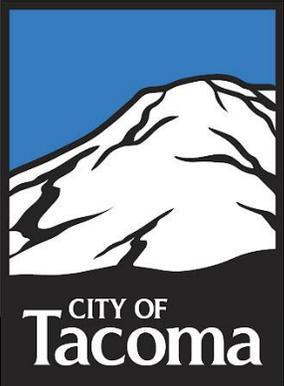
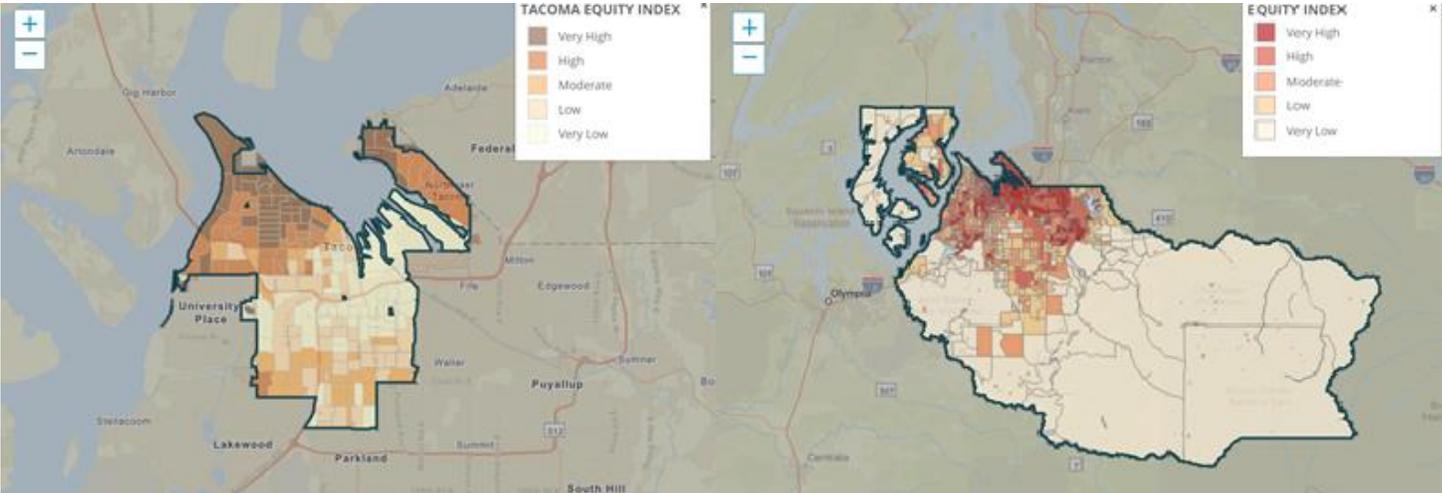


# Tacoma and Pierce County Equity Index

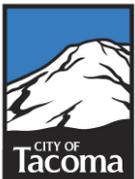
## User Guide and FAQs

Updated: November 4, 2021



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# Tacoma's Equity Index

The Equity Index is an interactive tool that visually highlights disparities in Tacoma. It uses 29 data points sorted into five determinant categories to determine where community members are not able to access services or where services do not meet community needs. It is one of the primary tools that City staff, partners, and other decision makers use to help ensure they are making data-informed decisions to improve access to opportunity for all community members. Below you can access the open version of the Equity Index and jump into the data yourself.

## Equity and Tacoma 2025

Tacoma 2025 represents our community's vision for Tacoma's future. With defined indicators and other ways to measure progress, it is a plan that guides where the City of Tacoma – as both a local government organization and a community – is going over the next 10 years. The Equity Index is part of our strategy to connect the City's strategic goals, council priorities, department initiatives, and other assessments to implement the community's vision.

## Determinant Categories

The 29 indicators for each of the five determinant categories of the index (Accessibility, Economy, Education, Livability, and Environmental Health) were meticulously and collaboratively chosen. To create the calculations behind Tacoma Equity Index, we collaborated with the Kirwan Institute to select an array of community indicators of well-being, each of which has been shown in the social sciences literature to influence one's ability to succeed in life. The data for these indicators were collected at or aggregated to the Census Block Group level, and roll up to the overall Equity Index into a single measure based on several factors that can be compared across the city.

## Data Limitations and Diving Deeper

Part of the value of building an opportunity index is identifying the most accurate sources of data available. This can be a tedious process, but creating an opportunity index with the most accurate information at the most detailed geographic level will ensure confidence in the mapping products. However, another essential part of this process is recognizing the available dataset's limitations and moving forward. Perfect data rarely exists; though we care about understanding margins of error, confidence intervals, and collection methodologies, recognizing and accepting data shortcomings is part of the process.

Once the maps reveal high and low opportunity areas, we caution against a shallow analysis on the data and what the maps show when thinking through policy, investment, or program implications. For example, areas that show up as high opportunities should not be regarded as not needing any investment, as a deeper dive for example may show they have great natural amenities, but lack employment opportunities. Relying solely on the quantitative-based data used in the maps is not enough to make investment decisions. It is dependent on us to dive deeper into this data and tell a compelling story as to why a policy and/or program is the right one to address inequities in that area of Tacoma.



