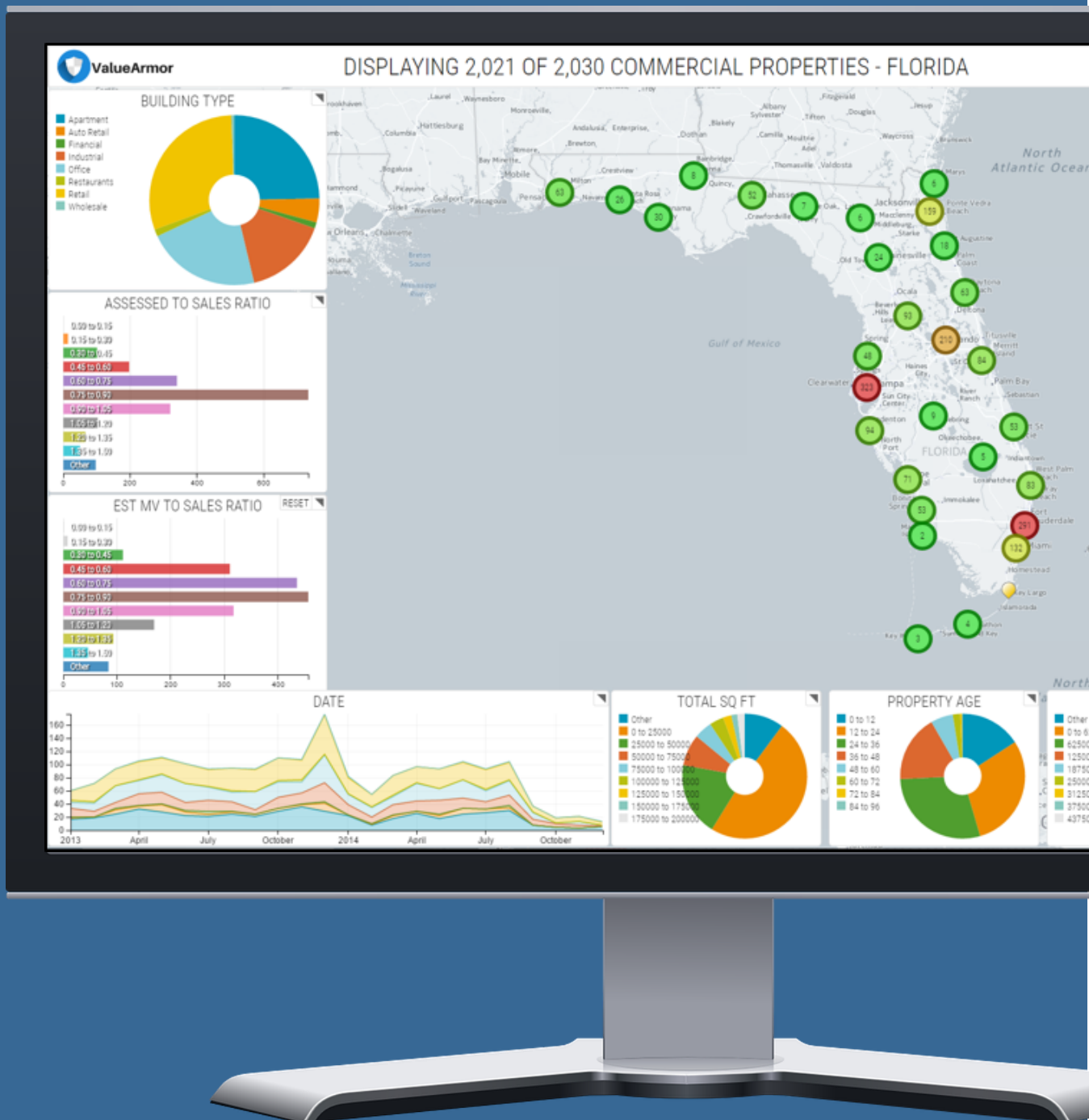




ValueArmor

User Guide

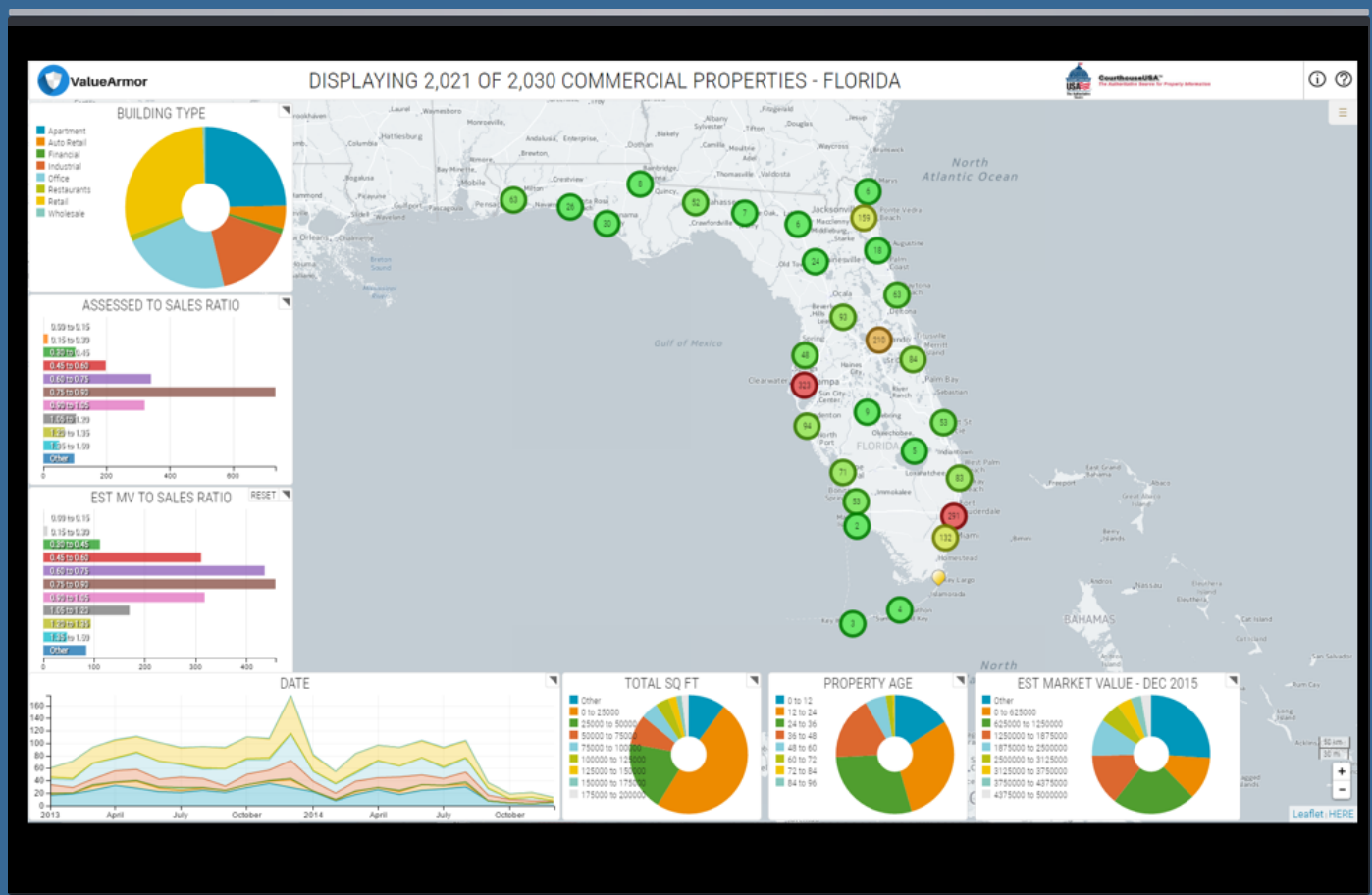




ValueArmor

Defend against big box stores

ValueArmor is a big data analytics product provided by CourthouseUSA. It involves comparing and analyzing statewide valid sales for the majority of commercial properties of a given class to support a value for comparable commercial property in a local area within that state. ValueArmor gives assessment jurisdiction commercial appraisers a tool to prepare assessments and defend against the onslaught of appeals filed in bulk by large tax appeal firms, which are shifting the tax burden to other local businesses and all homeowners.





