Washington State Electric Vehicle Charging Program (WAEVCP) Residential Mapping Tool User Guide

Washington State
Department of
Commerce

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PREPARED BY THE TIMMONS GROUP, INC.
FOR THE WASHINGTON STATE DEPARTMENT OF COMMERCE
LOCAL GOVERNMENT DIVISION
AND THE ENERGY FACILITY SITE EVALUATION COUNCIL

Cover image: https://wacommerce.maps.arcgis.com/sharing/rest/content/items/03deb162d9c94d3fa8989f898e8e62f9/data

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Contents

Introduction

Welcome to the Washington State Electric Vehicle Charging Program (WAEVCP) Residential Mapping Tool User Guide. The purpose of the WAEVCP **Residential Mapping Tool User Guide** is to provide written and visual guidance on how to use the web mapping application. It will explain basic and advanced tool functionality available in the tool and provide instructions about how to create a WAEVCP Site CoConsultation Report that applicants will use to fill out their application. It will also provide a list of map layers available in the tool, metadata about those map layers, and instructions about how to download map layers.

Project partnership

The Timmons Group, a third-party contractor produced an Online Mapping Needs Assessment and developed an interactive map application for this project, on behalf of the Washington State Department of Commerce. All findings and recommendations related to the Online Mapping Needs Assessment are based on engagement by the contractor as part of the Washington State Electric Vehicle Charging Program (WAEVCP) and are subject to further review by Commerce.

The Washington State Electric Vehicle Charging Program (WAEVCP) is a broader joint effort led by the Washington State Department of Commerce in partnership by interagency agreement with the Utility and Transportation Commission and Washington State Energy Facility Site Evaluation Council.

This study was prepared under contract with the Washington State Department of Commerce.
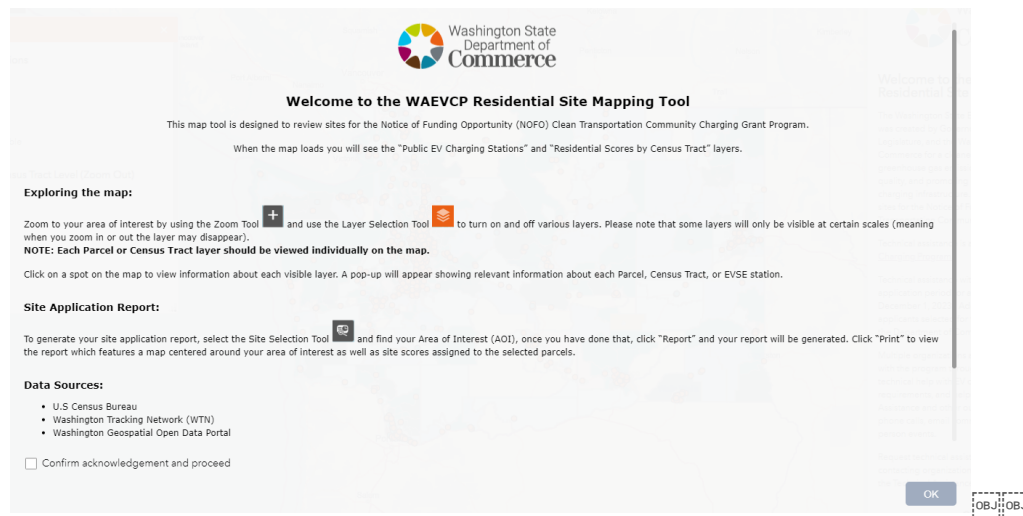
Section 1: Getting started

The state of Washington is committed to increasing the supply of renewable energy. We seek to support developers in identifying suitable sites for electric vehicle supply equipment (EVSE) that present the least conflict with other resource needs. Consultation early in a project is important for well-informed planning. **This map tool is designed to show the Residential Score assigned to census tracts and multi-family-housing parcels, while providing users with the ability to generate a report of detailed scoring criteria for selected sites. The tool also allows users to locate and navigate to existing EV charging stations near them.**

The WAEVCP Map Tool is a publicly available tool that can be accessed two ways:

