

Port of Seattle Equity Index

User Guide

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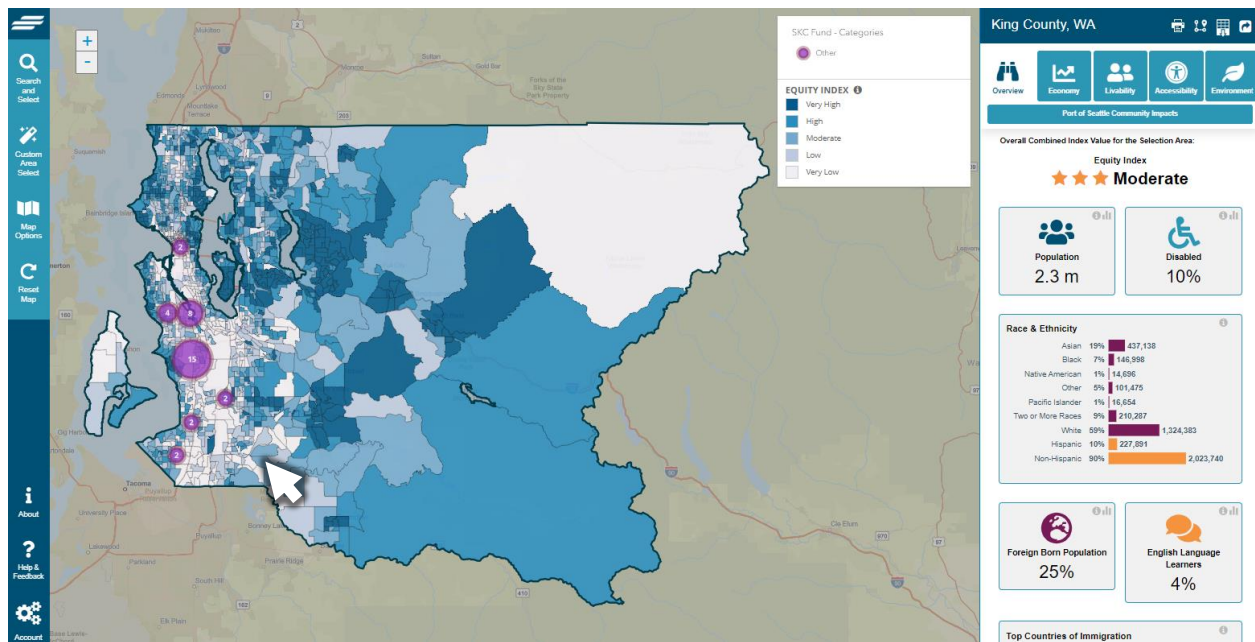
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User Guide

Overview

The Port of Seattle Equity Index, developed by Community Attributes Inc. and customized for the Port of Seattle Office of Equity, Diversity and Inclusion, is an interactive mapping platform that displays a set of community indicators within King County. A group of partners and advisors collaborated to select and categorize the indicators. The index calculation methodology is derived from work by the Kirwan Institute on Race and Social Justice. This resource is free to the public and designed to share information about factors that contribute to equity and access to opportunity throughout the County. The information displayed in the Equity Index does 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 partner engagement to promote greater equity and access to opportunity across the County.



The Equity Index allows you to specify a location within King County by selecting a city, searching by address, or 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 and opportunity within the selected area, you can also add color-shaded layers to highlight indices such race, livability, accessibility, and education.

The following walkthrough highlights the different aspects and functionality of the Equity Index. Frequently Asked Questions (FAQs) can be found on the Port of Seattle website.

We hope you find the Port of Seattle Equity Index to be a useful resource for you and your community.

For additional information or to provide feedback, please email Bookda Gheisar, Sr. Director Office of Equity, Diversity and Inclusion, Bookda.G@portseattle.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.

