

US Census Demographic Data - 2015

Problem statement

- We were approached by a client, who is a non profit organization.
- They want to roll out a program to provide opportunities for women empowerment.
- We were supposed to give them at least one suggestion of the State where that should happen,
- We should also give them a benchmark on how much they would expect to pay the facilitators of the program, on the ground
- We should also demonstrate the factors we considered before arriving at our answer.

Visuals Used

- Map
- Bar chart
- Treemap
- Scatter plot
- Histogram

Approach

- We considered factors such as , poverty levels, unemployment rates, ratio of women to men, and median income per house hold and per capita income

LINK

Link to work

[Link](#)

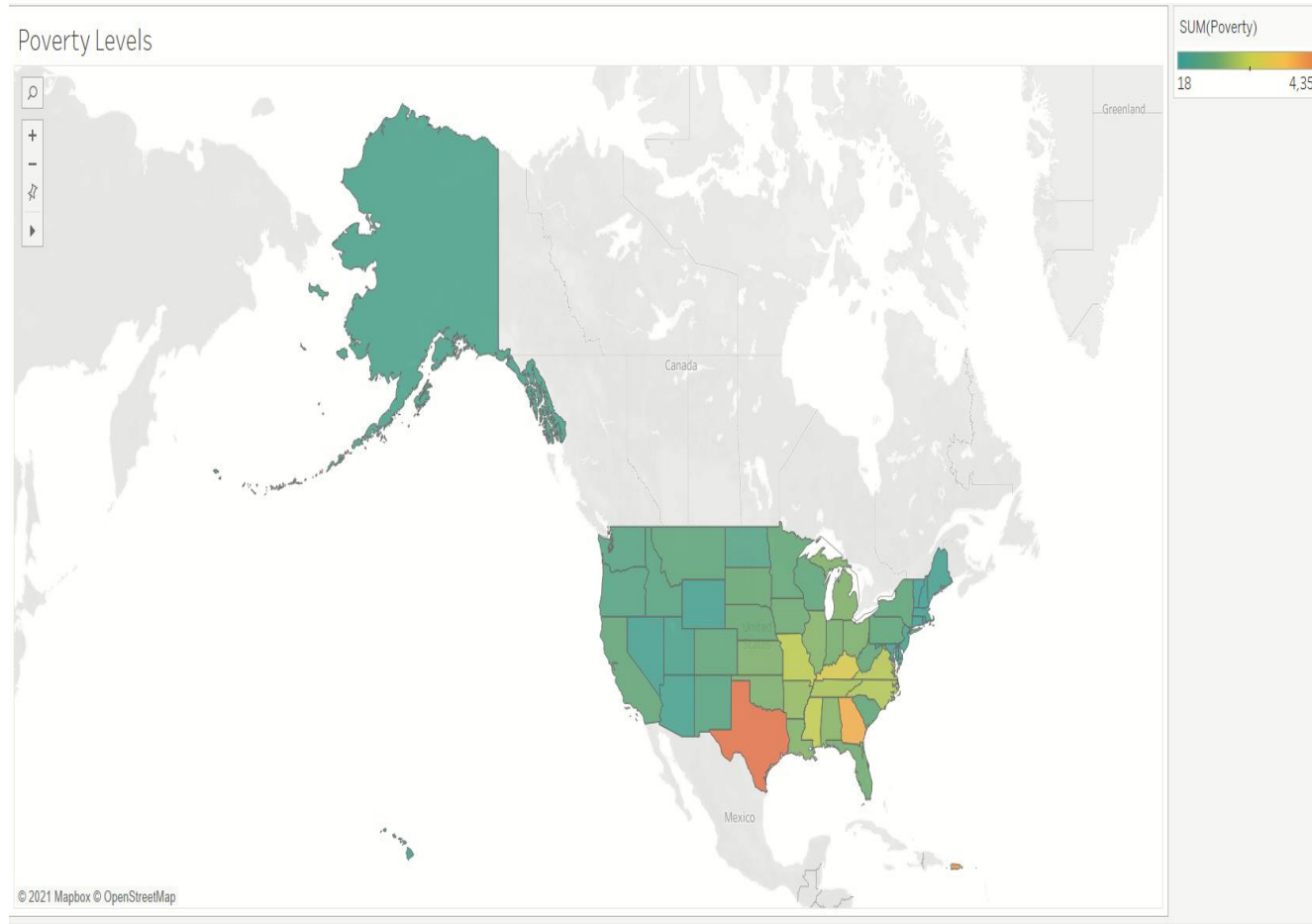
Questions Asked

- Which State has the highest percentage of the population below the poverty level?
- Which state has the highest unemployment levels?
- Which state has the highest percentage of women?
- How does the income per capita compare with median household income for our identified state?