1. Directly going to: https://bit.ly/EV-Residential-Grant-App

2. Viewing the Hub page: https://ev-station-grants-wacommerce.hub.arcgis.com/
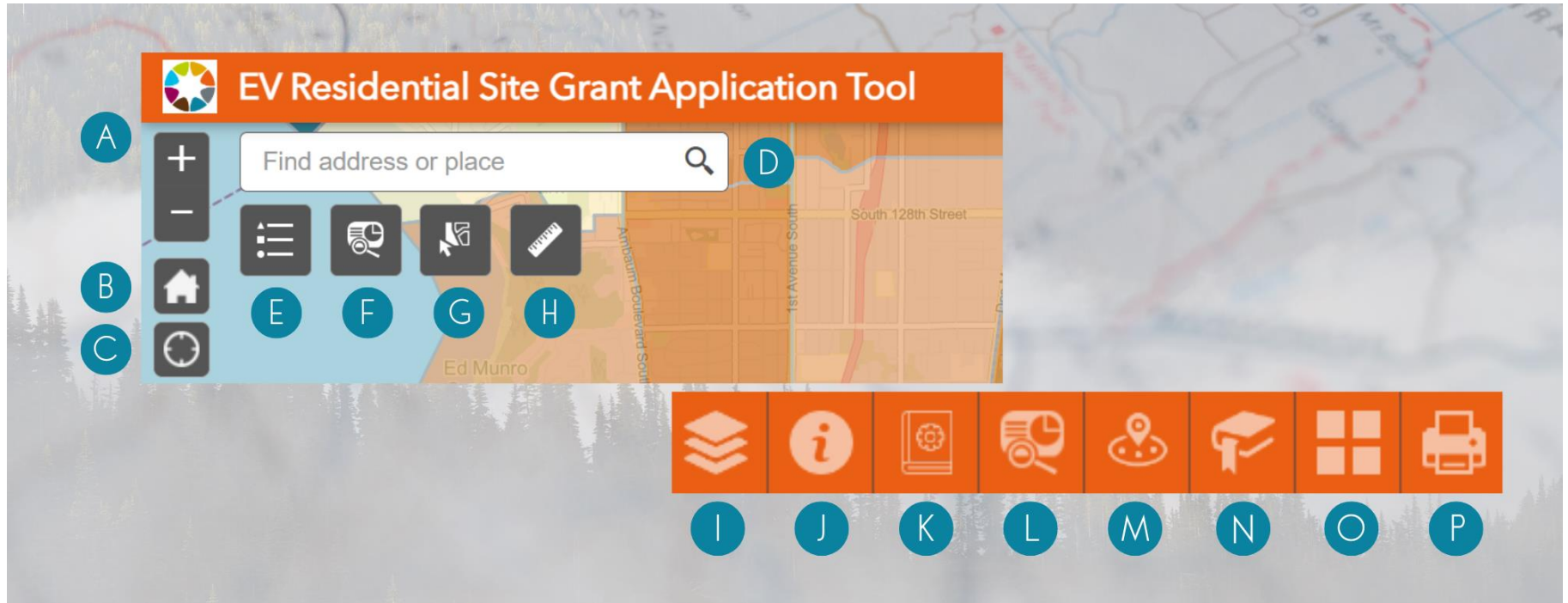
With option 1, you can directly access the map tool. With option 2, you can access a Hub page, which has more information, metadata, contacts, and a link to the WAEVCP Map Tool. Both options are available with any modern browser including (but not limited to): Google Chrome, Mozilla Firefox, Microsoft Edge, Apple Safari. **Google Chrome is the best browser to use for this tool.**

A required disclaimer statement and acknowledgement checkbox is your first view of the map tool. You must check the box to indicate that you have read and understand the instructions for exploring the map, generating your site application report, and the disclaimer in order to proceed to the map. Check the box to state *I confirm acknowledgement and proceed* and select *Ok*.

Section 2: Map tool basics and navigation

This section outlines important features of the mapping tool and provides a simple-to-use visual index of the map tool icons and the functionality that can be accessed from each icon.

Legend (see above for reference)

A. **Zoom**: Zoom in and out of the map.

> **NOTE**: To engage with and see the parcel data, you will need to zoom in within the map extent past the census blocks. The layers will remain grayed out until you are zoomed in far enough.

B. **Home**: Zoom to the default/home extent.

C. **My Location:** Navigate to your current location.

D. **Search:** Search layers by predefined search criteria.

E. **Legend:** Opens the legend to display symbology for layers toggled on in the map.

F. **Screening Tool:** Opens the screening tool to generate the consultation report.

G. **Select:** Opens the select tool to allow you to select features in the map for deeper analysis.

H. **Measurement:** Opens the measurement tool and allows you to make linear and area measurements.

I. **Layer List:** Opens the layer list to show all available layers to toggle on/off in the map.

J. **About:** Opens the About window with information about the map tool and relevant hyperlinks.

K. **App Usage Instructions:** Quick description of the tool ribbon in the top right of the map view.

L. **Generate Screening Report:** This provides step-by-step instructions to generate and print your site selection report.

