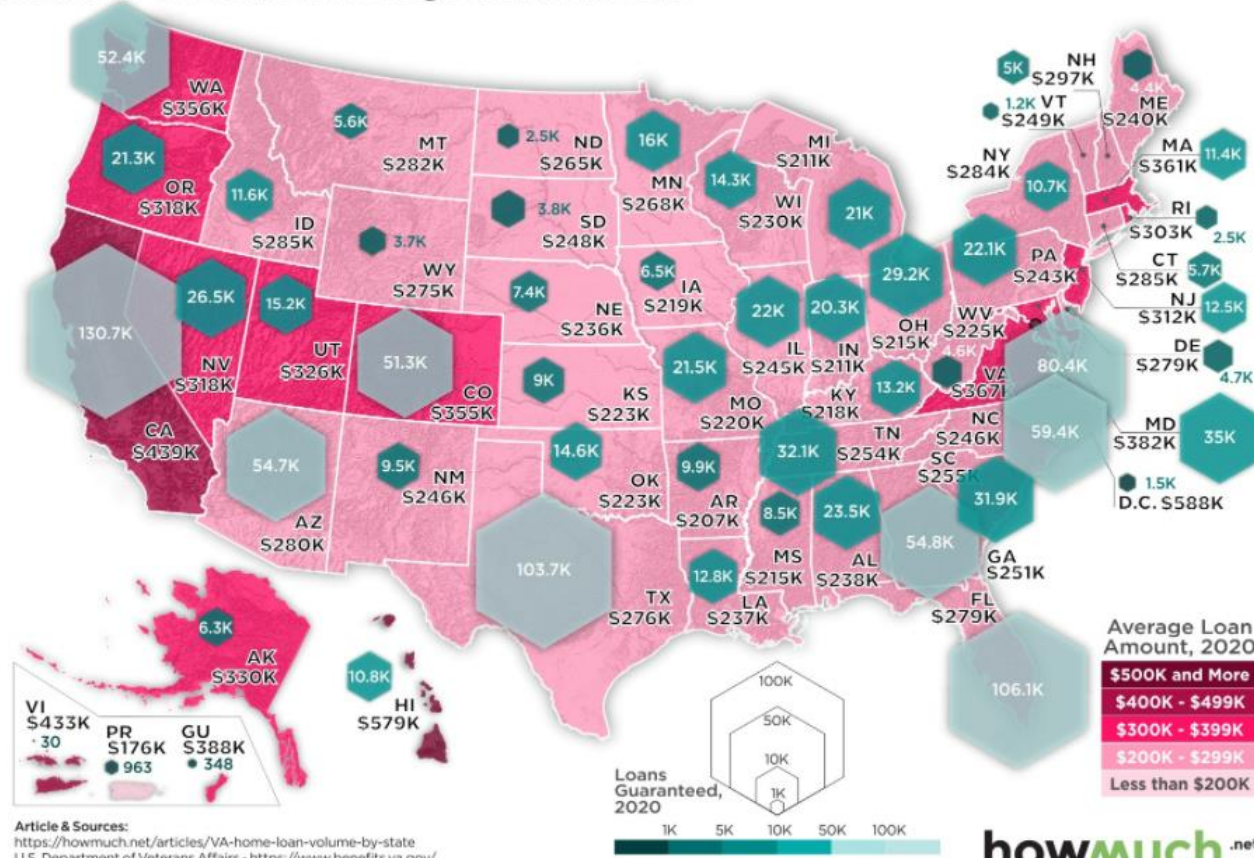


STAT 515 Redesign project

VA Home Loan Volume by State

Number of Loans & Average Loan Amount



howmuch.net

The author primarily focuses on two factors number of loans and average loan amount across different states.

Number of Loans representation:

The author has aimed to represent the number of loans disbursed across different states by using the hexagon shapes. The shape of hexagon is directly proportional to the number of loans

Disbursed in each state.

The grading of color of the hexagon is also proportional to the number of loans disbursed in a state.

For instance, the state Florida has 106.1k loans disbursed which is represented in pastel green

Color while the state PR has 963 loans which is represented in dark green color.