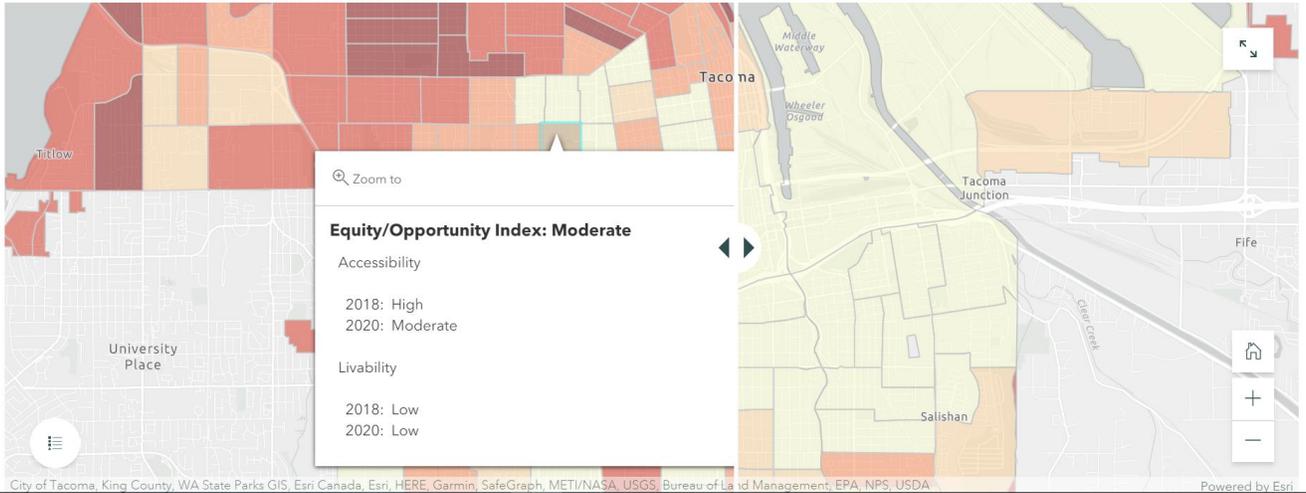
## Comparing Data over Time

With each update to the Equity Index, you will be able to navigate a comparison map to switch between the different maps so that you can see how the distribution of opportunity has changed over time. The [2018-2020 Equity Index Comparison Tool](#) is now live.



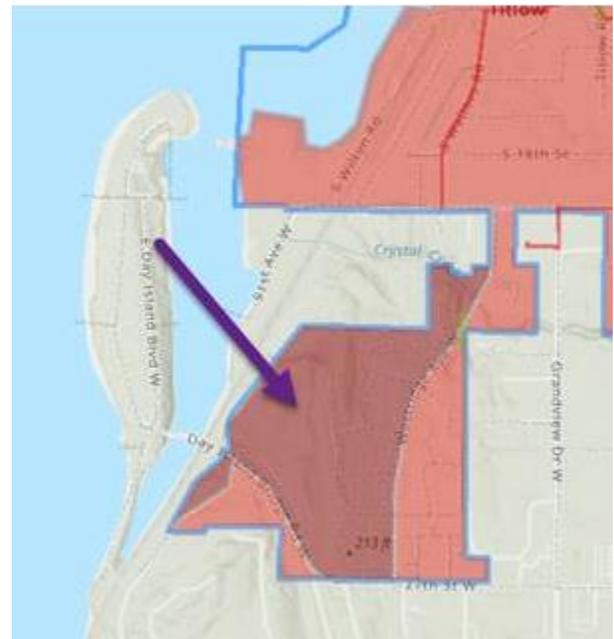
Comparison of the 2018 and the 2020 Equity Index

...



## Mapping Polygons and Geographic Limitations

When mapping data to our City limits, there are sometimes census block groups that are cut short, and the full picture is missed. For example in the Day Island area or Swan Creek, there are higher outcomes in the overall census block group, but only a small portion of that group falls within the city boundary. With the Day Island example, this leads to high opportunity slivers showing in the city where there are primarily lower quality housing and lower outcomes.

