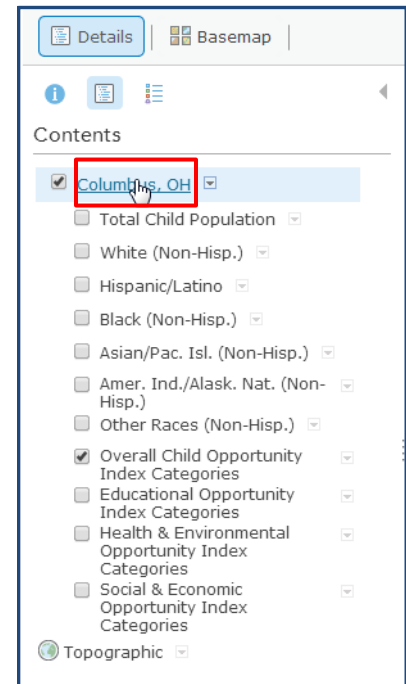
The Opportunity Map table of contents will display two entries: the name of the current metro area and the name of the base map layer (topographic).

Then click on the name of the metro area (not the drop-down arrow to the right of the name) to reveal a list of optional map layers.



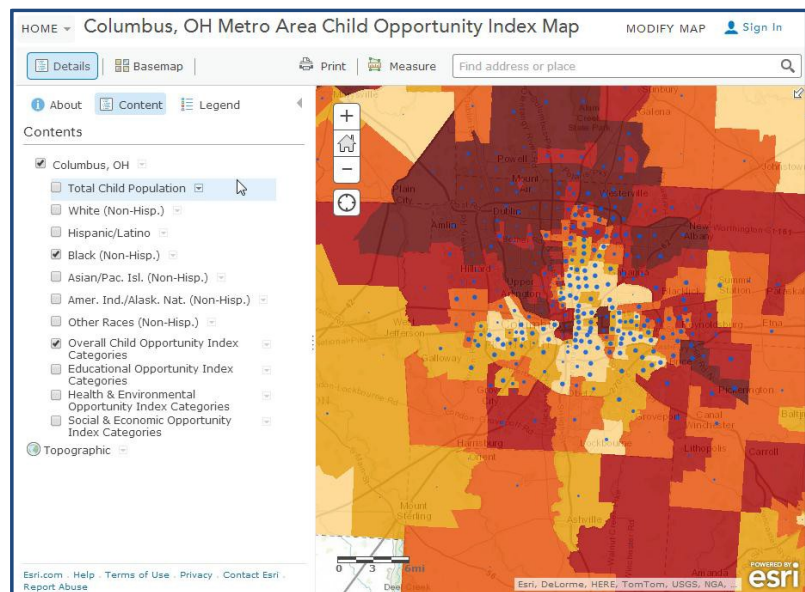
The Overall Child Opportunity Index Categories layer is turned on by default. Click other check boxes to turn layers on and off. Layers are displayed in the order they appear in the table of contents, top to bottom (higher layers appear on top of lower layers). Checking one of the race/ethnicity layers displays an overlay of child population. Each dot represents one Census Tract (it is the geographic center, or centroid, of the tract immediately below it).

It is highly recommended that you turn on only one child population layer and one Opportunity Index layer at a time so as not to obscure underlying layers.



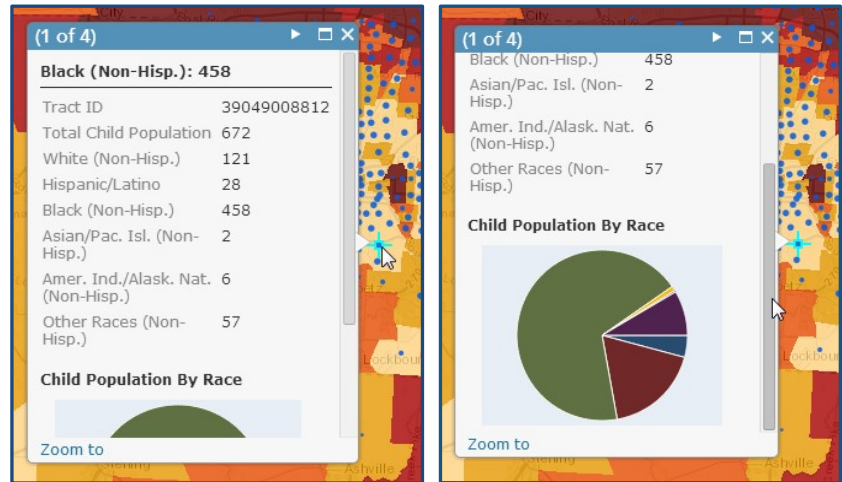
Interpreting a Child Opportunity Map with a Child Population Overlay

Please note that child population overlay dots will always appear in the geographic center, or centroid, of each census tract. Thus, attempting to overlay more than one population group at a time will obscure underlying population map layers. It is highly recommended that you turn on only one child population overlay layer at a time.



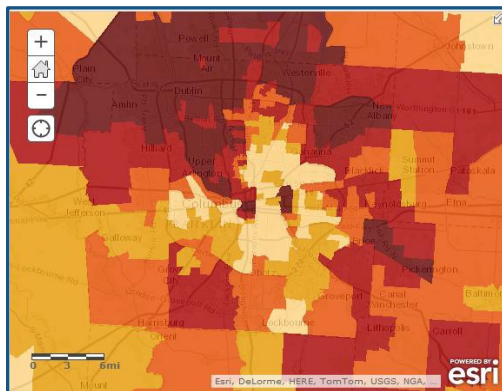
The size of each dot reflects the relative size of the child population for the selected racial/ethnic group only. If you choose to overlay the black child population on the opportunity map, tracts with a larger dot reflect locations with a larger black child population, relative to other tracts in the metro area. The size of the dot can be compared to the size of other dots showing the black child population, but cannot be compared to the size of dots reflecting another racial/ethnic group. For example, a metro area may contain tracts with black child populations ranging from 1 child (a small dot) to 5,000 (a large dot). However, the same metro area may have a much smaller overall Hispanic child population, with tracts ranging from 1 child (shown as a small dot) to 50 (shown as a large dot). The size of dots should only be compared within a child racial/ethnic group, not between groups.