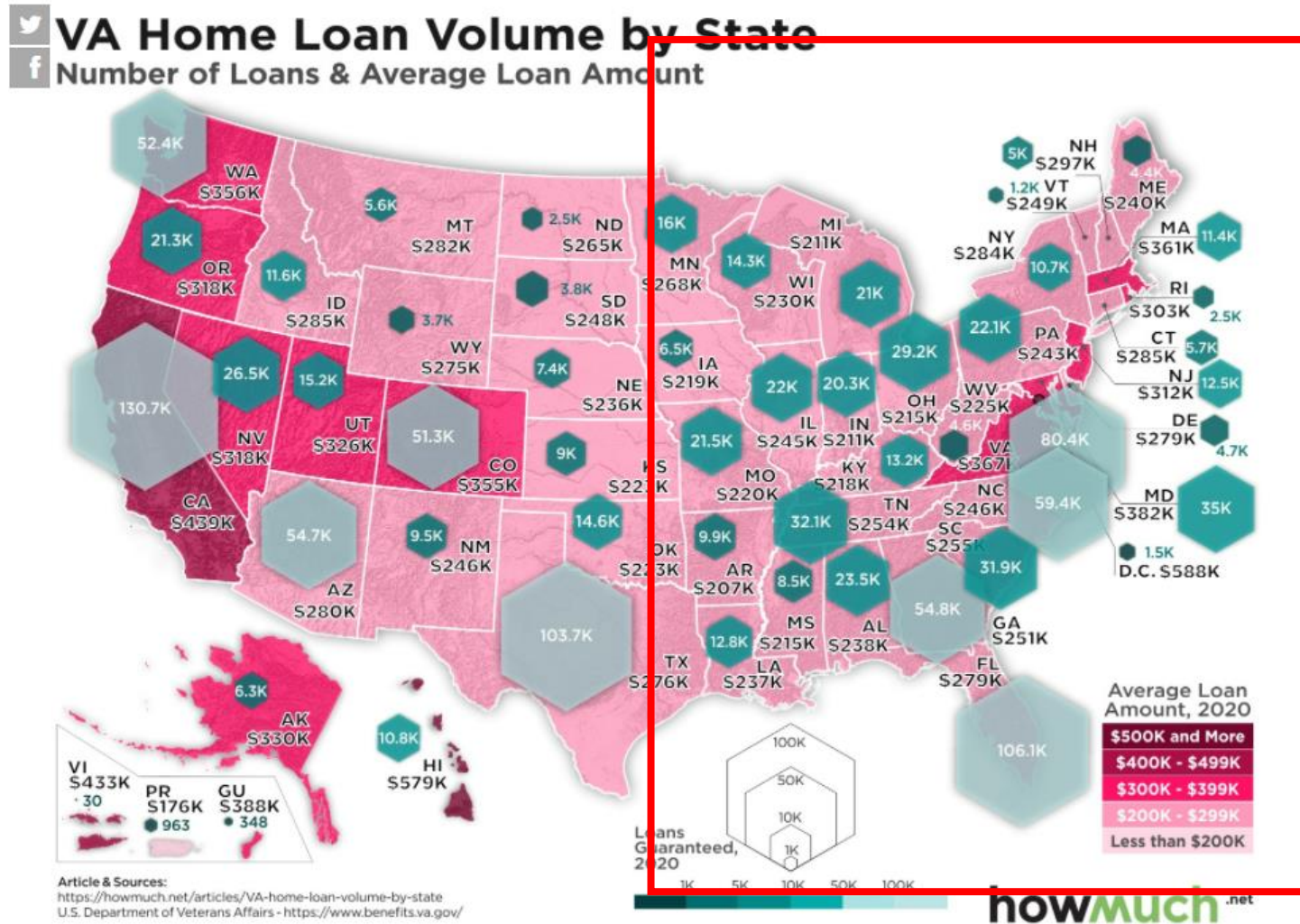
Average Loan amount:

In the given visualization author has used the concept of heatmap combined with the state map to represent average loan amount across different states in USA.

The states with average loan amount higher than the 500k are represented in dark red colors whereas the states with loan amount less than 200k are represented in light shades of pink. The loan amount is

Also indicated in bold font.

Issues Observed with current visualization:



- In the above plot, the no of loans hexagons from the states NC, SC, GA the are overlapped. They are interrupting with the information related to the loan amount.
- As the number of loans are increasing over 100k, the hexagon shape is getting increased which is overlapping with 2-3 states which disables the user to comprehend the information easily.
- The shape of indicators used is hexagon which occupies more area. In some areas where there are smaller states the information is getting intermixed causing confusion in grasping the information.
- The color used for color coding of the parameter which has loans less than 200k has light pink color which intermixes with the background.
- legends that are used to interpret the information here are more in number which does not enable user to comprehend the information easily.

Library Used for redesigning the plot.