M. **Locate Nearest EVSE Station:** Search for EV charing stations within a buffer distance from a selected location.

N. **Bookmarks:** Opens the bookmark gallery and allows you to choose from a selection of predefined bookmarks.

O. **Base Map Gallery:** Opens the base map gallery and allows you to choose from a selection of available base maps.

P. **Print:** Opens the print tool to allow you to print the current map view and any temporary drawings with measurements.

Section 3: Data layers in the map tool

This section outlines how data is organized within the tool and how to access specific data layers.

- The layer list shows the layer groups available in the tool.
  - Scoring criteria layers are listed with the viewing level as either parcel or census tract, and a tip informing the user to zoom in or zoom out to view.
- The legend lists the layers currently being displayed on the map.

Scoring criteria layers in the WAEVCP Map Tool display relevant information that will be used in the site application process. Layers included are:

- Multi-Family Housing – Parcel Level (Will need to zoom in to see)
- Residential Scores – Parcel Level (Will need to zoom in to see)
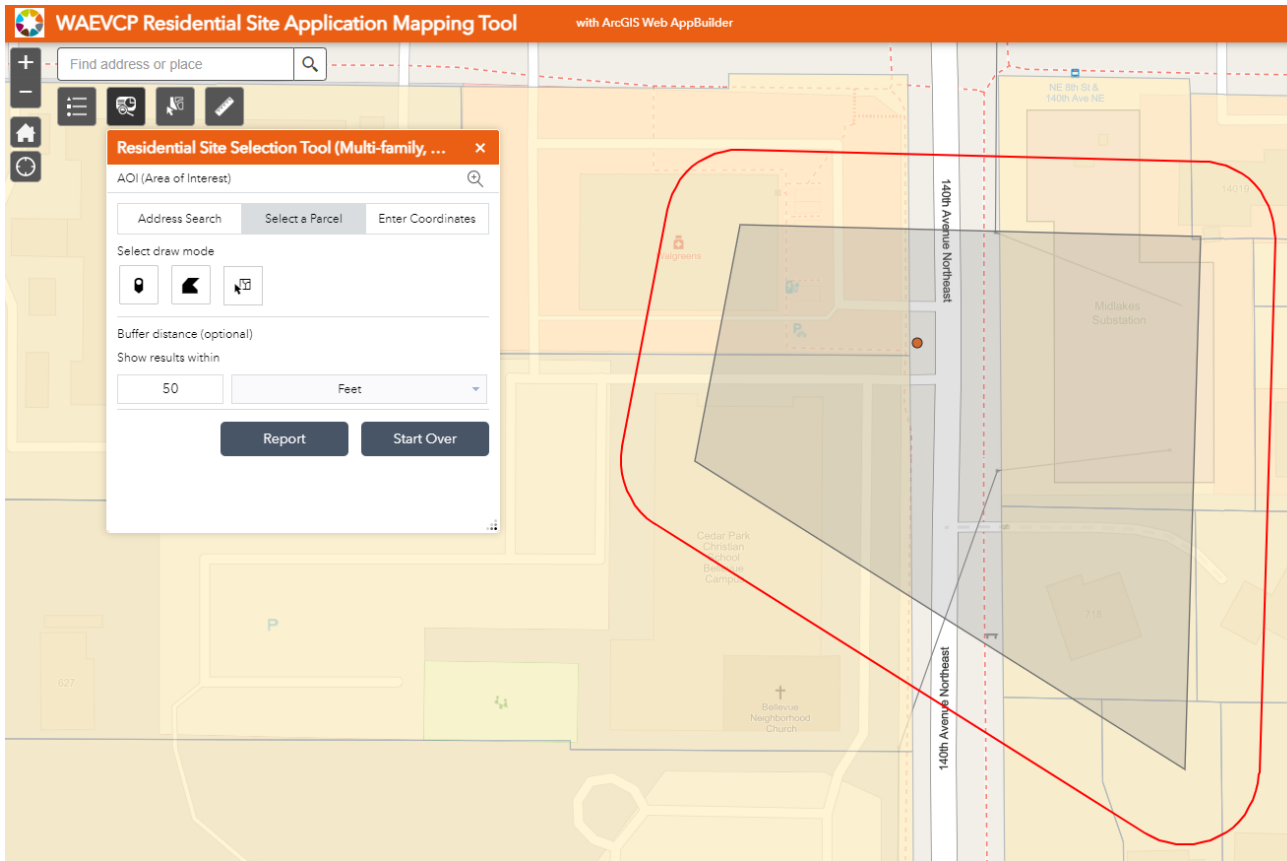- Residential Scores – Census Tract Level (Zoom out)

Reference layers in the WAEVCP Map Tool display additional datasets that may be helpful in the planning process.