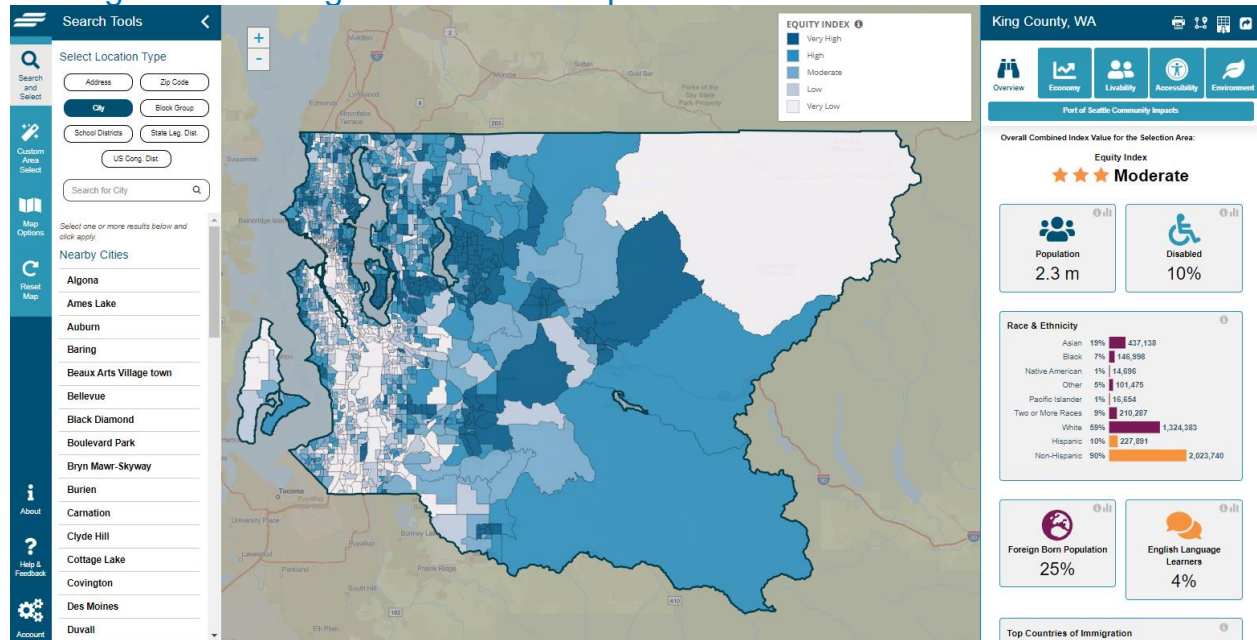
Map Basics: Zooming In/Out, Moving the Map Area, and Collapsing Menus

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 **+** 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.

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.

You can collapse the *Search Tools* menu by using your mouse to click on **<** in the upper right corner of the tool menu.

Finding and Selecting Areas on the Map



You have several options for selecting an area to investigate. You can search by street address, a defined Dist area (e.g., ZIP Code, City, or Congressional District), or you can draw your own boundaries. These options are described below:

Search for a Defined Area or Address



Click on the **search** icon in *Tool Panel* on the left side of the map to open the *Search Tools* menu.

Search by Address: Type a King County address directly into the Search bar. 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.)

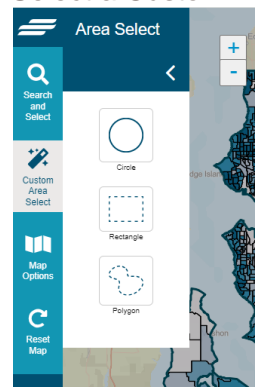
When the search function yields a list of locations, you can scroll through the options until you find the geographic area that you want. Once you click on a location from the options presented, the Map will zoom to that location, showing the enclosed or adjacent *census block group(s)*, and show community indicators for that area in the panel on the right. 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 decide to look at a separate location, just re-click the **Search icon** and the search panel will reopen.

Search by defined area (ZIP Code, City, Block Group, School Districts, State Legislative District or Congressional District): You

can also select one of the 6 defined location areas listed. The sub-options for that area will appear below on the panel, and then when you click apply selected, the map will jump to that area and list the equity characteristics of that area on the right panel.