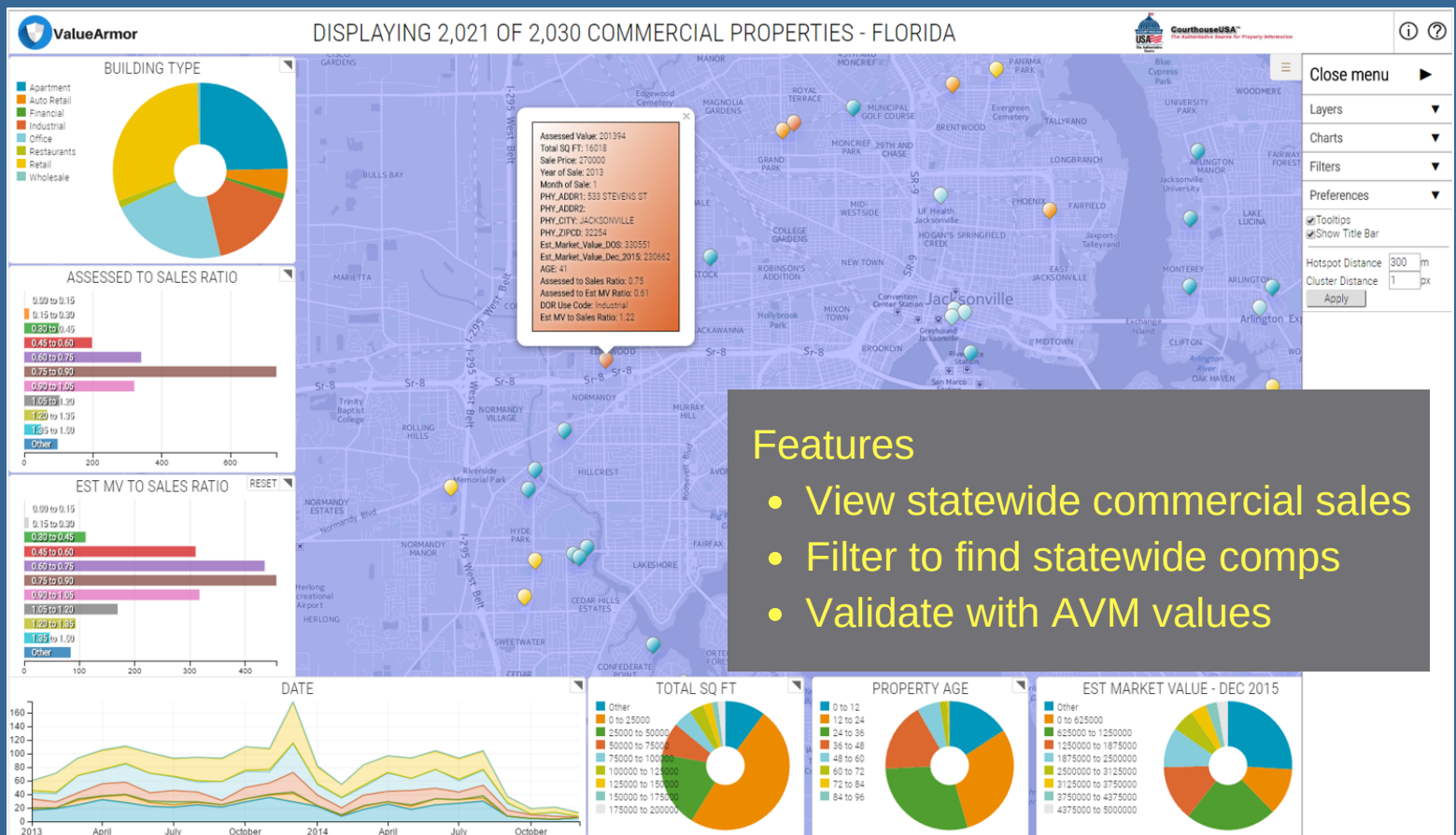
ValueArmor

Defend against big box stores

ValueArmor is a web-based tool developed by industry veterans Patrick M O'Connor, Marlene Jeffers, and Billy Burle. Patrick M. O'Connor, developer of the ValueArmor valuation model, is known to the mass appraisal industry as one of the most knowledgeable and respected modelers.

ValueArmor is unique because it:

- Expands the geographic area from the local assessment jurisdiction to a statewide geographic coverage.
- Provides access to a data set of filtered statewide sales and standard estimates of market value for most commercial and industrial properties within the state.



Features

- View statewide commercial sales
- Filter to find statewide comps
- Validate with AVM values

