

CAI Mapping Interface User Guide

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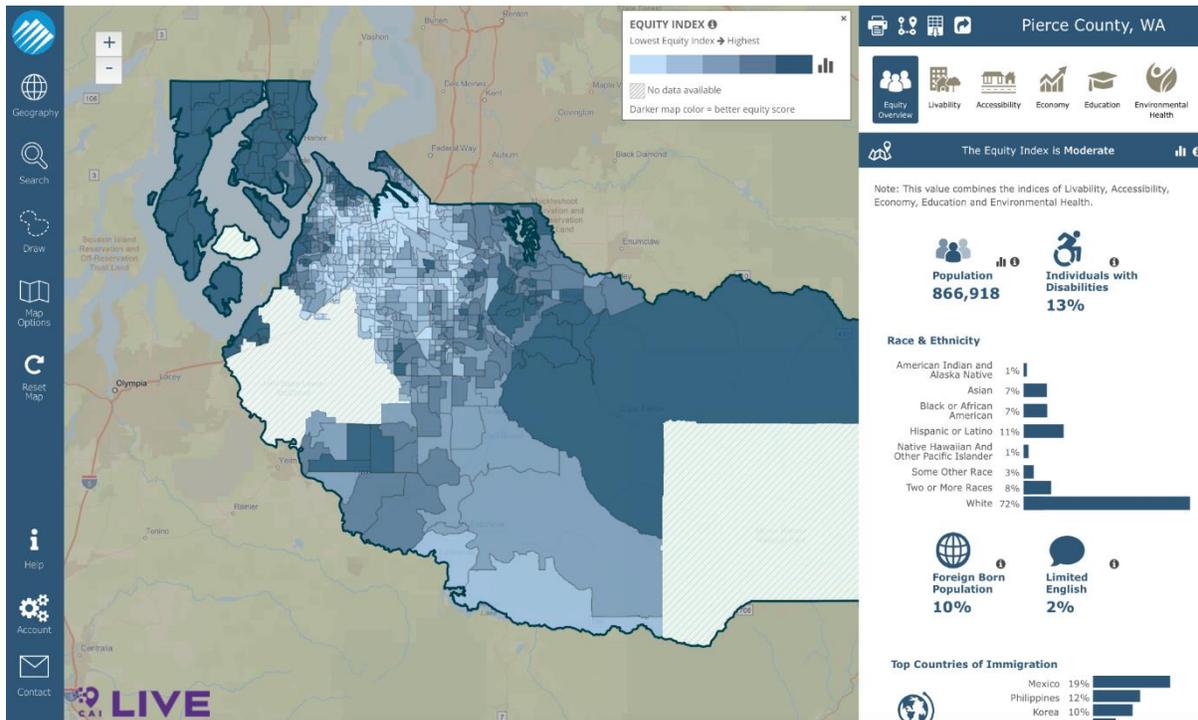
Overview

The CAI Mapping Interface, developed by Community Attributes Inc., is an interactive mapping platform that displays a set of community indicators within a particular geographic location. The selection of indicators may be sourced from the American Community Survey (ACS), publicly available city or state data, or proprietary tables. The information displayed in the map does not represent an exhaustive list of community characteristics. Instead, the map is designed as one tool of many that can be utilized to inform decision making, strategic intervention, calls to action, and stakeholder engagement.

The following walkthrough highlights the different aspects and functionality of the map. We hope you find the map to be a useful resource for you and your community.

Mapping Interface

The CAI Mapping Interface has three main components, the navigation panel, located on the left, the interactive map, at the center, and the data dashboard, located on the right.



The navigation panel can be used to configure what is displayed on the map, such as searching and selecting a geographic area or modifying the metric being visualized on the map. The data dashboard summarizes the community indicators based upon the geography that has been selected on the map.

The zoom feature, located in the upper left on the map, is to increase or decrease the field of view displayed on the map. To change the zoom, you can either click the + or – buttons in the top left corner of the map area or use the scroll wheel on your mouse while the pointer is hovering over a map area.

To navigate within the map, click and hold the mouse button while you drag the underlying map to a new area.

At any time, you can reset the map view to the default by clicking the “Reset Map” button on the far-left hand side of the screen.

The navigation panel buttons on the left of the screen launch open sub-panels. These sub-panels can be collapsed at any time by using your mouse to click on < in the upper right corner of the panel menu.

Geography

Level of Detail Data Visualization

By default, the application will show indicator values on the map at the block group level of detail. Alternatively, you can choose to see the indicator values grouped by Census Tract and Zip Code by selecting the corresponding radio button.

Please note that for Census Tract and Zip Code the presented data reflects aggregates from block groups and may not align with officially published Census data for these specific geographic areas.

Filter Geographical Area

You can use the area selection radio buttons to toggle the default area view for the map. When the map application is loaded, the geographic area designation for Pierce County is enabled. Selecting an alternate geographic area designation will redraw the map to show the desired area designation.

Search

Click on the Search icon on the left side of the map to open the Search Tools menu. You can select one of the defined location areas listed.

As you begin to type, the search bar will generate a list of locations that match your search criteria. Scroll through the options that appear until you find the geographic area that you want. Once you click on a location from the options presented, the map will zoom to that location, showing the overlapping census block group(s), and show community indicators for that area in the data dashboard on the right.