- Public EV Charging Stations: displayed by status (Available, Planned, and Temporary Unavailable)
- Multi-Family Housing Properties

Metadata about the layers and download options can be found on the Hub site at: https://ev-station-grants-wacommerce.hub.arcgis.com/pages/explore-the-data.
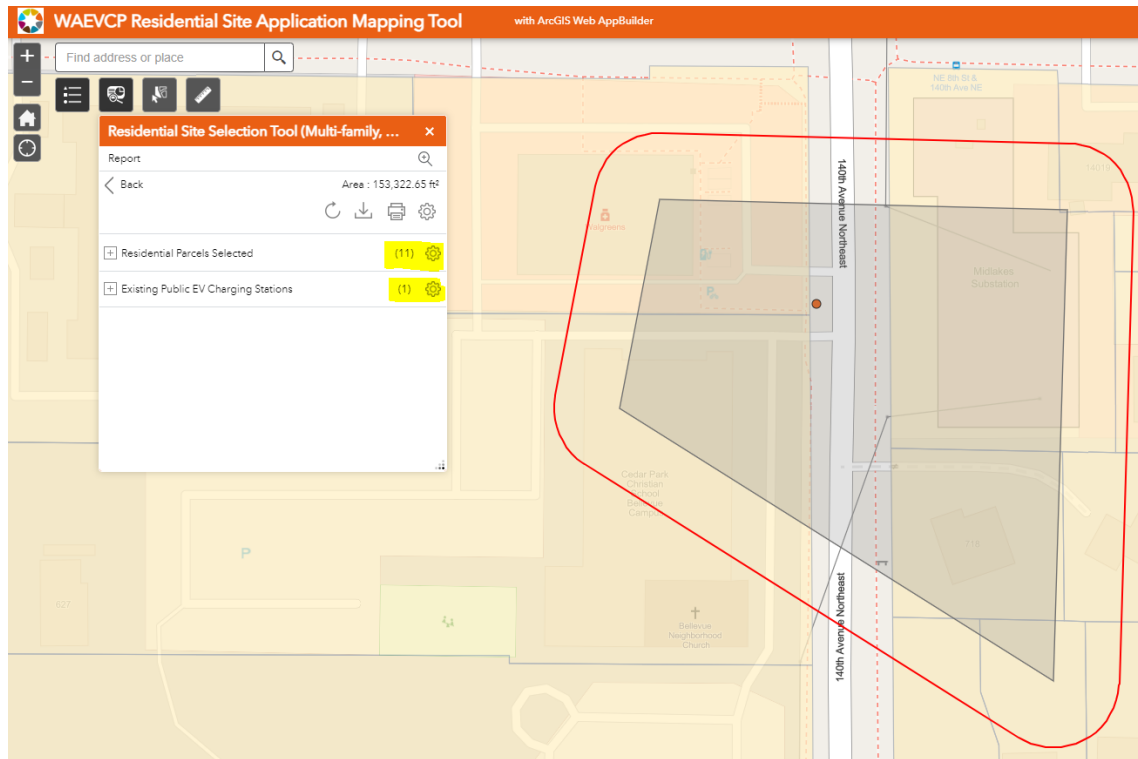
Section 4: Creating a Site Consultation Report

This section provides an illustrated step-by-step tutorial for generating a WAEVCP Residential Site Consultation Report.