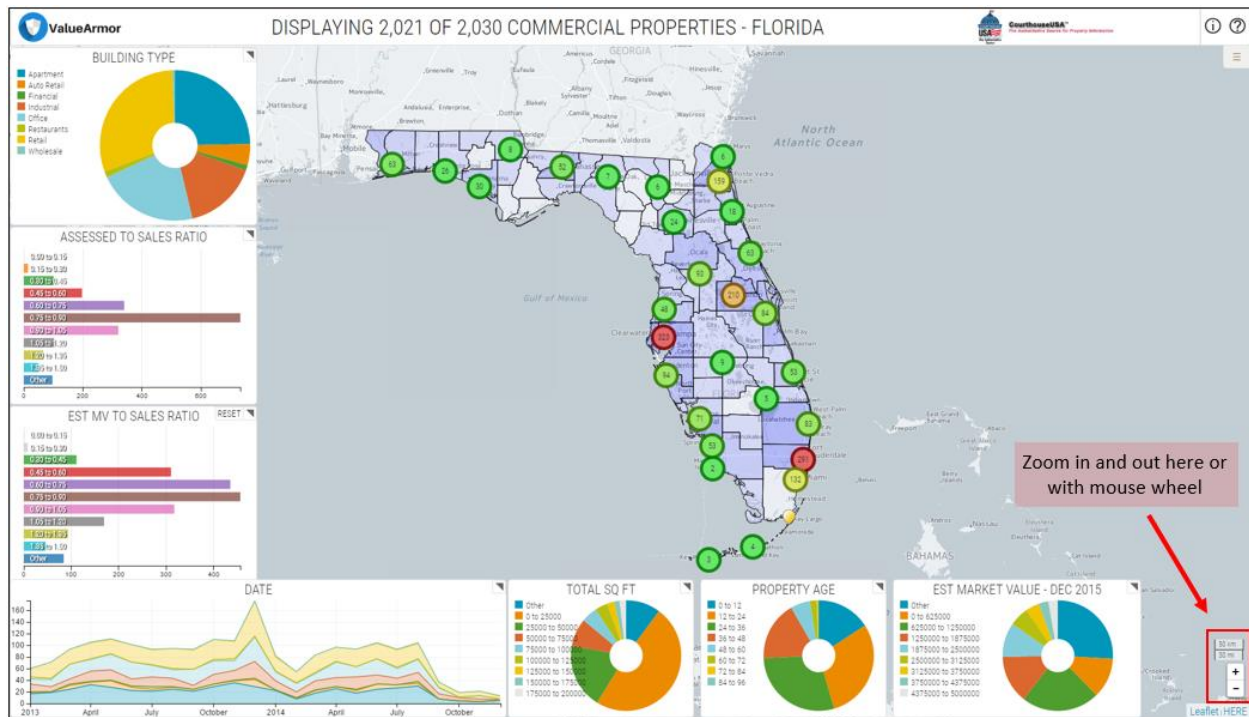
ValueArmor User Guide

ValueArmor by CourthouseUSA is your best defense for a fair value by utilizing an unbiased statistical model developed by mass appraisal expert, Patrick M. O'Connor. It allows you to expand the geographic area of data and market analysis to provide statistical support of estimates of market values with sufficient sales transactions.

Navigation

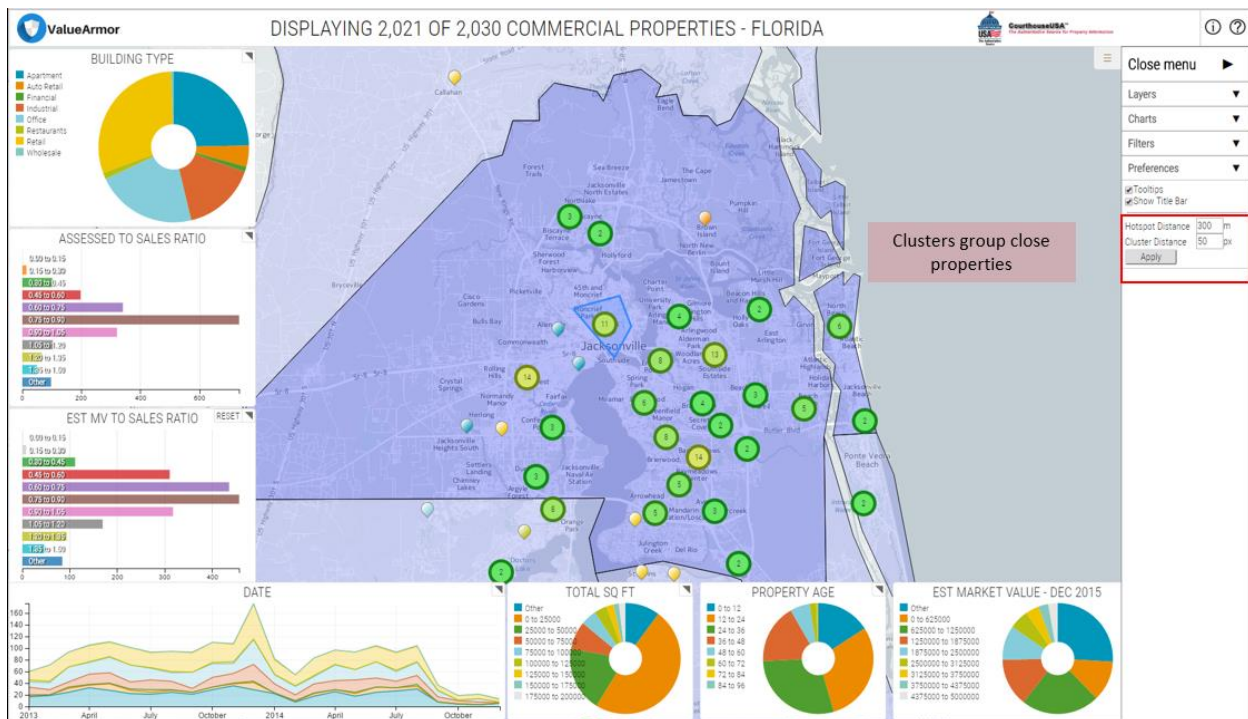
The ValueArmor Map viewer built using a platform developed by Hexagon Geospatial provides an easy to use interface for viewing the data for commercial properties within your state.