To change your selected location, re-click the Search icon and the search panel will reopen.

Drawing Selection Tools

The drawing tools an additional method for selecting an area on the map, which allows you to draw a shape around any area of the map and see the community indicators displayed for that selected area. You have three shape options to choose from: circle, rectangle, or freeform shape.

Once you have selected your desired shape, using your mouse, click and hold the mouse button while you draw the desired boundaries.

- For a circle, the first click will represent the center of the circular area you specify, with the diameter expanding or contracting as you move the mouse.
- For a rectangle, the first click will become one corner of the rectangular area you specify, with the shape of the rectangle expanding outward as you move the mouse.
- To draw a freeform area, you can move the mouse in any direction while you hold down the mouse button. It is simplest to draw a freeform shape (from start to finish) around your desired geographic area. It is possible to drag your mouse over a boundary you have already created. If this happens, the area that was “double selected” when the existing boundary was crossed will be removed from the display.

Once you have completed the shape selection, the map will zoom to that location, showing the overlapping census block group(s), and show community indicators for that area in the data dashboard on the right. If you select a geographic area that is smaller than a census block group, the map will redraw the boundaries of the area you selected within the nearest block group. Similarly, if you draw an area on the map that crosses census boundaries, the map will redraw your boundaries to the nearest block group boundaries.

Map Options

The Map Options icon opens the Map Options menu where you can change the base map views and select the base map layer, geography and indicator sets.

Map View

You can select the base map layer as a Street Map, a Satellite Map, or a Grey base map.

Dashboard Indicator Overlay Layers

Use the dropdown menu to visualize community indicators from the data dashboard on the map. Selecting an indicator from the dropdown menu will color shade every census block group based upon where the block group falls within a quintile range of all the block group values for that indicator. Selecting an indicator overlay will toggle other layers off as only one overlay can be viewed at a time.

Filtering Map Indicator by Other Indicators

You can use other indicators to determine how the select map overlay indicator is displayed.

To accomplish this, select the desired indicator to use as the filter from the Apply Map Filter drop down list and click Add Condition. You can choose the range of values you wish to include in the filter by moving each end of the slider.

When a filter is applied any block groups/ census tracts/ zip codes that have a value within the specified [blue] range for the selected indicator will be shown on the map, while a block group that is in the specified [non-blue] range for the selected indicator will not be shown on the map.

You can add multiple Conditions to the filter. To apply a filter configuration, click the Apply button. To clear an existing filter configuration, click the Clear button.

Apply Map Filter

+ Add Condition

Unemployment Rate



Apply

Clear

You can see the filters configured for a map by referring to the map legend.

EQUITY INDEX ⓘ ×

Lowest Equity Index → Highest

A legend for the Equity Index showing a horizontal bar with a color gradient from light blue on the left to dark blue on the right. To the right of the bar are three vertical bars of increasing height, representing a bar chart.

No data available

Darker map color = better equity score

ACTIVE MAP FILTERS

Unemployment Rate: 3% - 27%

View Key Demographic Indicator Layers

Additionally, you can toggle a few key demographic indicator layers to show on the map. Selecting the radio button associated with the desired demographic indicator will show that layer and remove any existing overlay layers. Demographic layers are not filterable as described above.

Community Indicators Dashboard

The right side of the map displays a dashboard with several community indicators.

Within the dashboard, community indicators are organized by category: Equity Overview, Livability, Accessibility, Economy, Education and Environmental Health.



Clicking on one of the buttons above will result in the associated community indicators for the selected category being displayed within the data dashboard. The values displayed for each community indicator are calculated based upon the selected geographic area on the map.

For each of the categories, you can view a summary of the index value associated with the category. Index values are characterized as being very low, low, moderate, high, or very high, depending on the value. You can refer to the indicator technical reference guide for more information on how the index values are calculated.

Within this category ribbon, you can use the map icon to toggle the map to show the overlay associated with the index.



Dashboard indicators can be accompanied by additional information accessible via clickable icons. These icons allow you to see additional context for the indicator.



Clicking on the bar icon will show the indicator disaggregated will show the distribution of the selected area block groups values.

Clicking on the info icon will display an explanation of the indicator including its data vintage, how current the underlying data is, and source.

The information and distribution panels can be hidden by clicking the x icon in the upper right.

Print, Export and Share

The icons above the data dashboard can be used to print (or save to a PDF), export data and share details of the map with others via a URL link.



Printing/ Viewing as PDF

Click the Printer Icon at the top of the Data Panel to format the map and data panel for printing and saving a scenario for use in reports or to compare selected areas.

If the map area does not print properly, click on the Print Setting button at the top of the window to optimize your printer settings.

To Print or Save as a PDF, click the Print Icon at the top of the screen and follow the instructions given by your browser.

Exporting Data

Data can be exported, via a data download, from the application in two formats: Excel and GeoJSON.

To download data into an Excel file, click the download icon appearing as a grid with the download arrow. To download data in GeoJSON format click the download icon appearing as points on a map. Tooltips are provided to specify the action taken when the associated icon is selected.

After the download is complete you should be able to utilize and share the underlying data outside of the map application.

Sharing Map

To obtain a link that can be shared with others, click the share icon. This will display a link and will provide the ability to copy that link which could then be used to share with a colleague or embed share on a website or social media site.