Select a Custom Area



To select a custom area, click the **Custom Area Select icon** on the tool panel, and choose circle, rectangle, or freeform shape around any area of the map, and the Equity Index 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 Tool 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

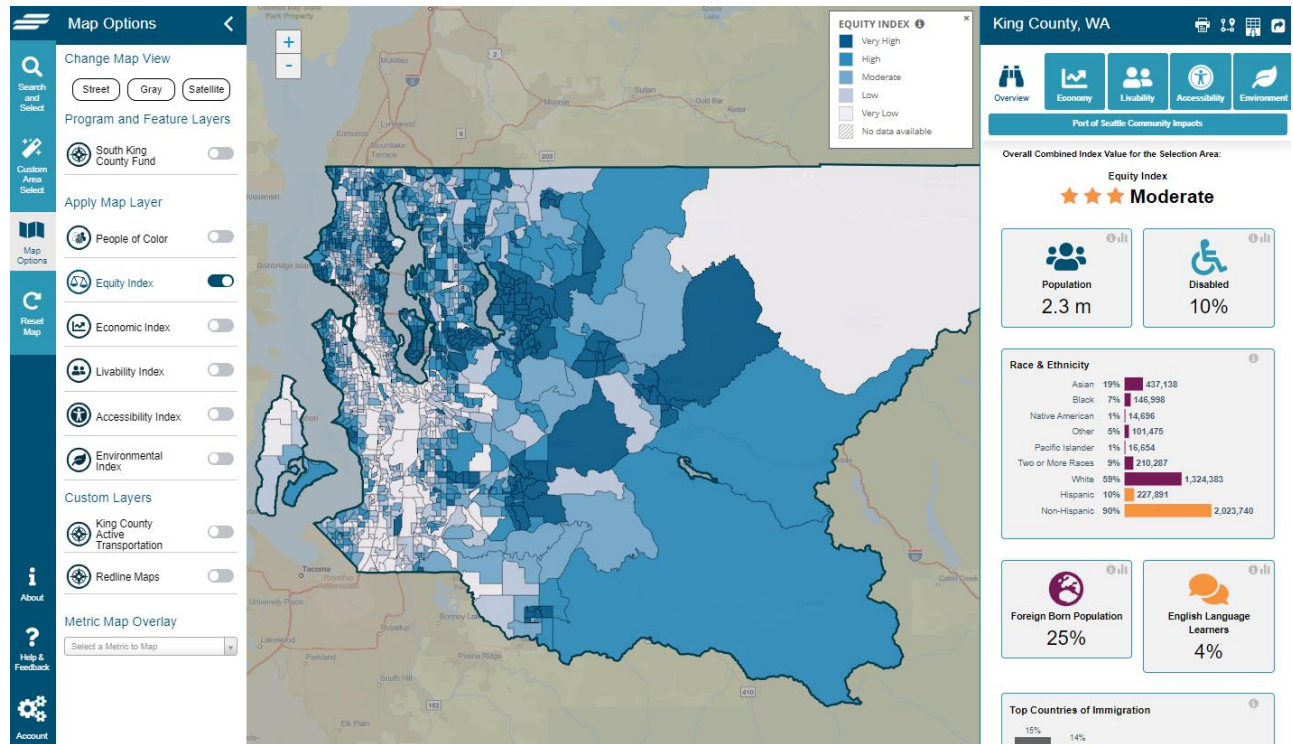
expanding or contracting as you move the mouse. For a rectangle, where you click the mouse will become one *corner* of the rectangular area you specify, with the shape of the rectangle changing depending on where you drag the mouse. Note that the corner of the rectangle created by your initial mouse 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.

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.

Change the Map View

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



Add 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".

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

Clear Selection and Reset the Map

Directly beneath the Map Options icon, is the **Clear Selected button** that clears the current selection, and the reset map button which will bring you back to the opening screen, with the entire County 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 Data Dictionary.

