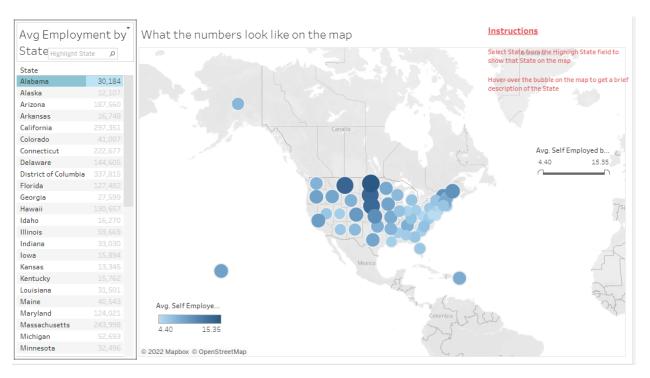
ANALYZING US DEMOGRAPHIC DATA

Data Story

1. Self-Employment Rate in the US



Summary: This dashboard shows the correlation between State and self-employment rate. The average employment by State is only a list. However, the *Highlight State* field at the top of that list zeroes in on the State location on the map. When the user hovers over the bubbles on the map, they get a brief description of the average employment in that State. The user can also move the sliders to see the top(s) and bottom(s) State(s) per average self-employment.

The State with the highest self-employment rate is North Dakota while the one with the lowest self-employment rate is in the District of Columbia.

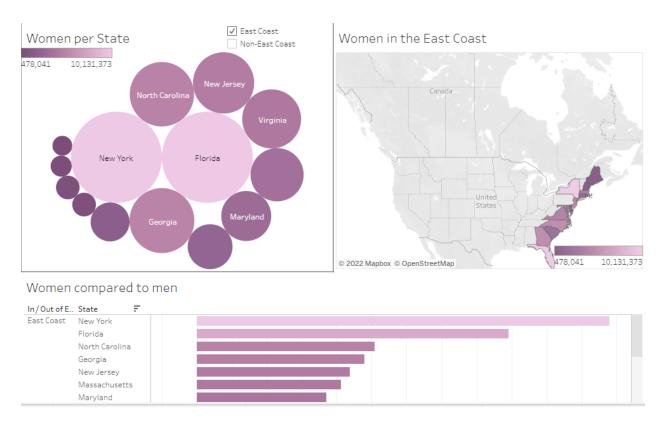
Design: I used a text table to show the population for each State so that the user has an idea up front what the population looks like (this may give some context as the average employment by state varies greatly). I used a map to show the average of self-employment per State so that the user has an idea where that particular State is

and how the States compare to each other. By looking at the map, the user can also see the general area of the State; if there's a pattern, the user can see it.

I believe the colours are appropriate for colour-blind people as the shades go from lighter to darker. There are probably too many filters but I assumed it would be better to have more than one filter.

Resources: n/a

2. Female Population on the East Coast



Summary: This dashboard shows what the female population looks like per State and how it compares to the male population. Upon seeing the bubble graph, the user will notice right away at least the top five states with the highest female population. If they hover over the bubble, they will be provided with more information about that particular State. If they want to know if the male population surpasses the female population in any of the East Coast States, they will get their answer right away. This chart doesn't respond to the other panes and has "East Coast" selected by default. However when both "East Coast" and "Non-East Coast" options are selected, this allows the bar chart to zero in all the States at the map chart.

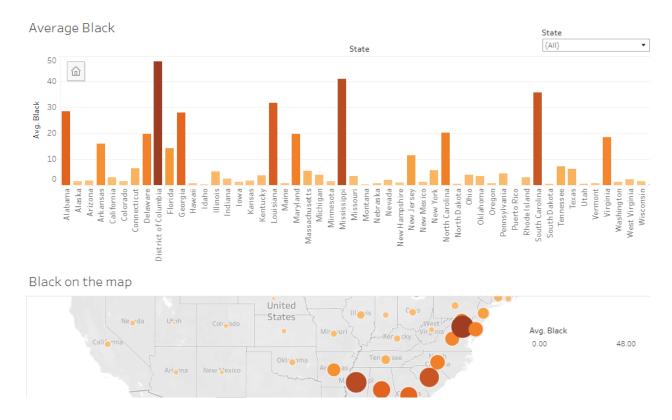
The male population does not surpass the female population on the East Coast.

Design: I used the bubble graph in the "Women per State" field to show how the female population compared to the Total Population. I wanted to show right away that the female population constitutes more or less half of the total population in almost all the East Coast States. The second pane is making a case for "East Coast". It shows where the States are located. The last pane, showing the comparison between male and female population, is more of an "aside" in case the user wants to know the States where the male population surpasses the female population.

I believe the colours are appropriate for colour-blind people as the shades for the map chart and bar chart are lighter with a high female population and get darker as the male population increases.

Resources: n/a

3. Average Black Population per State



Summary: This dashboard shows what the average Black population is compared to the total population. The first pane shows the States with the highest density of Black population. Although the states are sorted alphabetically, States with the highest density of Black population is obvious. If the user hovers over a bart, they will find out the population for that statem The map chart shows the States on the map; since this is a symbol map, it also shows the States with the highest average Black Population. Both panes respond to both filters:

- a) the "State" filter shows the approximate average/density of a State on the bar chart and the average black population on the map chart;
- b) the readouts under the "avg. Black" filter will allow the user to see the State with that specific average on the map and the approximate average/density of that State on the bar chart.

The States with an average of 30% or more of Black population are the District of Columbia (Surprising! I understand it's technically not a State), Louisiana, Mississippi and South Carolina.

Design: I used bar chart and map chart to help visualize the data better. The bar chart already answers the question. However, I made the panes interactive in case the user wants to know more about the States. Maybe the user wants to know the State with the lowest average of black population; they won't have to look elsewhere to find the answer. I believe those charts answered the question and follow up questions the user may have (Average black population in Southern States, for example)

I believe the colours are appropriate for colour-blind people as the shades and size of the dots for the map chart are darker with a higher average of Black. The density on the bar chart is taller and more opaque for the States with the higher average of Black. Also, the higher the average, the bigger the dots on the map chart and the taller and denser the bars on the bar chart.

Resources: n/a