Click on a single dot (centroid) for details about the racial/ethnic composition of the child population in that tract, including a pie chart illustrating the racial/ethnic composition of the child population. If you are zoomed in to a sufficient level of magnification, the upper left of the pop-up box will read “(1 of 2).” Clicking on the arrow to the upper right of the pop-up box will reveal a second page that presents the Opportunity Index categories for that tract for the Overall index and for each of the three component opportunity domain indices. If you are not zoomed in to a low level, the upper left of the pop-up box may read “(1 of 4)” or even “(1 of some large number).” In this case, the mapping system reflects data from multiple tracts in close geographic proximity to the one you chose. Zoom in further to click on your specific tract of interest.

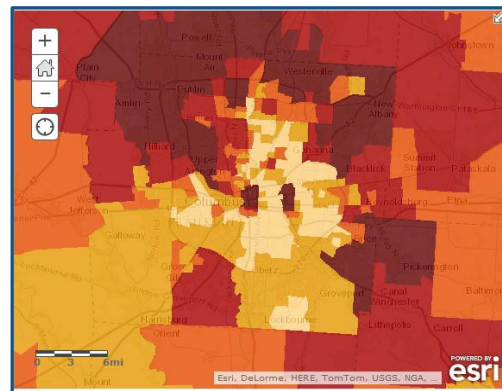


Using Other Layers on the Child Opportunity Index Map

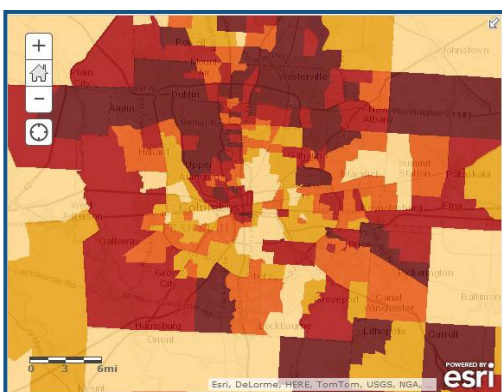
The three lowest map layers in the Table of Contents represent the three opportunity domains that comprise the Overall Opportunity Index (Educational Opportunity, Health and Environmental Opportunity, and Social and Economic Opportunity). Uncheck the Overall Layer and check each domain layer in turn to compare how neighborhood opportunity is distributed for each domain. Once again, it is highly recommended that you turn on only one Opportunity Index layer at a time.



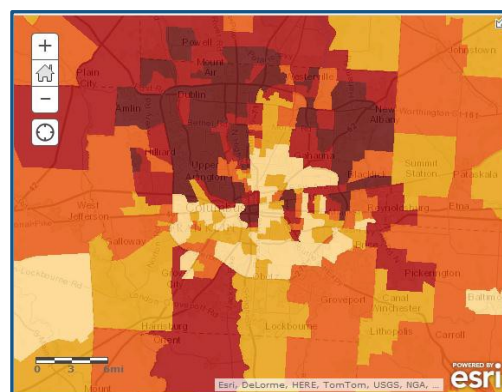
Overall



Educational



Health & Environmental



Social & Economic

Other ArcGIS Navigation Features



Details

Details: Toggles the left panel (containing the Legend) on and off.



Information: Toggles metadata about the map.

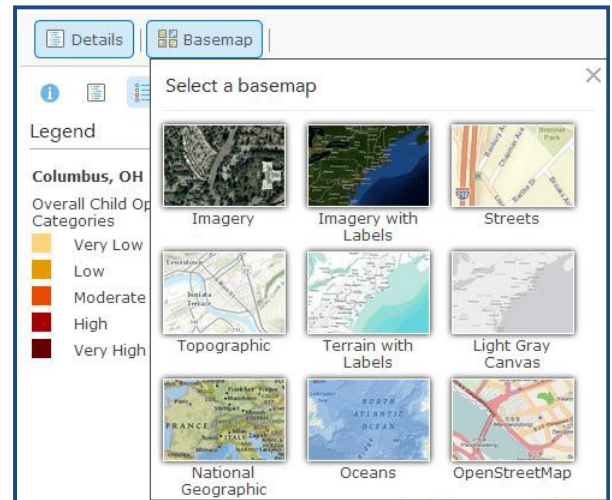


Show Map Legend: Toggles the legend on and off for all displayed map layers.

Changing the Basemap

Click on the “Basemap” button above the Legend to reveal a selection of basemaps. This allows you to change the underlying map layer (not the index, child population, or any other overlays). A Topographic basemap is shown by default.

Other options include Imagery (with and without labels); OpenStreetMap, and a Light Gray Canvas layer with subtle detail, used to emphasize the overlying data layers by removing distracting map features.



Adjusting the Transparency of the Index Layer

Click the dropdown arrow to the right of the metropolitan area name (in this example, Columbus, OH) to reveal the Transparency slider. This will enable you to adjust the transparency of the layer from fully opaque to fully transparent, revealing greater detail on the base map underneath. This can be used, for example, to view aerial imagery and explore differences in neighborhood infrastructure or physical barriers that may exist between high and low opportunity neighborhoods.