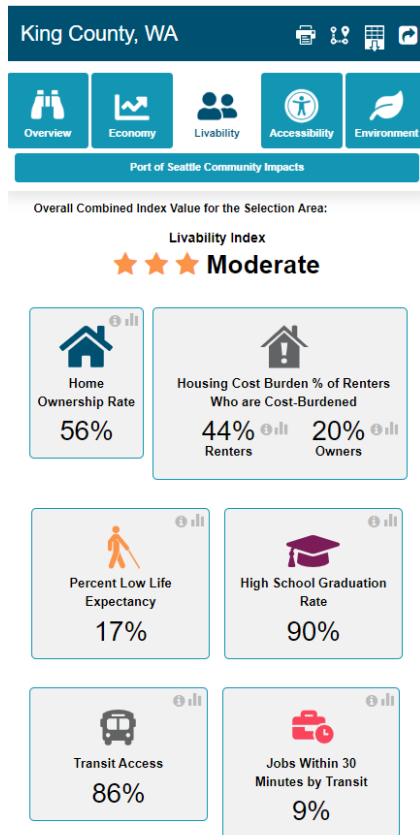
Provide Feedback on the Equity Map

Directly beneath the **About** button, is the **Help & Feedback** button with an question mark icon. Clicking this will open a dialog box. If you select **Help** and click "Let us know!" a new message will open in your email program to email cailive@communityattribute.com.

If select **Contact** and click "contact us here" a new message will open in your email program to email Bookda Gheisar, Sr. Director Office of Equity, Diversity and Inclusion, Bookda.G@portseattle.org.

Your feedback on the map is invaluable to both the Port of Seattle 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 the community indicators that make up the Equity Index. At the top of the dashboard, you will see the name of the area (City, "custom area," etc.), which the data and statistics in the dashboard reflect. Within the dashboard, community indicators are organized by subdomain: Overview, Economy, Livability, Accessibility, and Environment. To learn more about the community indicators and demographic measures, including how and why the indicators were selected, please contact the please email Bookda Gheisar, Sr. Director Office of Equity, Diversity and Inclusion, Bookda.G@portseattle.org.

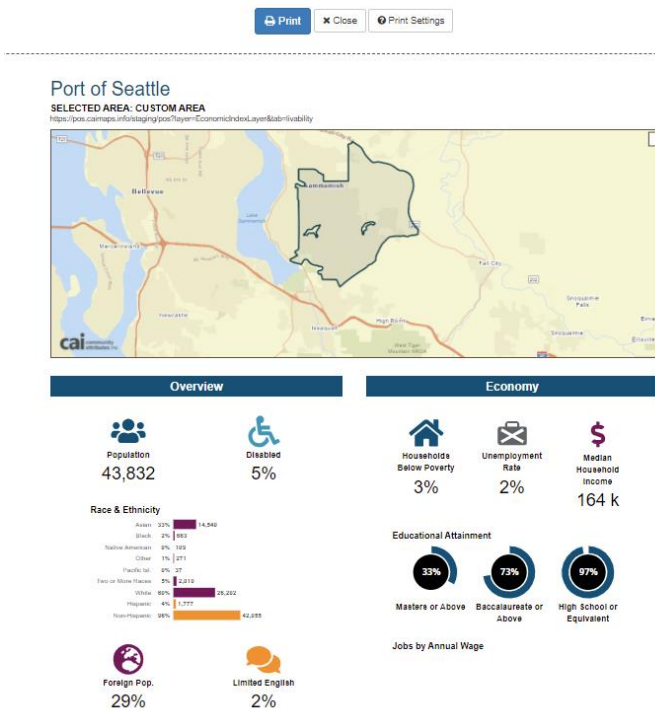
Each indicator on the dashboard has several features. An icon and the name of the indicator are shown to inform you what each estimate represents. *Note:* Not every indicator is measured the same way (e.g., percentages, counts, ratios). Take heed of what each indicator measures, how it is measured, what the data means in context, and how supplementary data could inform the estimates displayed on the dashboard.

Display metadata about the indicator by selecting the small **(i)** with the circle around it. This will open up a box with information including definition of the indicator,

data year, yea this data was added, scope, why the metric is important, source, and source link.

Display the distribution of data throughout the area of study (King County) by clicking on the small gray bar chart icon next to the indicator. This will open up a histogram of the data showing the distribution of the indicator values within the overall study area, and the position of the selected block groups along that range. This shows the absolute range and relative distribution of the indicators as well as how a given area compares within that range.

Printing and Saving to 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.

Download Data



Click the Point-to-Point icon at the top of the Data Panel to download the geographic data in the GeoJSON (Geographic JavaScript Object Notation) format. When you export data to GeoJSON format, you're essentially converting spatial data from its current format (such as a shapefile, KML, or database) into GeoJSON, allowing it to be easily utilized by various mapping libraries, web services, and GIS software that support GeoJSON.