Findings- See visuals on next pages

- Which State has the highest percentage of the population below the poverty level?- ***Texas***
- Which state has the highest unemployment levels?- ***Texas***
- Which state has the highest percentage of women?- ***Texas***

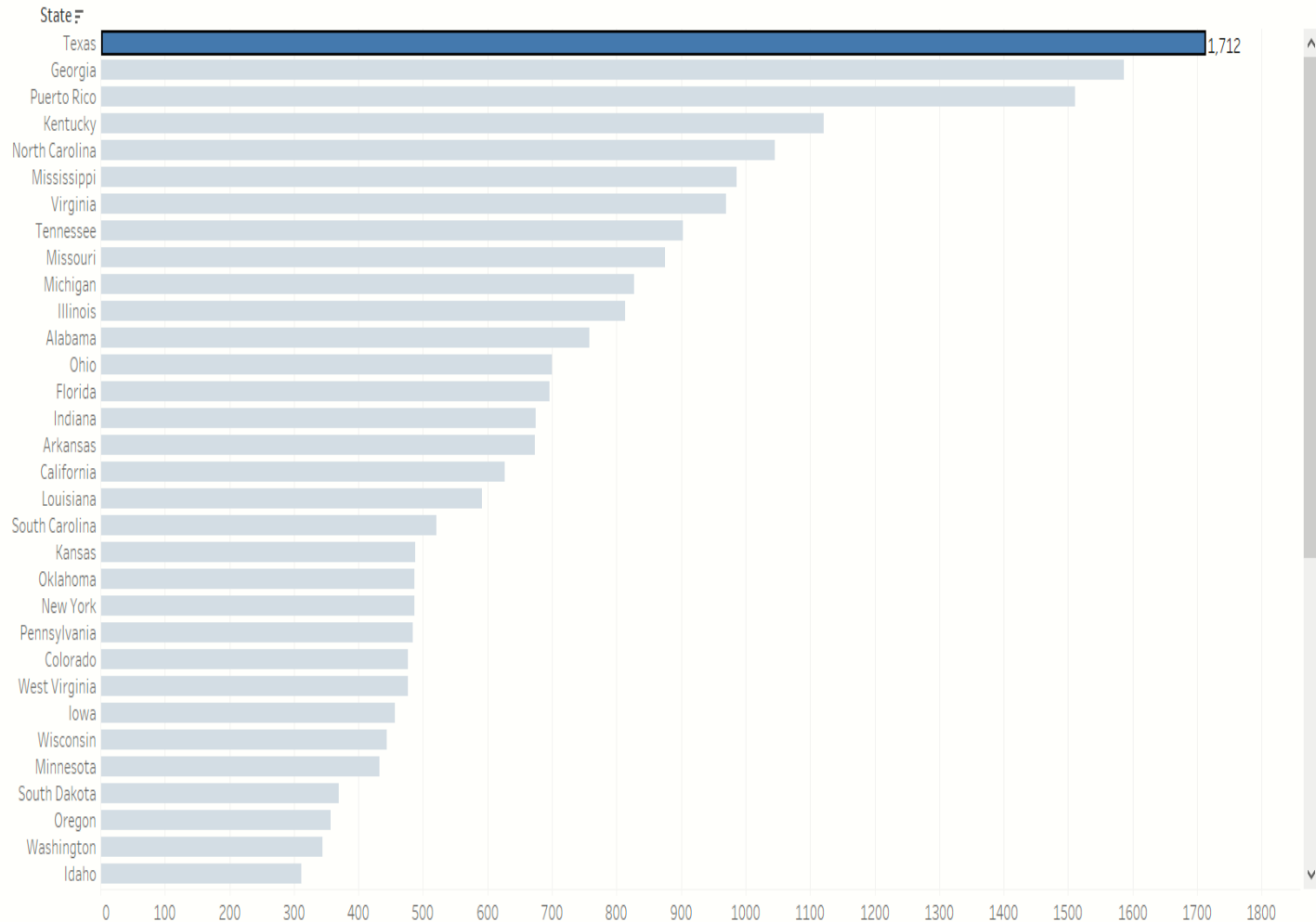
Which State has the highest percentage of the population below the poverty level?- *Texas*