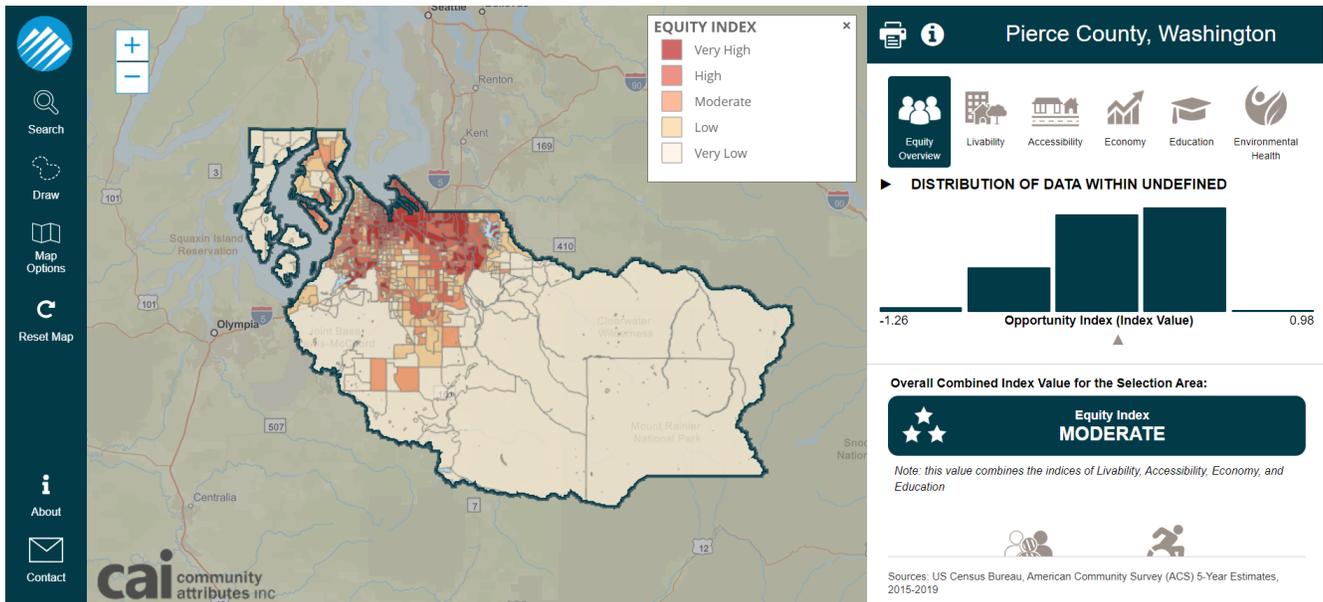


# Pierce County Equity Index

In partnership with Pierce County, the Tacoma Pierce-County Health Department, and Pierce Transit, a county level map has been developed that is very similar to the Tacoma map. The map utilizes the same indicators as the Tacoma map, but may utilize different data sets for the indicator. This is a first step at showing a proof of concept for a county level map, and gives some initial guidance to county level partners on how to utilize geographic opportunity to direct resources.

Important to note for the county level index, at this time the map only utilizes local data for unincorporated Pierce County, and Tacoma while primarily utilizing state and federal data. As the index is updated and expanded to other jurisdictions, additional local data will become available.

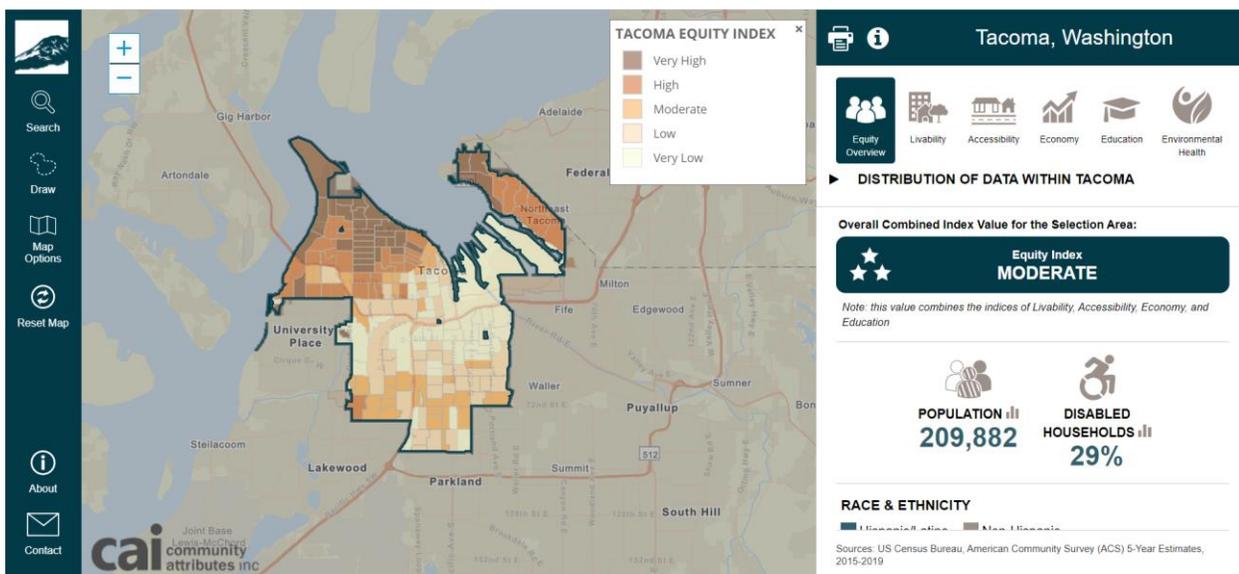
You can access the county map online via the City webpage at [www.cityoftacoma.org/equityindex](http://www.cityoftacoma.org/equityindex), or linked directly below. (<https://piercecouny.caimaps.info/caiive>)



# User Guide

## Overview

The Community Opportunity Maps (COM), developed by Community Attributes Inc. and customized for the City of Tacoma and Pierce County, are part of an interactive mapping platform that displays a set of community indicators within the City and County, and forms the visual foundation of the Tacoma Equity Index, and the Pierce County Equity Index. This resource is free to the public and designed to increase access to available information about factors that contribute to equity and access to opportunity throughout the City and County. The information displayed in the Equity Indexes do not represent an exhaustive list of community characteristics associated with equity. 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 to promote greater equity and access to opportunity across Tacoma and Pierce County.



The Equity Indexes allows you to specify a location within Tacoma or Pierce County by selecting a census block group, or if relevant, a neighborhood or council district, business district, congressional district, city boundary, searching by address, or by drawing boundaries on the map using your mouse. Once an area is selected, the map zooms to the specified area and displays community indicator data for that given area. The community indicators include information on people, access to resources, facilities, jobs, environment, and opportunity. When using the map, you can also add color-shaded layers to the map to highlight indices such as race, livability, accessibility, education, and the environment.

The following walkthrough highlights the different aspects and functionality of the public mapping tool. Frequently Asked Questions (FAQs) are included at the conclusion of this guide. For additional information or to provide feedback, please email Bucoda Warren, Strategic Initiatives Coordinator, at [bwarren@cityoftacoma.org](mailto:bwarren@cityoftacoma.org).