Users can zoom in and out by either using the button located in the lower right corner or by using the mouse wheel. The pan feature allows users to click and drag around the map.

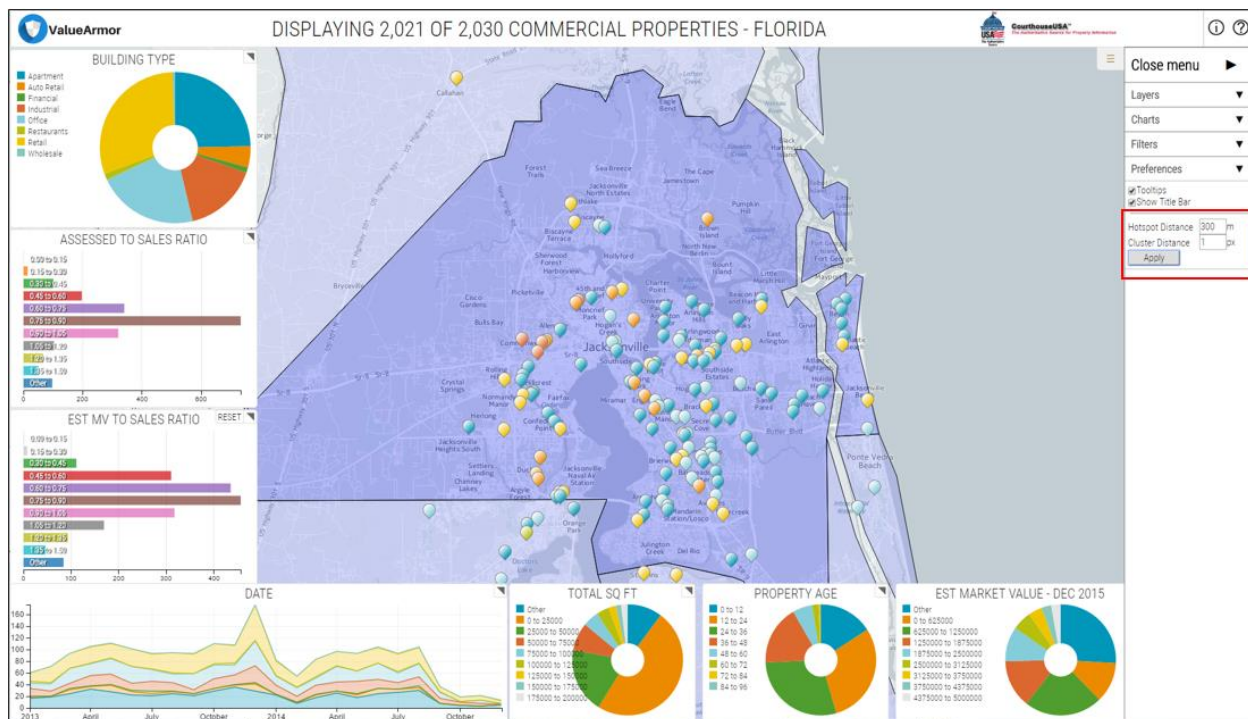


Clustering

The clustering feature helps to easily view the data on the map without excessive overlap of points that are within close proximity to each other. The large circles on the map are labeled with a number representing the number of properties within that particular cluster.