I used a map because it is a good visual indicator of the different states. I also used contrasting colors to show the highest vs lowest levels

Which state has the highest unemployment levels?- *Texas*

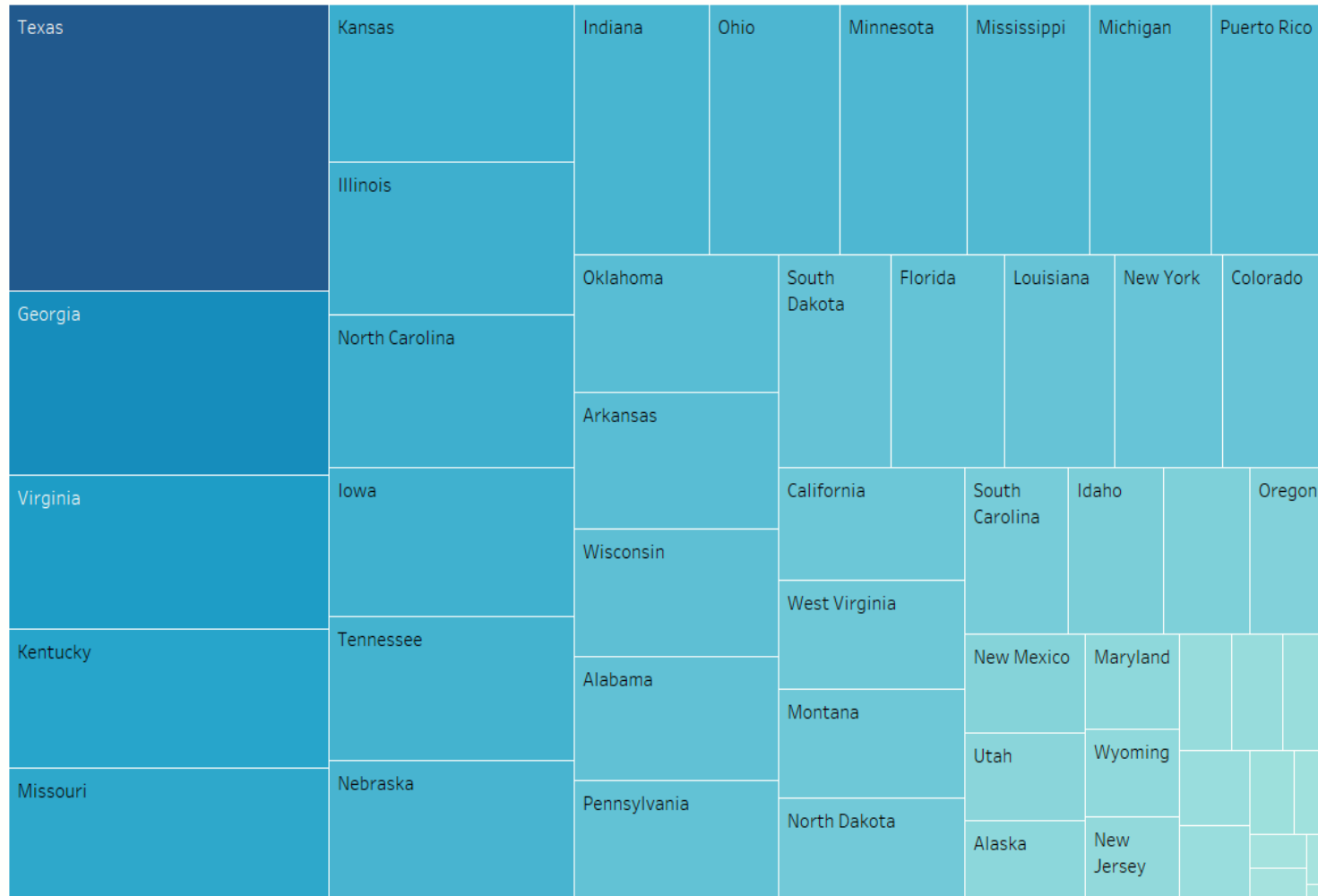
unemployment rate



- I used a horizontal bar chart ordered by descending order.
- An ordered bar chart enables one to rank categories, based on a quantitative variable