## Organization of this Guide.

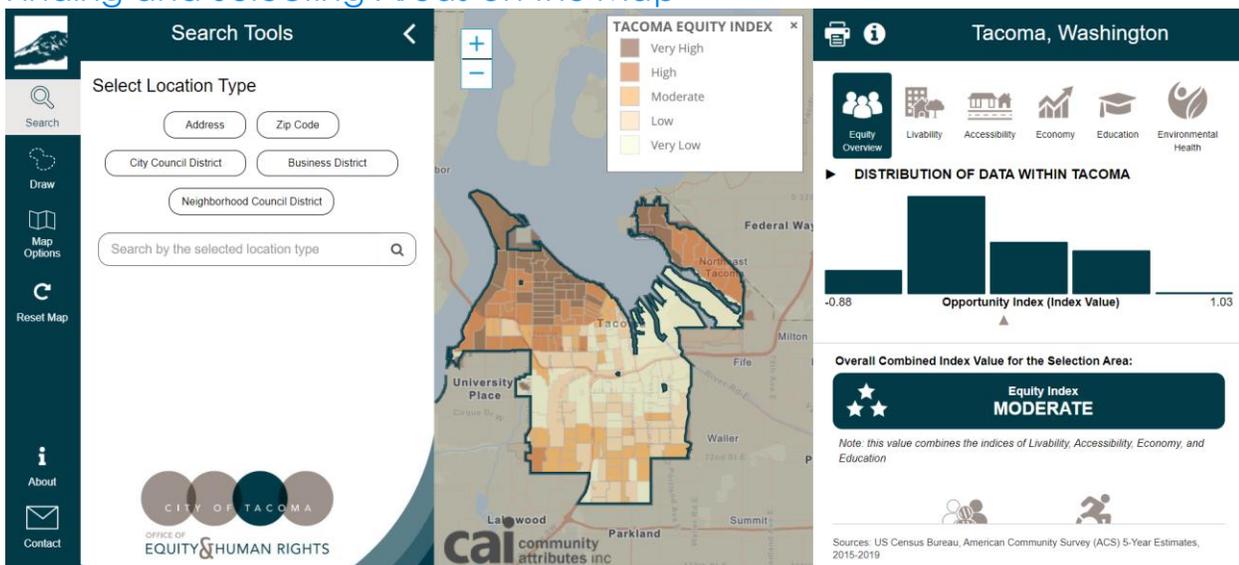
This guide is designed as a tour of the online mapping tool, starting with the top left corner, and showing the features on the left-side tool panel, which allows you to navigate, select, and reset the map, followed by the right side data panel, which helps you understand and interpret the information on the map. Though this guide focuses on the Tacoma Equity Index, the navigation of the County Index is functionally the same.

## Map Basics: Zooming In/Out and Moving the Map Area

In order to zoom in and out of the map to see the entire boundary of the geography selected, to view the surrounding area, or to select a different area, you can either click the **+** and **-** buttons in the top left corner of the map area, or by using the scroll wheel on your mouse while the pointer is hovering over a map area.

You can move the map area in view by hovering the pointer over any area on the map and clicking and holding the mouse button down while you drag the underlying map to a new area.

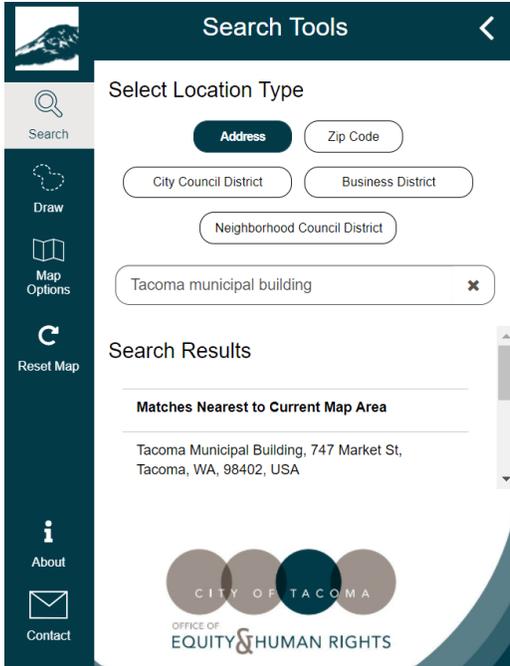
## Finding and Selecting Areas on the Map



To specify the area where you would like to know more information, use the **search** icon in control panel on the left side of the map. You can choose an area by searching for an address directly in the search box, or by specifying the type of area you would like to select (e.g. City Council District, or ZIP code), and then selecting one or more areas from the options shown and clicking **apply selected**. You can also use the **draw** tool to select custom areas by drawing boundaries on the map using your mouse. You can collapse the tool menu by using your mouse to click on **<** in the upper right corner of the tool menu.



## Search for a City or Address, or Select a County, ZIP Code, or State



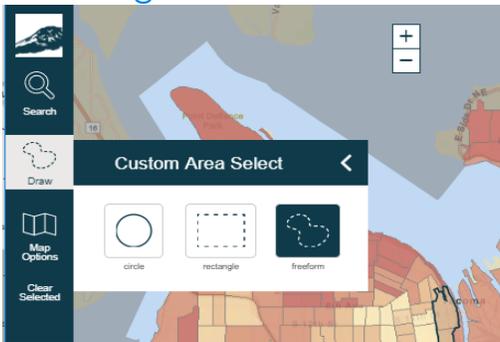
With the *Search Tools* menu expanded, you will see a search bar where you can type an address. As you begin to type, the search bar will generate a list of locations that match your search criteria. (Note: Generally four or more letters must be typed into the search bar to narrow your search to a manageable list of locations.)

When the search function yields a list of locations, you can scroll through the options until you find the geographic area which you are searching for. Once you click on a location from the options presented, the Map will zoom to the *census block group containing the location you selected* and show community indicators for that block group. If the area you selected does not fully appear on your screen, try zooming out a little bit using the +/- buttons in the upper left of the map.