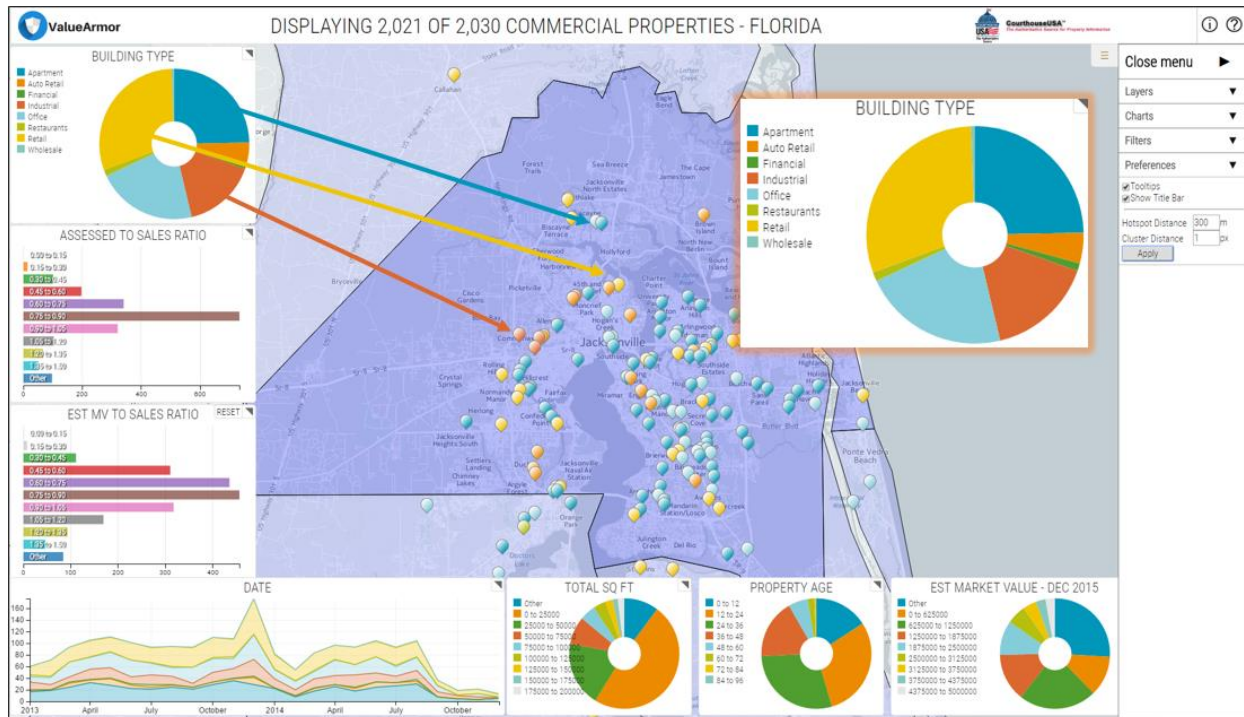


The blue outline around the cluster in the middle of the map is displayed when you hover over that point with your mouse. In this example, the blue box represents the geographic boundary of the 11 properties within that cluster. The cluster distance is user defined and can be changed at any time while viewing the map. The example above shows a cluster distance of 50 while the example below shows a cluster distance set to 1.