Plotly

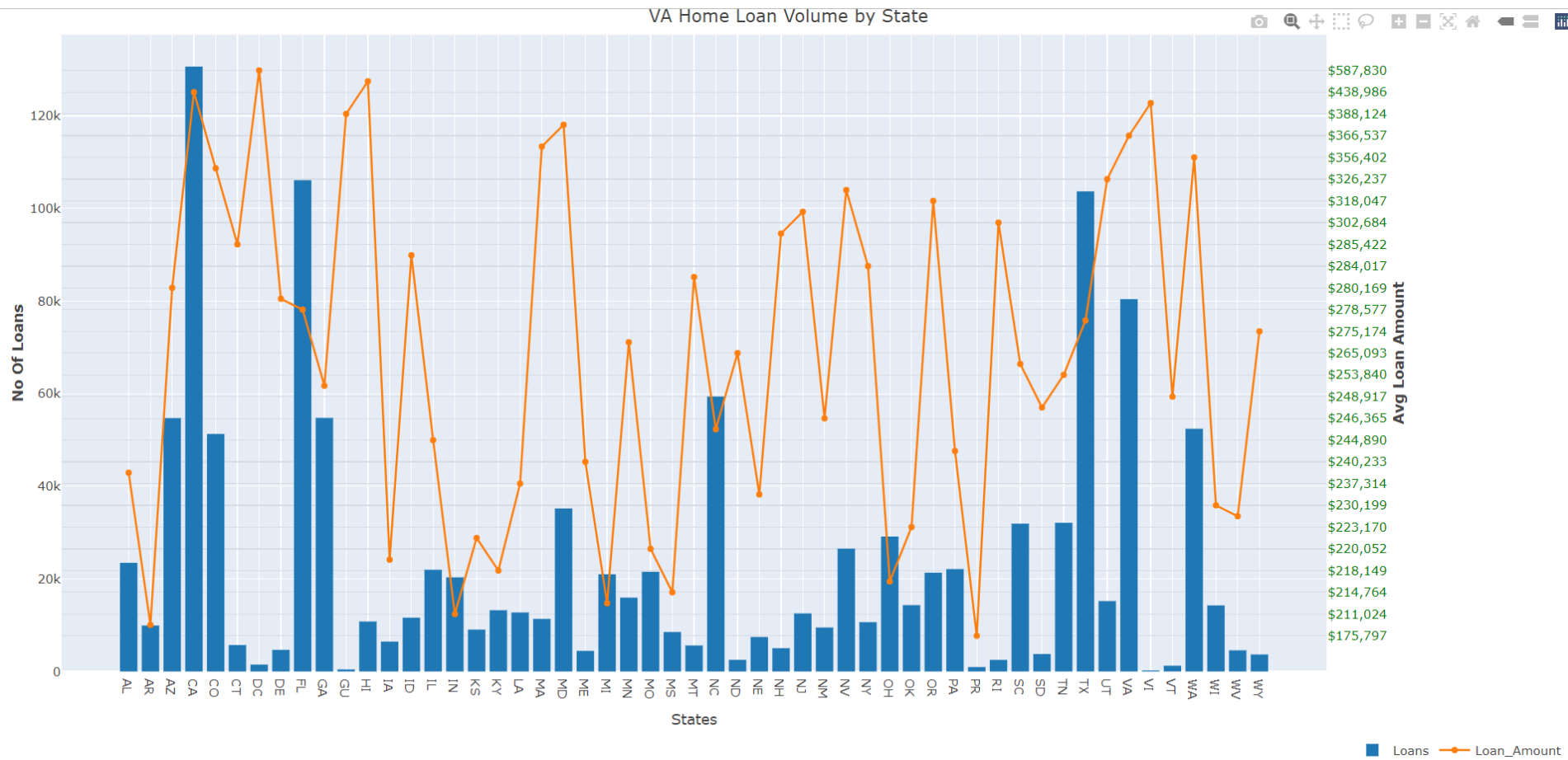
Reason to choose the library.

The primary goal of this plot is to create a comparison between the two parameters number of loans and average loan amount across different states in the year 2020. I chose the plotly library to create interactive plots that convey information clearly and engage the user.

Data Set Used.

<https://howmuch.net/sources/VA-home-loan-volume-by-state>

Final Plot.



Key Points.

1. The redesigned plot is an interactive plot which engages user in understanding the information.
2. The redesigned plot has a grid which enables users for easier comparison between different scales.
3. The interactive plot enables the user to access the information.

Challenges.

1. Learning the plotly library functions to be able to create an interactive plot.
2. Implementing the concept of double y axis plots to enable easier comparison between different scales representing number of loans and average loan amount.