A sample report is shown, and the content will be explained at a high level. The first step to generating a site consultation report is to open the tool and *select an area of interest*. There are three ways to select an area of interest: by searching for a place or address; selecting a parcel by point, polygon, or drawing a rectangle area on the map; or inputting coordinates. The example to the left shows a polygon drawn on the map. You may buffer your location or drawing by a measure and several different unit options. The red line that appears around your polygon is your buffer distance.
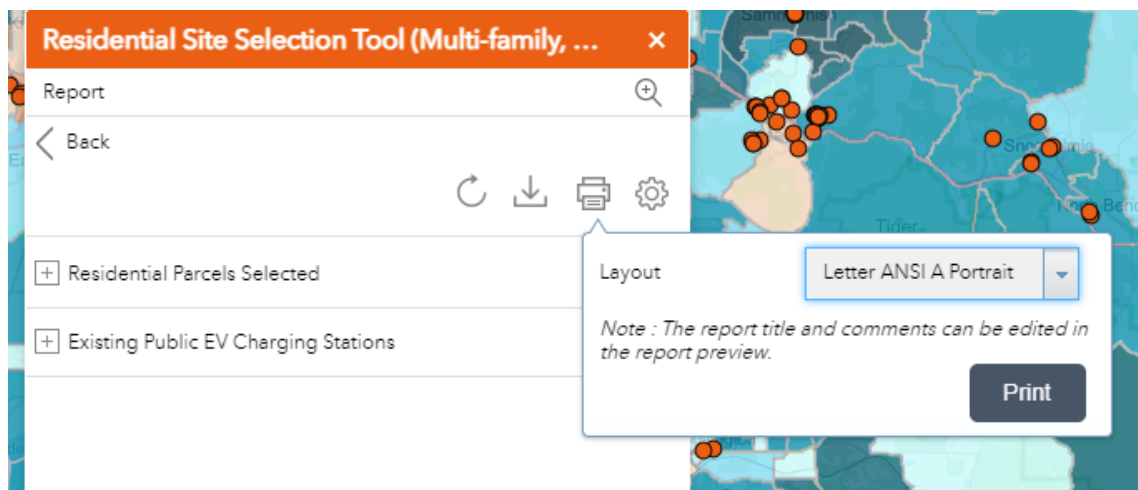
To begin the report generation, select report. Otherwise, to reset everything, select start over.
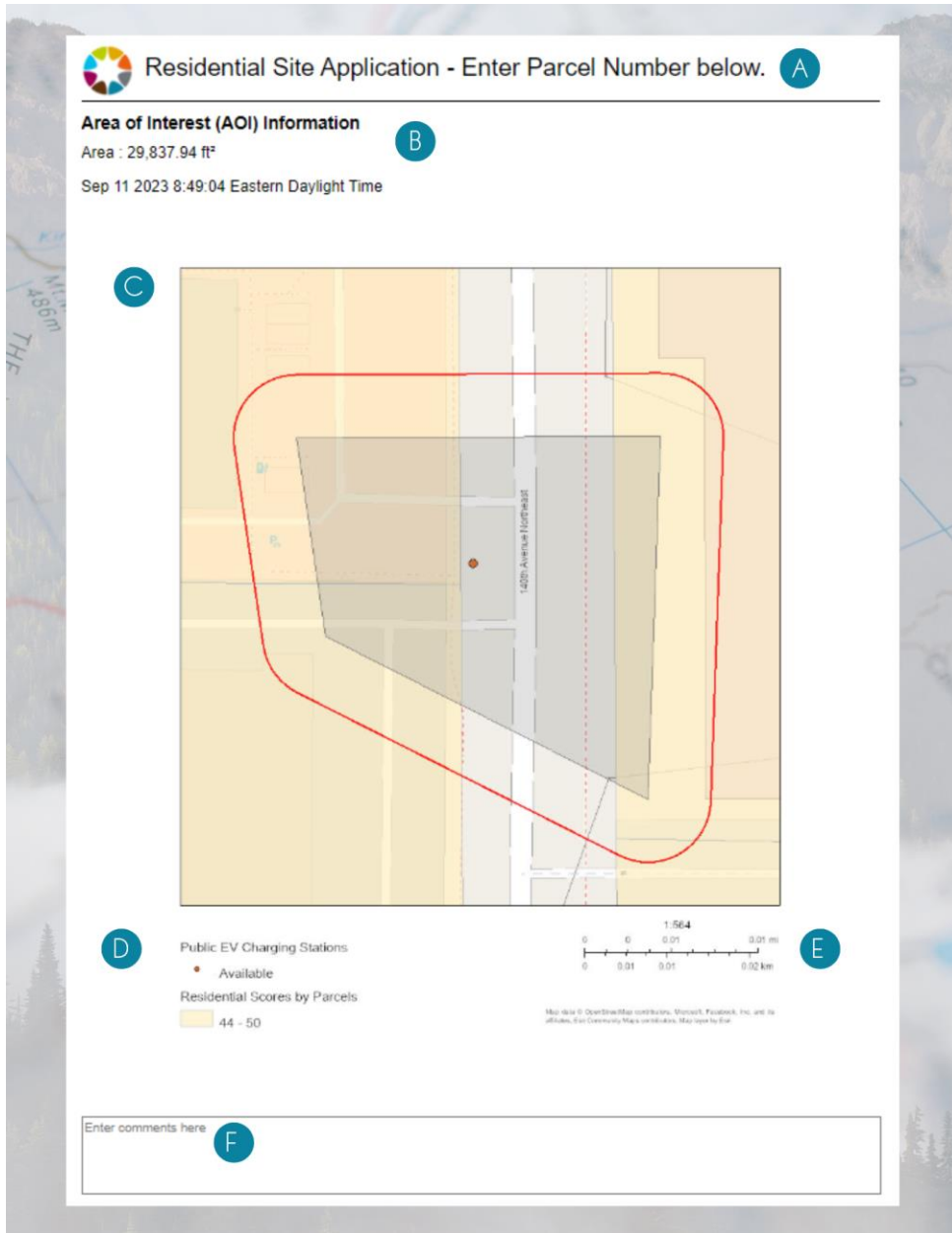
After selecting report, the map tool will process the area of interest and compare it against several priority layers in the map.