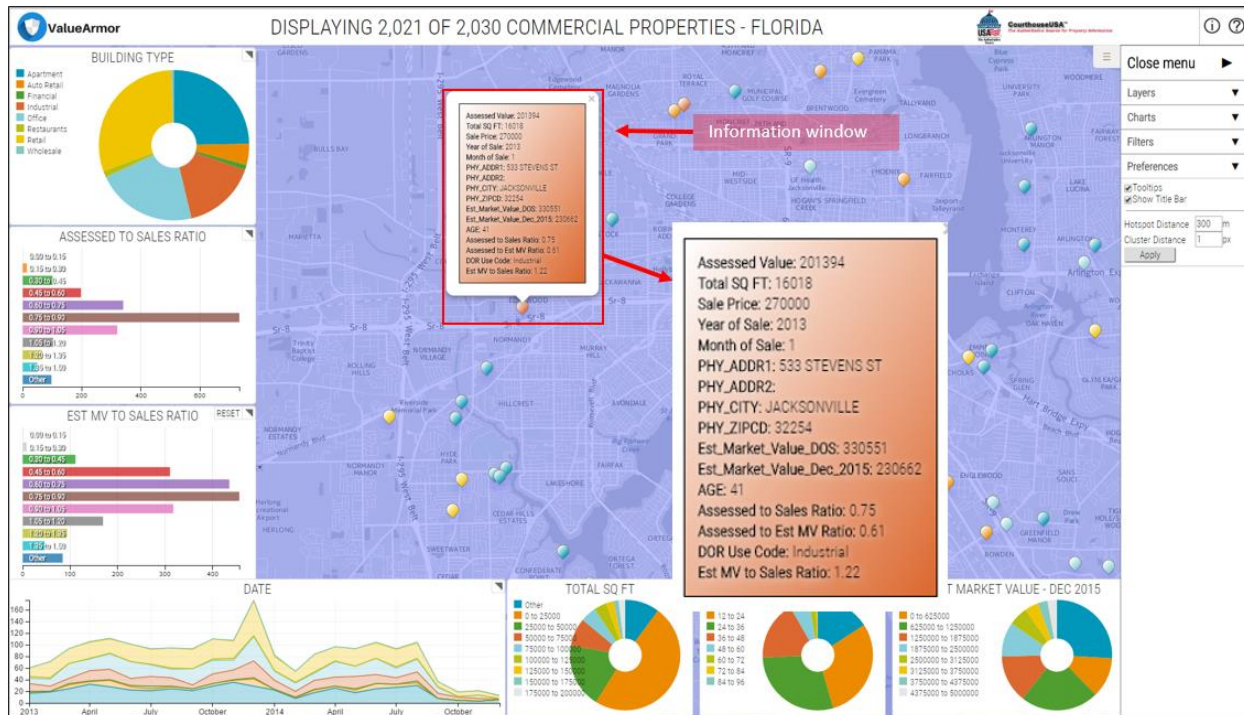


Viewing the Data

The points representing commercial properties are color coded by building type (i.e. Apartment, retail, industrial)

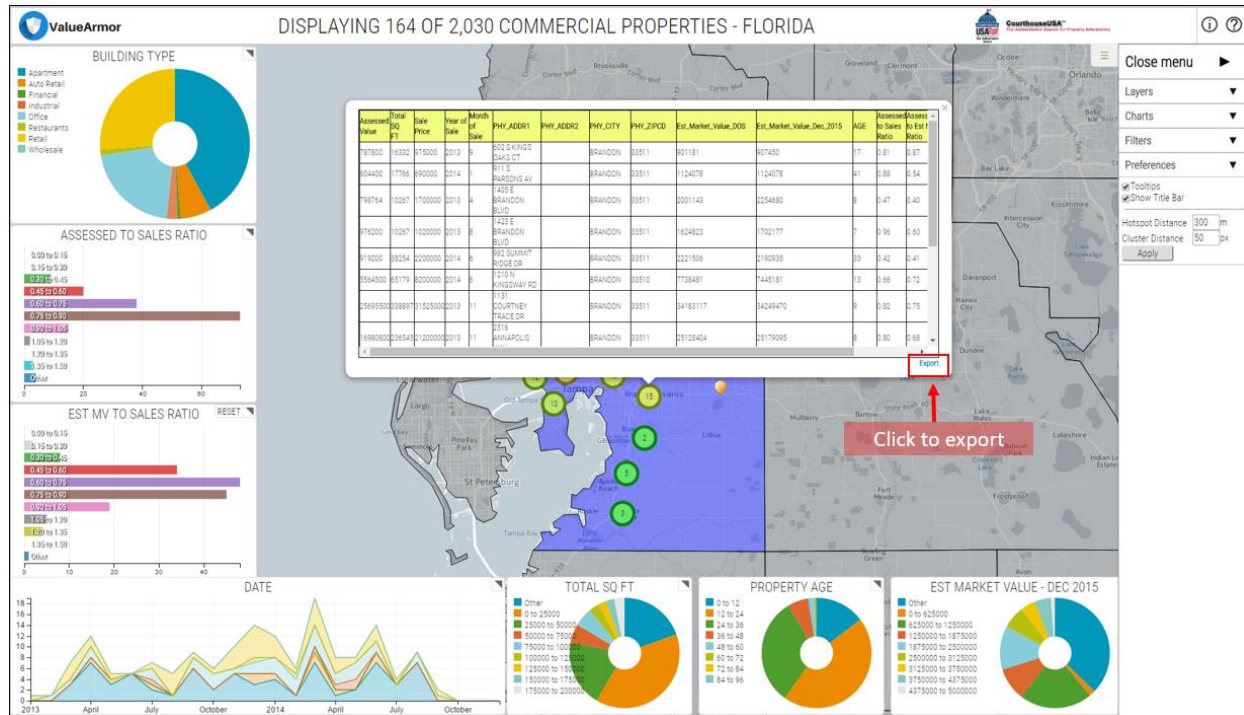


To view the information about a single property, click on the point to pop up an informational window with the associated attributes for that point.