Click on the Table icon at the top of the Data Panel to download the data in spreadsheet format.

Share

Click the Share icon on the top of the Data Panel to generate a link that can be shared to provide access to the Equity Index.

Data Dictionary

Category	Name	Definition	Source of Data	Polarity
Overview	Population	Total count of population.	U.S. Census Bureau American Community Survey 5-Year Estimates	Neutral
Overview	Disabled	Percentage of non-institutionalized population within the block group with disability.	U.S. Census Bureau American Community Survey 5-Year Estimates	Neutral
Overview	Race and Ethnicity	Percent and totals of block group population that identifies as White, Black or African American, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander, Some Other Race, or Two or More Races.	U.S. Census Bureau American Community Survey 5-Year Estimates	Neutral
Overview	Foreign Born	Percent of population that is foreign born.	U.S. Census Bureau American Community Survey 5-Year Estimates	Neutral
Overview	Limited English	Percent of population with limited English proficiency.	U.S. Census Bureau American Community Survey 5-Year Estimates	Lower is better
Overview	Top Countries of Immigration	The top five countries of immigration for the foreign-born population residing in the United States.	U.S. Census Bureau American Community Survey 5-Year Estimates	Neutral
Overview	At Home Languages	Percent of census tract population by languages spoken at home.	U.S. Census Bureau American Community Survey 5-Year Estimates	Neutral
Economy	Poverty Rate	Percent of the population within the block group earning less than the U.S. Census Bureau's poverty	U.S. Census Bureau American Community Survey 5-Year Estimates	Lower is better

Category	Name	Definition	Source of Data	Polarity
		threshold, which varies based on family size and composition.		
Economy	Unemployment Rate	Unemployed percentage within a block group of the total eligible workforce over 16 years of age.	U.S. Census Bureau American Community Survey 5-Year Estimates	Lower is better
Economy	Median Household Income	The median household income in a given area.	U.S. Census Bureau American Community Survey 5-Year Estimates	Higher is better
Economy	Educational Attainment: Masters or Above	Percent of the population 25 years and over with a master's degree, professional school degree, and doctorate degree.	U.S. Census Bureau American Community Survey 5-Year Estimates	Higher is better
Economy	Educational Attainment: Baccalaureate or Above	Percent of the population 25 years and over with a bachelor's degree, master's degree, professional school degree, and doctorate degree.	U.S. Census Bureau American Community Survey 5-Year Estimates	Higher is better
Economy	Educational Attainment: High School or Above	Percent of the population 25 years and over with a regular high school diploma and a GED or alternative credential.	U.S. Census Bureau American Community Survey 5-Year Estimates	Higher is better
Economy	Estimated Jobs Total	Total number of employees by place of work within the county by major sector categories.	Puget Sound Regional Center Puget Sound Regional Center Data Portal	Neutral

Category	Name	Definition	Source of Data	Polarity
Livability	Home Ownership Rate	Owner occupied home ownership rate by block group.	U.S. Census Bureau American Community Survey 5-Year Estimates	Higher is better
Livability	Housing Cost Burden	The total percentage of all owners and renters in a block group spending 30% or more of their income on housing costs.	U.S. Census Bureau American Community Survey 5-Year Estimates	Lower is better
Livability	Percent Low Life Expectancy	Percent low life expectancy of those residing within a particular block group.	Environmental Protection Agency EJScreen	Lower is better
Livability	High School Graduation Rate	The 4-year adjusted cohort graduation rate. This is the number of students who completed high school in four years, divided by the number of students who are in their "cohort"; those that started 9th grade at the same time. "Adjusted" refers to the fact that some students may have moved in or out of the school, and the cohort size needs to be adjusted to accurately track those students. Data was calculated based on the percentage of a block group within a corresponding school attendance zone. Calculation included high school. No data was reported for Skykomish High School.	State of Washington Access Washington, Washington Office of Superintendent of Public Instruction High School ESD121	Higher is better