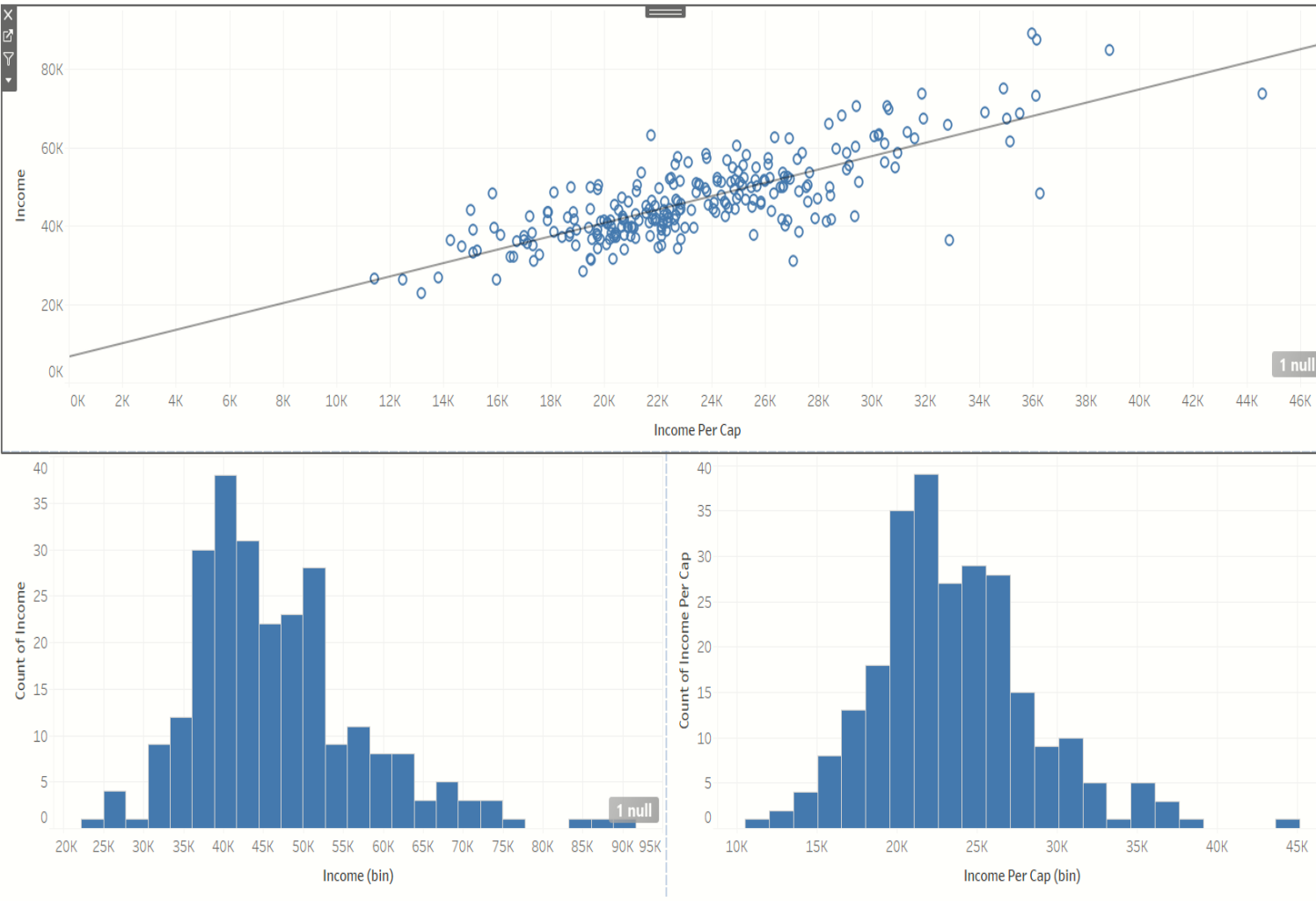
Which state has the highest percentage of women?- *Texas (Created a calculation $[Women]/([Women]+[Men])$*

women



- Tree map is a quick way to see the largest /smallest values, based on the categories

Income vs Income Per capita in Texas



- A scatter plot shows correlation between income per cap and median house hold income. There is a strong positive correlation
- Histograms show the distribution.
- Histogram to the left shows that a majority of households earn an income of 39K.
- Histogram to the right show that majority of counties have an income per capita of 21K.
- This means our client should plan pay budgets within 21K and 39K

Recommendations

- *Our client should consider rolling out the program in Texas..*
- *Our client should plan pay budgets within 21K and 39K*

Resources

N/A