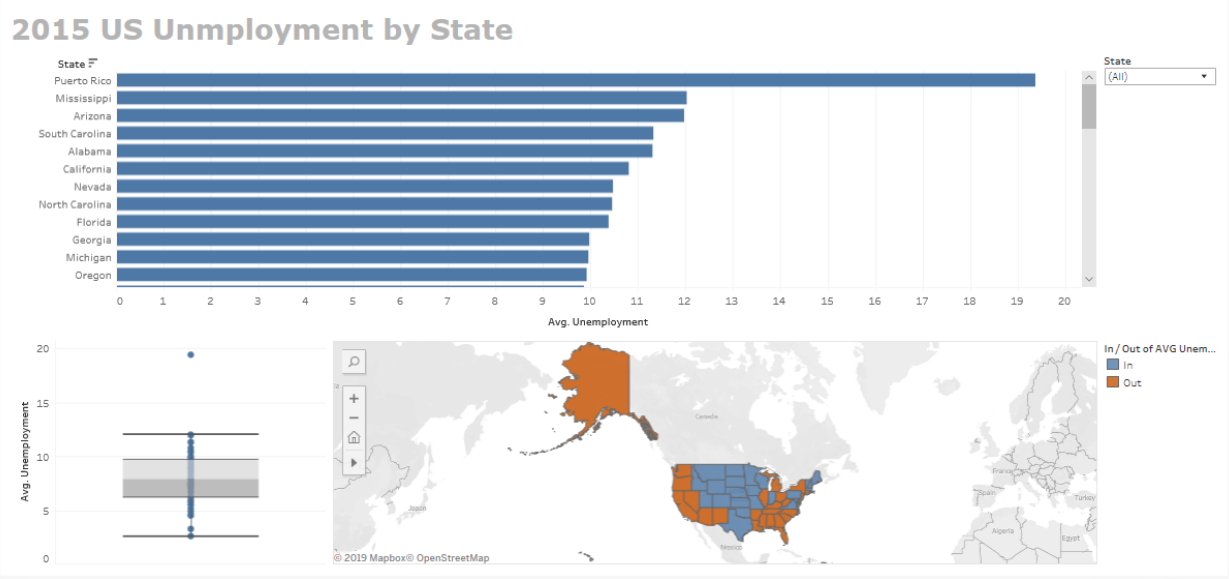
Data Visualization Project

With US Census Demographic data

Insight 1 < Unemployment Rate by State >

Link

https://public.tableau.com/profile/winnie.choi#!/vizhome/2015USUnemploymentbyState/Dashboard1



Summary

Puerto Rico shows the highest unemployment rate with 19.37%, followed by Mississippi with 12.02%.

Box-and-whisker plot shows the variation and indicates an outlier - Puerto Rico (19.37) .

Median for all states accounts for 7.9 while median without the outlier shows 7.858.

Map depicts trends of unemployment rate. Most of Pacific, East South Central and South Atlantic states are having over average unemployment rate. While most of Mountain, West North Central and West South Central states are showing under average unemployment rate.

(US census bureau regions: https://www.census.gov/geo/reference/webatlas/divisions.html)

Design

Data interpreter is used and header and data shows all clean.

Map color for In and Out is selected from color blind pallet.

State filter is enabled to apply to all related worksheets so that we can exclude the outlier as needed.

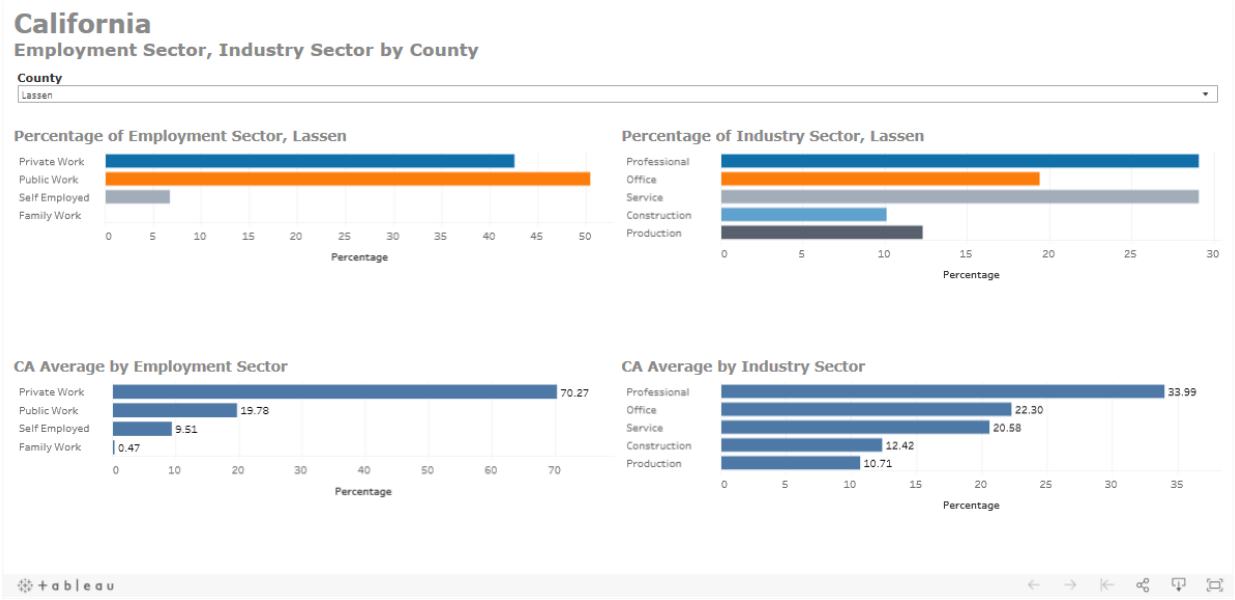
Resource

- Unemployment rate difference from Average
  https://www.tableau.com/solutions/gallery/unemployment-horizon-chart