If you cannot locate an area using the search menu, or you aren't sure how a location name is spelled, you can navigate using your mouse and the zoom features to find your desired location.

Regardless of whether you have entered search criteria into the search bar, or if you have moved the map using your mouse and zooming in/out, you can also select nearby districts or ZIP codes. If the district you are searching for does not appear in the list generated by your map view, try zooming out or moving the map to a different area using your mouse so that the district is within the map window. Once you select the district or ZIP code of interest, the map will zoom to that area, and provide you with the community indicators and indices in the data panel.

## Selecting a Custom Area



To select a custom area, click the **draw icon** on the tool panel, and choose circle, rectangle, or freeform shape around any area of the map (within the U.S.) and the map will display community indicator estimates for the area you have selected or, if you have selected 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 freeform draw an area on the map that crosses census boundaries, the Equity Index will redraw your

freeform boundaries to the nearest block group boundaries.

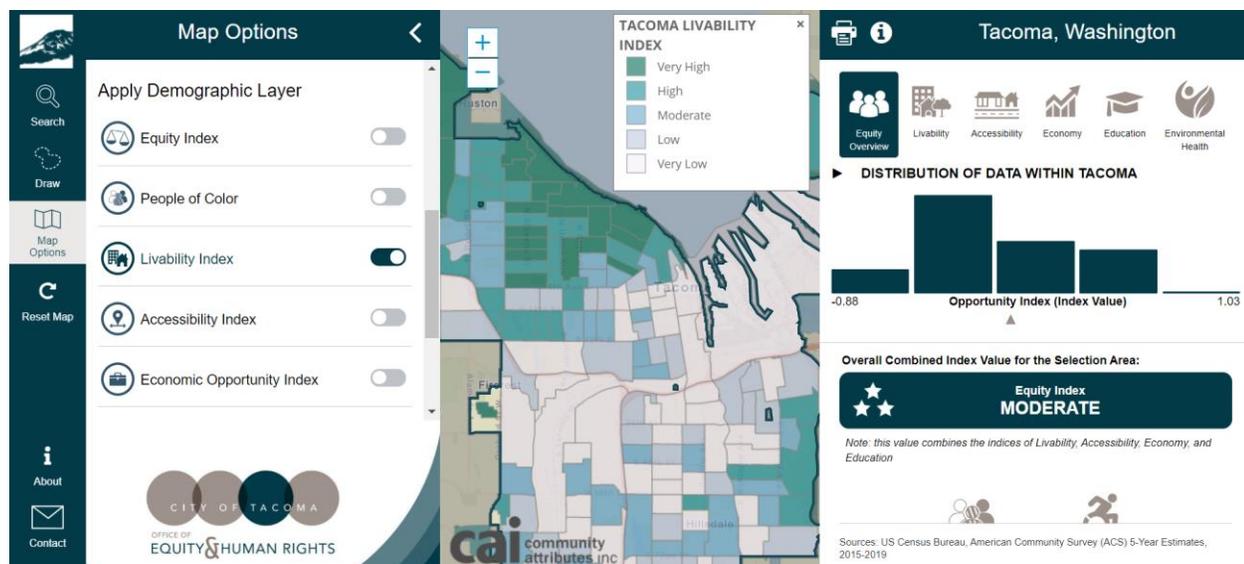
In order to draw a circle, rectangle or freeform shape using your mouse, click and hold the mouse button while you draw the desired boundaries. For a circle, where you first click will



represent the *center* of the circular area you specify, with the diameter expanding or contracting as you move the mouse. For a rectangle, where you click the mouse will become one *corner* of the rectangular area you specify, with the shape of the rectangle changing depending on where you drag the mouse. Note that the corner of the rectangle created by your initial mouse click will differ depending on the direction in which you move the mouse. Lastly, 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, though it is possible to drag your mouse over a boundary you have already created. Again, the map will adjust to areas designated by the census block group for which measures of the community indicators can be estimated.

## Changing the Map View

Click on the **Map Options** icon to change the base map views and select the base map layer indicator sets. Similar to the **Search Tools** menu, you can collapse the **Map Options** menu by clicking the < at right of the text "Change Map View".



## Adding an Indicator Layer and Switching Street/Satellite View

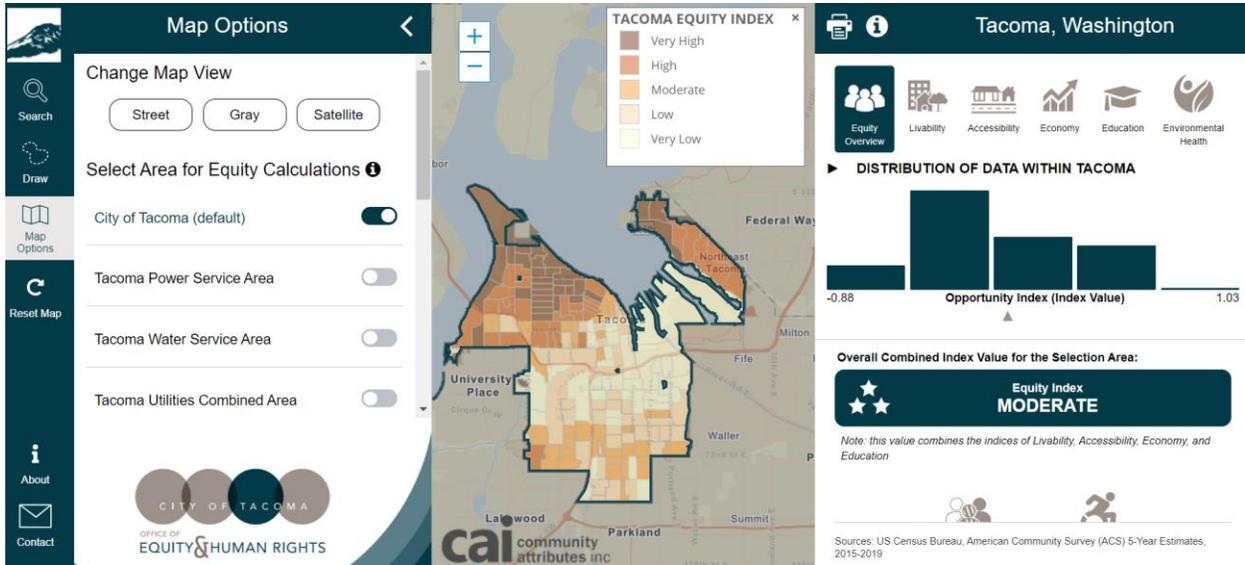
You can toggle on/off the indicator layers on the Equity Index. When the layers are turned on every census block group is color-shaded in proportion to the scale of the indicator selected. For example, when the layer *Livability Index* is turned on, every census block group in the map view is shaded at one of the five levels of "livability" shown on the legend, from "very high" to "very low"



