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Udacity Tableau
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Summary

This story is centered on child poverty in the Pacific Northwest (PNW). I used the Udacity census data to explore this theme.

First visualization is a geographic map showing Child Poverty by county for the PNW states. A tooltip allows hovering to see population data which helps view outliers like Gilliam County, OR. Gilliam county has 2 outliers in population and child poverty.

The second visualization in the story shows general poverty. General poverty is not a 1:1 match for child poverty. Coupled with the third visualization we see that children are more affected by poverty in all but 8 counties by an average of 5.93%.

Each of the above maps and bar charts were designed to give a soft blue for the least affected areas and a red to highlight the most affected areas.

I had a hunch that industry makeup was a major factor in determining child poverty rate. While unemployment and each industry selected correlated as expected, only the P-value of service industry was above .05.

The last visualization also determines that population has a significant negative relationship to child poverty. Even removing King County does not significantly change the relationship strength or p-value of the relationship.

Using scatter plots and trend lines we were able to see the relationships with the added benefit of displaying a Pearson correlation variable and p-values. I chose a shape setting for state in case the future explorers would like to focus on smaller areas than the region.

Lastly, a dashboard is shown with a few of the reports side by side. The story note makes it clear that though this is a good place to see some relationship, the dataset has confounding variables and collinearity that make further analysis needed to learn more about this issue.

Links:

<https://public.tableau.com/app/profile/shane.mcgin.boyce/viz/UdacityPNWPoverty/Story1?publish=yes>

References: N/A