Category	Name	Definition	Source of Data	Polarity
Livability	Transit Access Score	Acreage of a block group's area within 1/4 mile of rail and bus service stops, within 3 miles of park and ride locations, and within micro transit areas from Sound Transit and King County divided by total block group area. Overlapping transit areas yield higher totals, meaning greater transit access.	Sound Transit Open Transit Data, King County King County Open Data Portal	Higher is better
Livability	Jobs Within 30 Minutes by Transit	The percentage of workers who commute to work by public transportation (bus, subways, light rail, streetcar, trolley, long-distance train or commuter rail or ferryboat), walking, taxicab, motorcycle, bicycle, or other means within a 30-minute travel time.	U.S. Census Bureau American Community Survey 5-Year Estimates	Higher is better
Livability	Crime Risk	The rate of crimes defined in the personal and property categories, which includes murder, rape, robbery, assault, burglary, larceny, and motor vehicle theft.	ESRI ESRI Business Analyst	Lower is better
Accessibility	Neighborhood Park Access	Percent of block group within 1/2 mile of neighborhood parks.	Puget Sound Regional Center Puget Sound Regional Center Data Portal	Higher is better

Category	Name	Definition	Source of Data	Polarity
Accessibility	Community Park Access	Percent of block group within 1 mile of community parks.	Puget Sound Regional Center Puget Sound Regional Center Data Portal	Higher is better
Accessibility	Regional Park Access	Percent of block group within 10 miles of regional parks.	Puget Sound Regional Center Puget Sound Regional Center Data Portal	Higher is better
Accessibility	Pedestrian and Bike Facilities Access Score	Score of dedicated bike and pedestrian facilities of all minor and major arterial roadways and shared use paths within a block group. This metric generally ranges between 0 and 4, with 4 indicating complete facilities on each road segment over the total road length, and 0 indicating the absence of facilities on each road segment over the total road length.	Puget Sound Regional Center Puget Sound Regional Center Data Portal	Higher is better
Accessibility	Internet Access	The percentage of households with access to home internet.	U.S. Census Bureau American Community Survey 5-Year Estimates	Higher is better
Accessibility	Voter Participation	The percent of voters who voted in the general election divided by the number of eligible voters in the block group averaged over four years. This evaluates voter participation and can be used to determine access to civic processes.	Washington Secretary of State Election Results and Voters' Pamphlets, U.S. Census Bureau American Community Survey 5-Year Estimates	Higher is better

Category	Name	Definition	Source of Data	Polarity
Accessibility	Access to Healthy Food	The mRFEI (modified Retail Food Environment Index) percentage assesses the proportion of healthy food outlets within an area, with a percentage of zero indicating a food desert lacking access to affordable nutritious options. In areas with mREI percentages above zero, lower percentage signify food swamps, characterized by an abundance of energy-dense snacks overwhelming healthier food choices.	ESRI ESRI Business Analyst	Higher is better
Environment	Diesel and NOx Pollution	Annual diesel and Nitric Oxide emissions average for the area (tons/Km2), estimated by EPA modeling.	Environmental Protection Agency EJScreen	Lower is better
Environment	Toxic Risk	The toxicity-weighted concentrations of chemical releases to air from facility emissions and off-site incineration. Air releases from Risk Screening Environmental Indicators (RSEI) are modeled by the Toxics Release Inventory (TRI) program.	Environmental Protection Agency EJScreen	Lower is better
Environment	Average Annual	Annual average concentration of fine particulate matter estimated based on air quality monitors and	Environmental Protection Agency EJScreen	Lower is better

Category	Name	Definition	Source of Data	Polarity
	Particulate Matter Index	atmospheric circulation and dispersion models from the US EPA. Measured in micrograms per cubic meter.		
Environment	High-Traffic Roadway Pollution Risk	Index representing the distance-weighted average annual daily traffic along major roadways for each block group, measured from the centroid of each block group.	Environmental Protection Agency EJScreen	Lower is better
Environment	Asthma Rates	Asthma hospitalization rates per 10,000. Asthma hospitalizations are defined as resident hospitalizations for asthma using specific discharge diagnosis code fields.	Washington State Department of Health Washington Tracking Network	Lower is better
Environment	Urban Tree Canopy	The percentage of a block group that is covered by an urban tree canopy.	Multi-Resolution Land Characteristics (MRLC) Consortium NLCD Tree Canopy Cover (CONUS)	Higher is better