***Patrick Doyle - Week Six Assignment***

I used R and Plotly to produce an interactive 3 dimensional scatter plot against the backdrop of the county outline. I customized the axis, tooltip hover-overs, and colors. The x and y axis’ are longitude and latitude. The Z axis is the year a home was built and the color of a marker indicates the price of a home. I wanted to demo a three dimensional chart as ggplot2 does not support it.

I had a great amount of difficulty generating a slider that would allow the phase in and out of price groups (even as a software engineer). R-shiny has the edge on Plotly in this respect. However Plotly looks to have a far more developed platform built in for python and creating the sliders using that platform looks far easier. Plotly seems fantastic for ad-hoc analysis and one-off charts and I will be spending more time with it after the conclusion of this course.

I attempted to upload the plot but the free accounts restrict uploads to half a megabyte. I uploaded everything to a git repo so that the graph can be generated simply by executing the code. (The csv is grabbed from git). One last bit of functionality that Plotly appears to lack: I used price grouping for the color of my plots, however if I wanted to customize the legend I would have to break the plot data into subsets for each separate group and create a trace for each one, allowing me to customize each name in the legend and add them to the same “*legendgroup*”.

Git Repo: <https://github.com/pdoyle5000/data_visualization/tree/master/assignment_six>