While the process is ongoing, a loading symbol will appear for each layer in the tool. When the processing is finished, each layer will have a number next to it. These numbers are highlighted in yellow in the example to the left.

There are several options to explore the data layers that intersect the area of interest (AOI). The most important option is the print icon, which will generate the WAEVCP Site Consultation Report.

Select the print icon and choose a layout. The default, and best option, is 'A3 Portrait.'

Page one of the Residential Site Application shows a map centered on your selected area of interest (AOI). All other map layers toggled on in the map are present in the view.

This map will be generated and may take a few moments when the print preview window opens.

The section below the map on the right shows the map scale, scale bar and service credits related to some layers in the map. The map scale and scale bar will update as the map extent and zoom scale change per your selected area of interest.

A. The title of your map. This can be modified prior to printing to better describe the report.

B. This shows you the size of the AOI selected as well as the date and time when the report was generated.

C. The map extent centered on your selected AOI.

D. A legend shows the symbology of layers toggled on in the map. There is a limited area to display the layers so not all layers toggled on will show in the legend.

E. The map scale and scale bar will update as the map extent and zoom scale change per your selected area of interest.

F. You may enter additional comments in this section if additional context is needed to describe the information.

Summary

Name	Count	Area(ft²)	Length(ft)
Residential Parcels Selected	1	N/A	N/A
Existing Public EV Charging Stations	0	N/A	N/A

Residential Parcels Selected

#	Eligibility	Parcel ID	Census Tract	County	Housing Affordability Score
1	Not Eligible	3521109001	53033031502	King	3

#	Low-Income Household Score	Overburdened Community Score	Address	City	Zip
1	4	1	No Data	No Data	98022

#	Land Use Code	Assessor's Link	Area(ft²)
1	0	https://blue.kingcounty.com/Assessor/eRealProperty/Dashboard.aspx?ParcelNbr=3521109001	N/A

Below the map extent, there are several tables with additional information about the residential sites selected.

The Residential Site Score is broken down by Housing Affordability Score, Low-income Household Score, and Overburdened Community Score.

