# MetroBooming – Statement of Characteristics

To better understand Vancouver's expansion over time, and how zoning plays an important role in affordable housing, MetroBooming presents an interactive visualization of Vancouver's development, and how the new R1-1 zoning type can boost housing into the future.

When a census tract is selected, the application visualizes the current buildings within the census tract, using a 3D scene. By adding a third dimension to the visualization, users have a better visualization of building density within the different regions of Vancouver, as the increased density with high rise apartments is lost in 2D maps.

In addition, the buildings are symbolized by their zoning type, demonstrating the massive gap in missing middle housing in many of Vancouver's census tracts. Moreover, with a filter, users can step back into time, and see which builds remained in the past, and which ones were constructed more recently.

Finally, on the left, interactive graphs show the change in population and dwelling count over time. The aim of the graph demonstrates that much of Vancouver's dwellings is in medium or high-density housing such as apartments and row houses. While single-family dwellings take up much of the space, they do not add much to the total dwelling count. This emphasizes the importance of the introduction of the R1-1 zone type, which allows these single-family dwellings to be redeveloped into multiple unit housing.

To emphasize the potential of the R1-1 zone, MetroBooming allows users to simulate scenarios with different levels of redevelopment within R1-1 parcels. This provides the user statistics on the number of potential additional units with the redevelopment scenario, as well as how it helps push the dwelling to 1000 residents ratio closer to 476, which is the ideal ratio, given Vancouver's average household size of 2.1.

In essence, MetroBooming provides an easy to use, and visually appealing way to analyze temporal development in Vancouver, looking back at the past, and into the future.