# Data Visualization Project

#### Links

#### In order of

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#### Visual 1

#### Summary

The purpose of this project was to look at child poverty across states to see what the differences were and where it was worst. The first visual shows the child poverty across states and highlights the worst state, Mississippi in orange, and the best state, Connecticut in blue. The purpose of this visual was to show how large the difference between child poverty levels between states are.

#### **Design Choices**

- Orange was chosen for Mississippi because colors closer to red are associated things that are bad or alarming and in this case that would be the high poverty levels.
- Blue was chosen for the same, but opposite reason.
- The words 'worst' and 'best' and 'Child Poverty' were bolded in the title because it automatically draws the eye and tells the viewer what the are looking at before they glance down.

Resources: NA

## Visual 2

#### Summary

The purpose of the 2<sup>nd</sup> Visual is to show what states have worst child poverty levels by geographic region and highlight where it is worst in this case the South East. It also has tooltips so that the viewer can hover over states and see statistics (percent of black population, income per capita, unemployment) that could be related to child poverty. This allows to the viewer to see what statistics are high or low in the respective light (low poverty) and dark (high poverty) zones.

#### **Design Choices**

- The map was chosen because it was the only way to easily communicate the proximity of states and their child poverty levels.
- The darker colors were chosen to represent high child poverty levels because dark colors have a negative association and light colors have a positive association.
- 'South East' was bolded in the title so that the takeaway from the visual was explicit.

Resources: NA

#### Visual 3

#### Summary

The purpose of the visual is to show give an overview of the states poverty level in descending order and show the geographic hot spots for poverty and then show the positive correlation between the percentage of black population and child poverty rates. The states that are blue represent the states in the South East of the US so the viewer can compare what the percentage of black population looks like compared to the other states.

## **Design Choices**

- The bar chart is at the top of the Dashboard because it introduces the problem being looked at and then following it the other visuals provide more information.
- The chart in the lower left includes a trendline to clearly communicate the correlation which is also stated in the title in bold so that it is clear.

Resources: NA

# Visual 4

## Summary

The purpose of the visual is to show the strong negative correlation between income and child poverty. States with higher average incomes have less poverty. The blue dots represent the South Eastern States so that the viewer can not only see the correlation between income and child poverty, but about where the South Eastern states fall in terms of income. In this case from the scatter plot it is obvious that they have some of the lowest incomes compared to the rest of the states.

# Design Choice

- Again bold text to emphasize the intended takeaway of the chart.
- Trendline to make negative correlation obvious

Resources: NA

#### Visual 5

#### Summary

The purpose of this graphic is to show the large difference between child poverty and poverty as a whole. It communicates you can not assume that child poverty rates are similar to poverty rates in general and that it may be something that needs to be further investigated. There is likely to be a reason for such a large difference.

#### **Design Choices**

- Blue and orange for the color blind
- Order from high to low poverty rates so that the viewer can quickly ascertain where a state falls relative to the rest of the states.
  - Ex. If they are looking at a state in the middle, they will know intuitively that this is about the average poverty rate
- Bold text to clearly communicate message. It should also be noted that the reason
- "Higher" is bolded rather than something else is because all the charts are about child poverty
- The title says "Higher" rather than "High" because the comparison is relative to poverty rates in general.

Resources: NA