Take note of the eligibility and parcel ID values, which will also be needed on your site application document. Additionally, the land use code for the AOI is generated in the report as well as the assessor link and square footage of the parcel. NOTE: if you want more information about the site selected, select the Accessor's Link to see more.
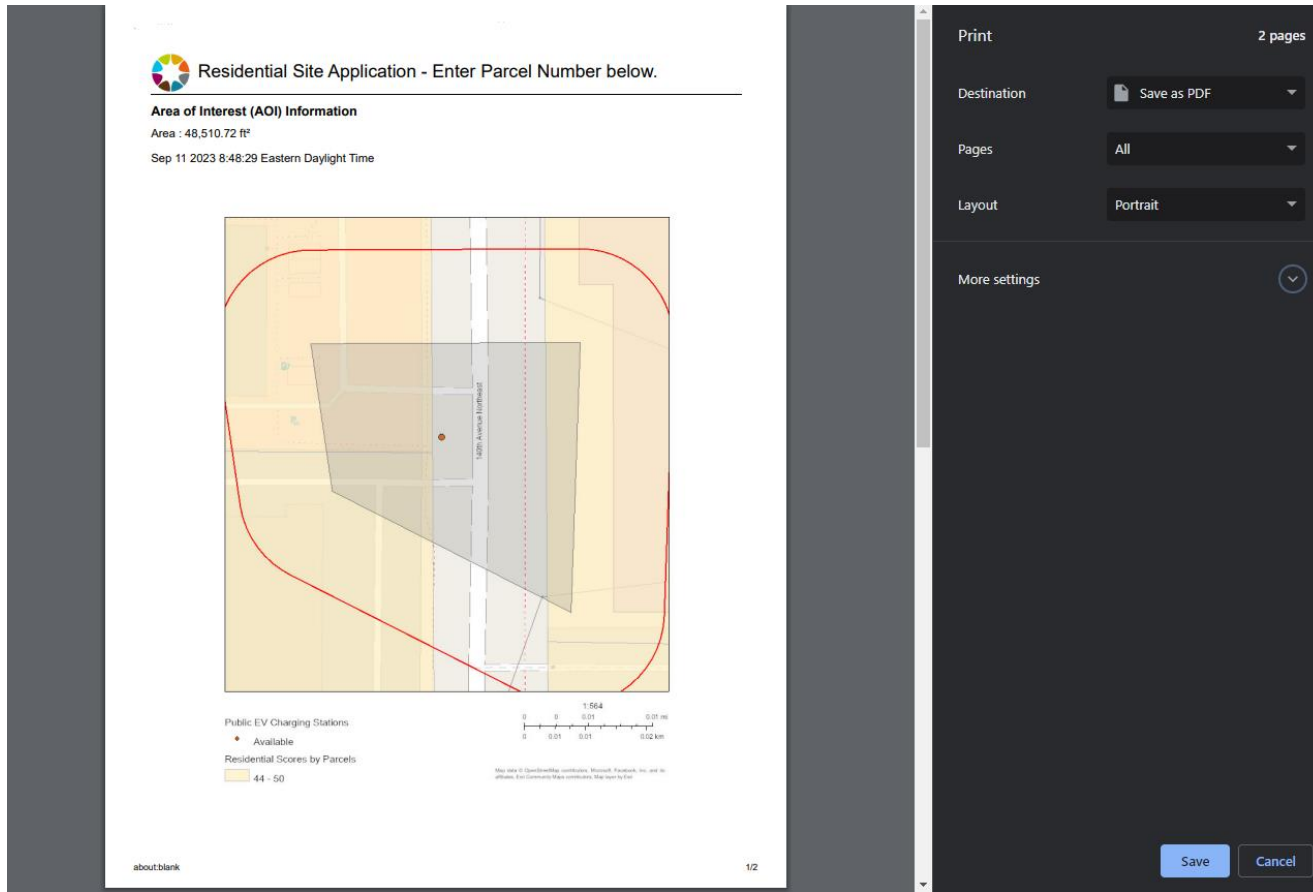
Helpful Terms:

Unaffordable housing refers to the situation where households allocate more than 30 percent of their income toward housing-related expenses. This concept is a vital metric for understanding housing affordability challenges to ensure that individuals and families have access to suitable and sustainable housing options without compromising their overall financial well-being.

Low-income household refers to a single person, family, or individuals residing together, whose income is equal to or less than 80 percent of the median family income adjusted for the size of the family. This median income is specific to the county, city, or metropolitan area where the project is situated. The data regarding this median income is reported by the U.S. Department of Housing and Urban Development.

