

## 1. Which States have the highest unemployment rates?

- a. **Link:** [Percent Unemployed](#)
- b. **Summary:** The first question I sought to answer was which states had the highest rate of unemployment. I previously had attempted to calculate the unemployment rate against total population; however, I realized the employment fields were already percentages. I took the average of the 'unemployment' field to find the proportion of unemployment in each state. I then added a filter to only show the 5 states with the highest unemployment rates. This allowed me to get the proportion of unemployment compared to the state population.
  - i. Puerto Rico ended up having the largest percentage of unemployed peoples, compared to the state population. This was followed by Mississippi, Arizona, South Carolina, and Alabama.
- c. **Design:** I added labels to show the unemployment rate on the treemap itself. I chose to display this information via a combination of size and color. I chose to narrow down my results to only the top 5 for this reason, I felt it created a less cluttered graph and appeared more concise. I left the color palette as blue, to keep the graph simple. This should be color-blind friendly, as it is differentiated not only by shade, but also size.
- d. **Resources:** N/A

## 2. Are there specific demographics that can be correlated to unemployment?

- a. **Link:** [Puerto Rican Unemployment](#)
- b. **Summary:** After discovering that Puerto Rico had the highest rate of poverty per population, I wanted to know if I could find any additional information related to unemployment in the state (territory). I created a dashboard for this portion of the exploration, including 3 graphs.
  - i. The first graph shows the unemployment rate by county, using a map to visualize the values. Adjuntas ended up with the highest rate.
  - ii. I didn't find any correlation between unemployment and racial demographics. Since the population of Puerto Rico is primarily White/Hispanic, I decided to use that as my baseline to compare against. I grouped all 'non-White/Hispanic' racial demos into a calculated field and compared that against the unemployment rate of each Puerto Rican county. This did not show any correlation.
  - iii. I wanted to compare the rate of unemployment against child poverty. I anticipated there to be a much clearer correlation between the two, however it is more nuanced than I originally thought. While Adjuntas did have both the highest instances of unemployment and child poverty; Lares came in second for unemployment but had a relatively low proportion of child poverty. This did not correlate in the way I anticipated
- c. **Design:** I kept the color scheme consistent throughout the dashboard. I ended up removing the graph titles, and instead added a smaller annotation to identify the intention of the visuals. This looked cleaner than keeping the titles. All the visualizations should be color-blind friendly, as any value notated by color is done so by color darkness, not hue.
- d. **Resources:** N/A

### 3. Which states have the highest total instances of unemployment?

- a. **Link:** [Unemployment Instances by State](#)
- b. **Summary:** Previously I looked at unemployment by comparing the instances to each state/county's respective population. This gave me an idea of how proportionally impacted each area was. However, for this graph I decided to look at which states had the highest overall instances of unemployment.
  - i. The results for this are different than the proportional graph. When looking at strictly counts, Texas has the highest unemployment. Followed by: Georgia, Puerto Rico, Kentucky, and North Carolina.
- c. **Design:** I sorted the bar chart to go in descending order. This makes it easier to see where the states rank, even when they are close in value. I also decided to color the graph by unemployment instance. The color and bar heights display the same information, so it wasn't necessary to add color differentiation. I thought it helped add another layer of clarity for the states with close unemployment values. This should also be color-blind friendly, since the colors are not needed to interpret information not presented elsewhere.
- d. **Resources:** N/A