## Changing the Geography

The Equity Index map also contains various geographies that you can access through the **Map Options** icon. Through Tacoma's map, you can also select the Tacoma Public Utilities power service area, water service area, and combined service areas as layers. Under the Pierce County Equity Index you can find a layer for Pierce Transit. When you toggle a new geography the five levels of shading, and underlying equity score, adjusts to calculate to the selected geography. That means the relative score shown when viewing a certain geographic layer is comparing block groups in that geography only.

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



## Resetting the Map

Directly beneath the Map Options icon, is the **Reset Map** icon that resets the map to the opening screen, with the entire City of Tacoma or Pierce County map selected.

## Access the Map Info and FAQ

The **About** button (the **i** with a circle around it) will bring up the latest version of the User Guide and FAQ, which includes information on the indexes and the City's commitment to data equity. The FAQ is appended to this User Guide.

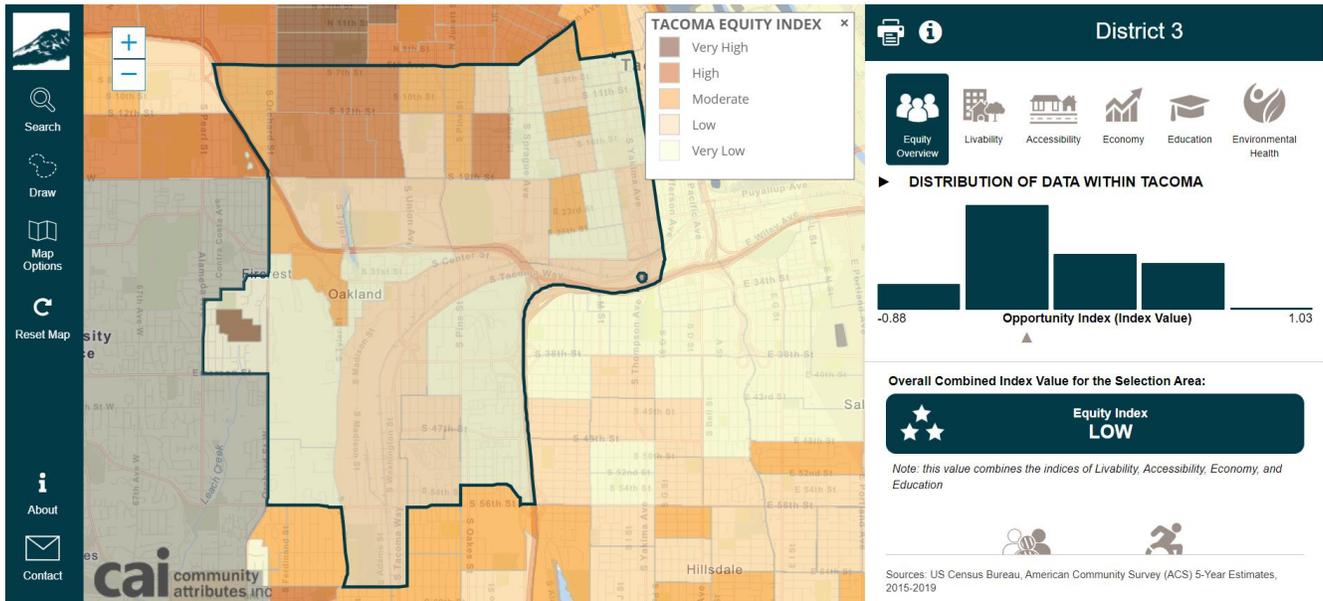
## Provide Feedback on the Community Opportunity Map

Directly beneath the **About** button, is the **Contact** button with an envelope icon. Clicking this link will open a new message in your email program to [bwarren@cityoftacoma.org](mailto:bwarren@cityoftacoma.org). Your feedback on the map is invaluable to both the City of Tacoma and the creators of this map. Whether it's helping to make the map easier to use, identifying issues with the data, or you find that the indicators simply don't reflect your neighborhood, we welcome your insights.