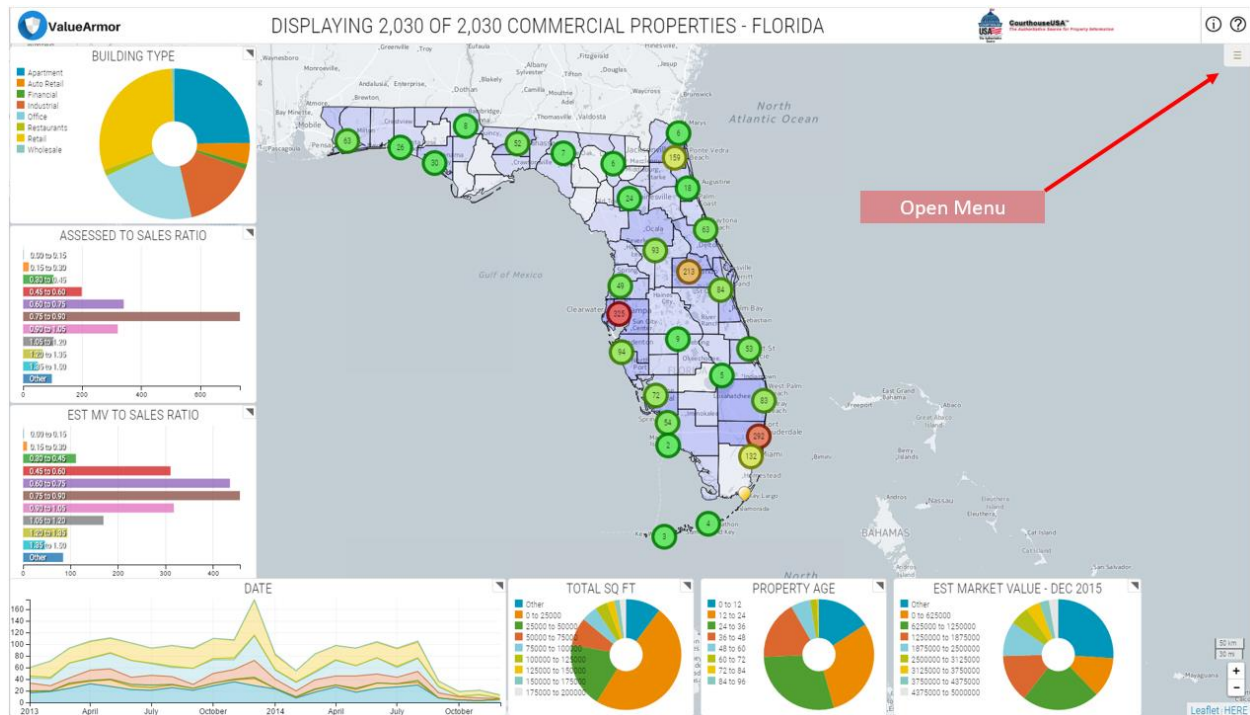
Exporting

User have the ability to selected a clustered point to view the data for all the clustered parcels and to export the data to an Excel format.



Menu

To open the menu, click the 3 line button in the top right corner. The menu contains options for layers, charts, filters, and preferences.



Below are the items in each section of the menu.

| Layers | Charts | Filters | Preferences |
|--|---|------------------|--|
| Close menu ► | Close menu ► | Close menu ► | Close menu ► |
| Layers ▼ | Layers ▼ | Layers ▼ | Layers ▼ |
| <input checked="" type="checkbox"/> Incidents | Charts ▼ | Charts ▼ | Charts ▼ |
| <input checked="" type="checkbox"/> Boundaries | All | Filters ▼ | Filters ▼ |
| <input checked="" type="checkbox"/> Hotspots | <input checked="" type="checkbox"/> Building Type | Reset All | Preferences ▼ |
| Charts ▼ | <input checked="" type="checkbox"/> Date | Reset Boundaries | <input checked="" type="checkbox"/> Tooltips |
| Filters ▼ | <input checked="" type="checkbox"/> Assessed to Sales Ratio | Reset Charts | <input checked="" type="checkbox"/> Show Title Bar |
| Preferences ▼ | <input checked="" type="checkbox"/> Est MV to Sales Ratio | Preferences ▼ | Hotspot Distance 300 m |
| | <input checked="" type="checkbox"/> Total SQ FT | | Cluster Distance 50 px |
| | <input checked="" type="checkbox"/> Property Age | | Apply |
| | <input checked="" type="checkbox"/> Est Market Value - Dec 2015 | | |
| | Filters ▼ | | |
| | Preferences ▼ | | |