"Overburdened" highlights the cumulative impact of multiple stressors on a community, which often amplifies the negative effects of each individual stressor. When these challenges intersect, they create a compounding effect that makes it exceedingly difficult for residents to break free from the cycle of disadvantage.
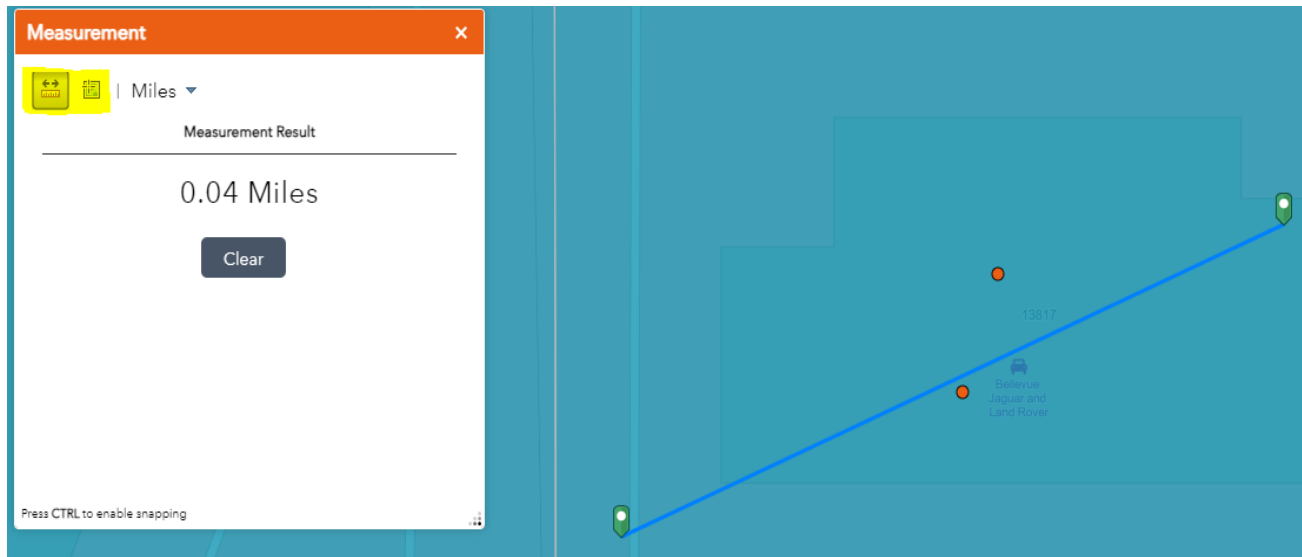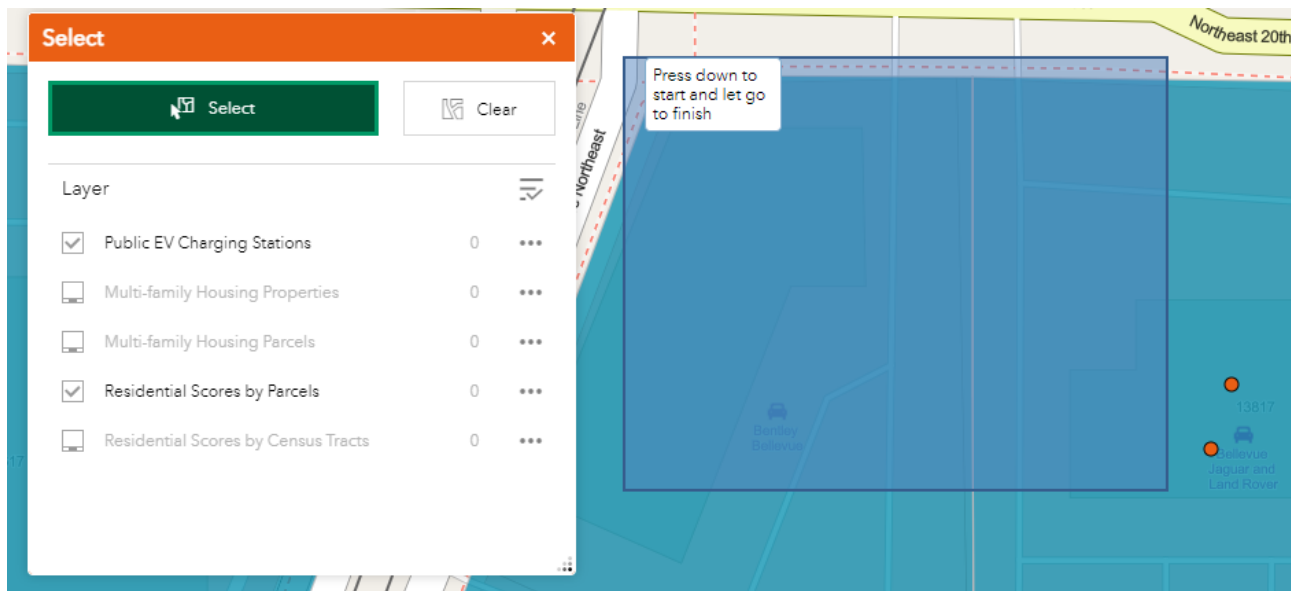
Section 5: Printing your Site Report

Select print in the top right of the print preview window to show the browser's print menu. At this point, the report has had the page breaks inserted and the final product is shown. You may choose a destination to save the PDF of your report, or you may choose to immediately print the consultation report.

Section 6: Advanced tool functionality

This section will provide more detail on several advanced map tool features: Measure Distance and Select

Measure Distance: Distance can be calculated using the measurement tool by selecting the start and end points. A line can have many points along and the measurement will be a total of the entire line length. Different units of measure are available and will update an existing measurement automatically. Only one line can be drawn at any given time. When using the tool, select which method of measuring you will be using in the top left of the tool window.

Select Tool: This tool allows you to make a large selection of points within your map extent. You will be able to see how many items show up in the layer list after you have completed your selection.

NOTE: You will need to zoom in to see the parcels layer and to select a parcel.