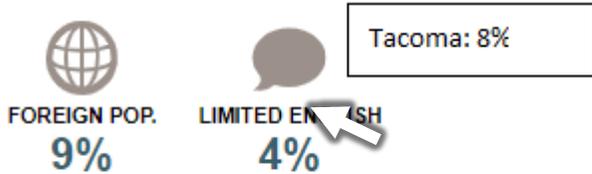


## Reading the Community Indicators Dashboard

The right side of the Equity Index displays a dashboard with a number of community indicators that make up the overall Equity Index. At the top of the dashboard, you will see the name of the area (district, "selected area", etc.) which the data and statistics in the dashboard reflect. Within the dashboard, community indicators are organized by subdomain: Equity Overview, Livability, Accessibility, Economy, Education, and Environment. To learn more about the healthy community indicators and demographic measures, including how and why the indicators were selected, please contact us at [bwarren@cityoftacoma.org](mailto:bwarren@cityoftacoma.org)



Each indicator on the dashboard has several features. An icon and the name of the indicator are shown to inform you what each estimate represents. Hovering your mouse pointed over any particular indicator (the icon, indicator name, or estimate) will automatically display comparison values between that indicator and the overall map. *Note:* Not every indicator is measured the same way (e.g., percentages, counts, ratios). Take heed of what each indicator measures, how it is measured, what the data means in context, and how supplementary data could inform the estimates displayed on the dashboard. You will also see a bar graph displaying the distribution of data within the map. This chart indicates how data for that category is distributed by block group across the City. You can also see the mean via a small arrow below the bar graph.



# Appendix 1: Frequently Asked Questions

## What is the Equity Index?

The Equity Index is a mapping tool that shows us where there are areas of higher opportunity and where there are areas of lower opportunity. This mapping tool allows us to see where we should focus effort and resources to improve outcomes and support equitable outcomes in our city. The index is built off of 29 social, economic, and environmental indicators (or data points) across the goal areas of Tacoma 2025, the City's strategic plan. This methodology is mirrored in the Pierce County Index, with some variations to the method of data collection and data used.

## Why did the City create an Equity Index?

Achieving equity in our community is essential to our mission, both as a City government and as a city at large. The Tacoma community has consistently made it clear that equity and racial justice need to be prioritized, including through doing equity analyses of programs and policies at the City of Tacoma. This guidance helped establish the goals and analysis to create the Equity Index.

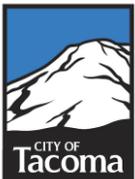
Working to achieve equity requires tools and skills that allow us to better understand the outcomes and conditions across our community, identify where focused effort and resources are needed, and taking action. Using data such as the Equity Index is an essential tool in taking those steps and making equity real.

## How did the City create the Equity Index?

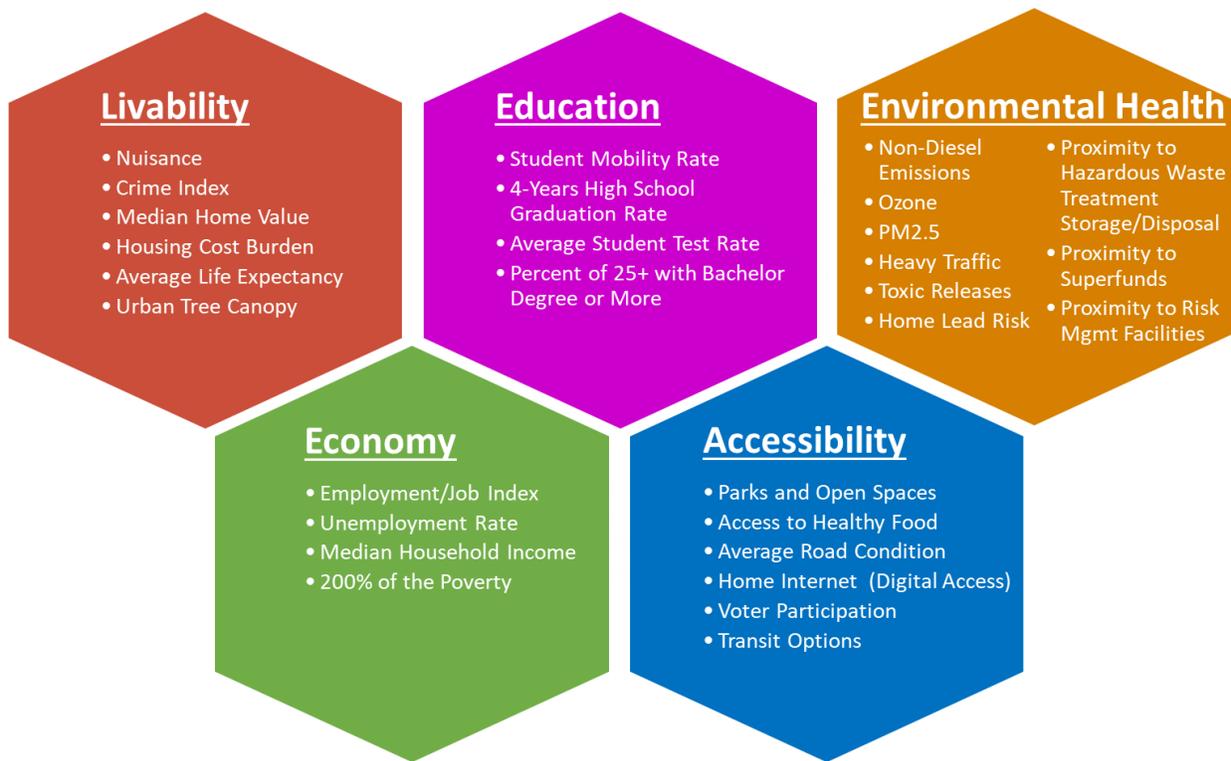
Working with Ohio State University's Kirwan Institute of Race and Social Justice, the City compiled the Equity Index to help facilitate data-driven decision-making processes to better focus resources and plan funding of programs and services to minimize inequities and maximize opportunities.