Insight 2 < California Employment, Industry Sector by County >

Link

https://public.tableau.com/profile/winnie.choi#!/vizhome/CaliforniaDatabyCounty/Dashboard1?publish=yes



Summary

The most dominant Employment sector in CA is Private work which accounts for 70.27%. The most dominant Industry sector is Professional with 33.99%.

Lassen county shows the most unique data different from CA average. Public sector accounts for 50.5% followed by private sector with 42.6%. Also, Lassen county has same popularity of Service and Professional with 29.11% each.

Glenn county's dominant industry sector is Construction which accounts for 24.7%. On the contrary, CA average data indicates that Construction sector as the least dominant.

Design

Title color and font is changed for simplification and effective typography. Color pallet is changed to color blind for bar charts. Dashboard sections for charts are adjusted in order for Tableau Public to have full view without scroll bar.

Mark labels are added for CA average charts so that it can be benchmarks for county data.

Order of rows for county data is matched with CA average data for better comparison.

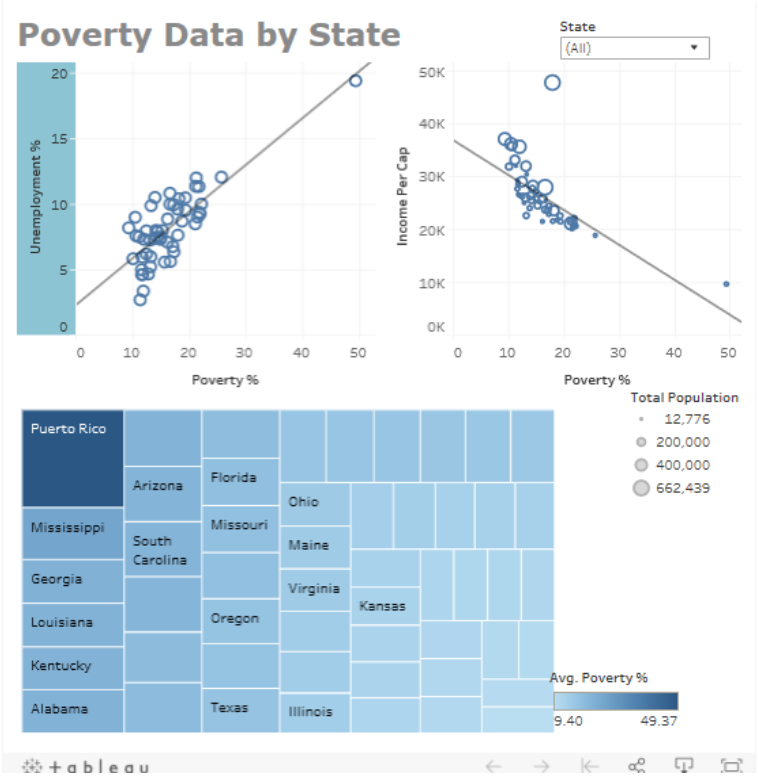
Resources

- Compare county demographics with census data https://www.tableau.com/solutions/workbook/create-transparency-easy-use-tools
- 7 tips and tricks from the dashboard experts https://www.tableau.com/about/blog/2017/10/7-tips-and-tricks-dashboard-experts-76821?__src=liftigniter&__widget=learn-recs-li&li_source=LI&li_medium=learn-recs-li

Insight 3 < Poverty Data by State >

Link

https://public.tableau.com/profile/winnie.choi#!/vizhome/PovertyDatabyState/Dashboard1?publish=yes



Summary

Poverty and Unemployment percentage shows positive correlation.
Poverty percentage and Income per Capita shows negative correlation with an outlier, District of Columbia (Income per Cap - $47,675 / Poverty - 18%).
High populated states tend to be above trend line and it indicates that their incomes are higher than less populated states with same poverty rate.
Puerto Rico has the highest poverty rate among all states with 49.37%, followed by Mississippi with 25.72%.

Design

Using only blue and grey simplifies the design and gives a clear focus.
Trend lines are added to scatter plots.
Size mark is utilized into poverty / Income per Cap scatter plot.
State filter is used to be applied to all sheets.
Tool tips are included to treemaps for unemployment rate and Income per Capita.

Resource

- 7 tips and tricks from the dashboard experts https://www.tableau.com/about/blog/2017/10/7-tips-and-tricks-dashboard-experts-76821?__src=liftigniter&__widget=learn-recs-li&li_source=LI&li_medium=learn-recs-li