Data based decision making is an important part of Tacoma's framework, and being able to overlay data with the color-coded geographic equity index helps us to direct more resources to areas of the city that need it most.

The indicators displayed in the Equity Index have been shown to have a direct correlation to equity based on research by the Kirwan Institute. Below you can see the five categories of data, and the current indicators under each one.







**TACOMA EQUITY INDEX INDICATORS**

**What does Very High or Very Low Opportunity mean?**

- Tacoma Equity Indices**
- Very High Opportunity
  - High Opportunity
  - Moderate Opportunity
  - Low Opportunity
  - Very Low

Very High Opportunity represents locations that have better outcomes because of access to better opportunities to succeed and excel in life. These better outcomes include things like high performing schools, access to adequate transportation, safe neighborhoods, livable wage employment, good health outcomes such as higher life

expectancies, and safe and healthy environmental conditions. In contrast, Low Opportunity areas have worse outcomes because they have more obstacles and barriers to opportunity within the area. These communities have limited access to institutional and societal investments that limit their quality of life.



### Why are higher opportunity areas labeled Red?

When looking at data related to equity and social justice, we want to be mindful not to reinforce historical representations of low income or communities of color as bad or negative. To do this, the Equity Index shows darker colors for areas with more opportunity rather than showing darker colors for worse outcomes. This helps to visualize the areas of high opportunity by using red and lighter colors in areas of lower opportunity to call out the need for more investment and opportunity. This “flipped” gradient does not use green, or “positive” colors, when referring to historically high investment (white) communities.

### Can I see additional or multiple map layers?

Within the navigation panel on the left side of the screen, you can aggregate the index layers by social determinant categories; Accessibility, Education, Economy, Livability, and Environmental Health. This is also where you will find the toggle switches to switch between the Tacoma, TPU Water/Power, TPU Water, and TPU Power layers. Within the Pierce County map this is where you can find the Pierce transit map layer.

### Can I add more data and indicators to the Equity Index?

In a way yes. By downloading the file and uploading it to ArcGIS you can overlay your data and indicators to the Index, and you can import the shape files into your own geodatabase. The indicators and standard deviations (z-scores) are available to download from [the Tacoma GISHub](#). This allows you to layer your own data with the index to perform your own analysis, but it does not change the base indicators of the index. You can contact us at the email below to learn how to overlay your data with the equity index, or to suggest future indicators to be included.

### What if I am interested in adding indicators to the index? How should I approach advocating for new indicators versus creating a layer on top of the index?

If the project/group proves that the proposed indicator fits the [metrics of opportunity](#) created by the Kirwan Institute, it should be added and considered for the next update. If not, an overlay of your data will suffice. Additional data on the people who live in the community, along with demographic factors such as race and age can be laid over the opportunity map to demonstrate who in the community has access to greater or lesser opportunity. Overlays can also show where a community's assets, such as street lighting, can be leveraged to improve opportunity, and policy analysis can help identify how existing or proposed policies impact the opportunity within that area.



### Which layers are you supposed to use in your analysis? The whole index, one of the 5 categories, or one of the 29 indicators?

When using the equity index in your analysis, you should always start with the overall index. The strength of the data in supporting your analysis is based on the all 29 indicators role determining opportunity.

Some programs may benefit from looking at the category layers, for example if a program is specifically looking at increasing livable wage jobs, it can be helpful to see how the economy index layer opportunity ratings are distributed. This additional layer of consideration could help to focus a program after taking the whole map into consideration to focus in.

### What if the data I gathered is already represented in the equity index? For example, tree canopy is already utilized in the index, but you want to look at where to plant trees.

When considering how the equity index impacts your analysis it is important to consider how the many indicators come together to create patterns of higher and lower opportunity, and how no one indicator can shift the map without change in the others. In cases like this your team can use an overlay area of tree canopy and the equity index, and see where trees have been planted, compared to areas that are still considered low opportunity. Targeting low opportunity areas is not the only factor in directing resources, you also have to consider where there are already trees planted or good tree coverage. It is only one piece of the story you are telling when prioritizing new tree plantings.

### We as a City talk about leading with race in our anti-racist transformation work. How is this incorporated into the equity index?

The equity index currently has a layer for communities of color that you can access. This allows you to see census data about area demographics and see where the greatest concentrations of persons of color in the Tacoma and surrounding areas. In comparing high and low opportunity areas of the city, there is often correlation to the higher concentrations of communities of color. Our Tacoma team is currently developing breakouts so you can see the percentage and number of residents of color per opportunity rank by race. This will allow quick visualization of what races make up low and high opportunity zones, and allow us to better focus race in the analysis of our programs and services.



### Why is race not an indicator and only a layer?

The indicators are based on factors that impact inequalities due to systemic racism that we as a government system are able to impact. We cannot directly impact the race of our communities, but we can impact these other indicators to create real change for our residents. Race however, is very tied to these indicators, and you can see that where communities of color are located are very aligned with where low and very low opportunity census block groups are located.

### Why is there data missing from the Pierce County Equity Index?

At the time of creating the first County level index in 2021, the data available to Pierce County was limited to the unincorporated areas the county has jurisdiction over, and data from the Tacoma map. Individual cities within the county have their own data sets which were not incorporated into the County index. The map was designed as a proof of concept to assist Pierce County in implementing a similar equity index county-wide as we have in Tacoma.

### How do I get more information?

Please send all inquiries to [bwarren@cityoftacoma.org](mailto:bwarren@cityoftacoma.org)

