Project 3

Carson Ou and Phuc Nguyen

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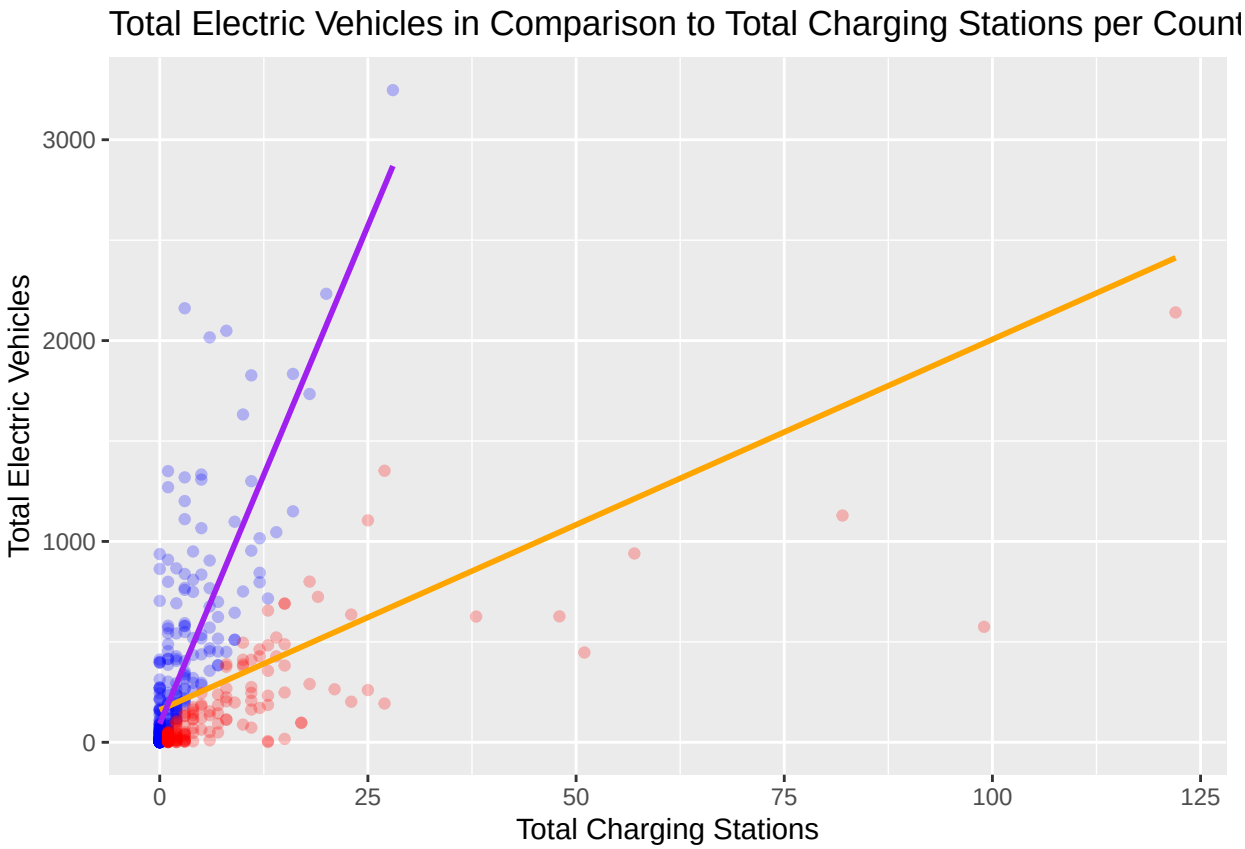
Outliers in our Dataset

In this scatterplot, we analyzed the dataset in terms of how many electric vehicles were registered to each zip code in the state of Washington, and how many charging stations were in each zip code in the state of Washington as well. The red dots refer to outliers in our dataset, where the county had a charging station to electric vehicle ratio that was outside the interquartile range, while the blue dots refer to zip codes that fell within that interquartile range. The orange line shows the linear regression of all datapoints, while the purple line only shows the linear regression of the points that were not outliers.

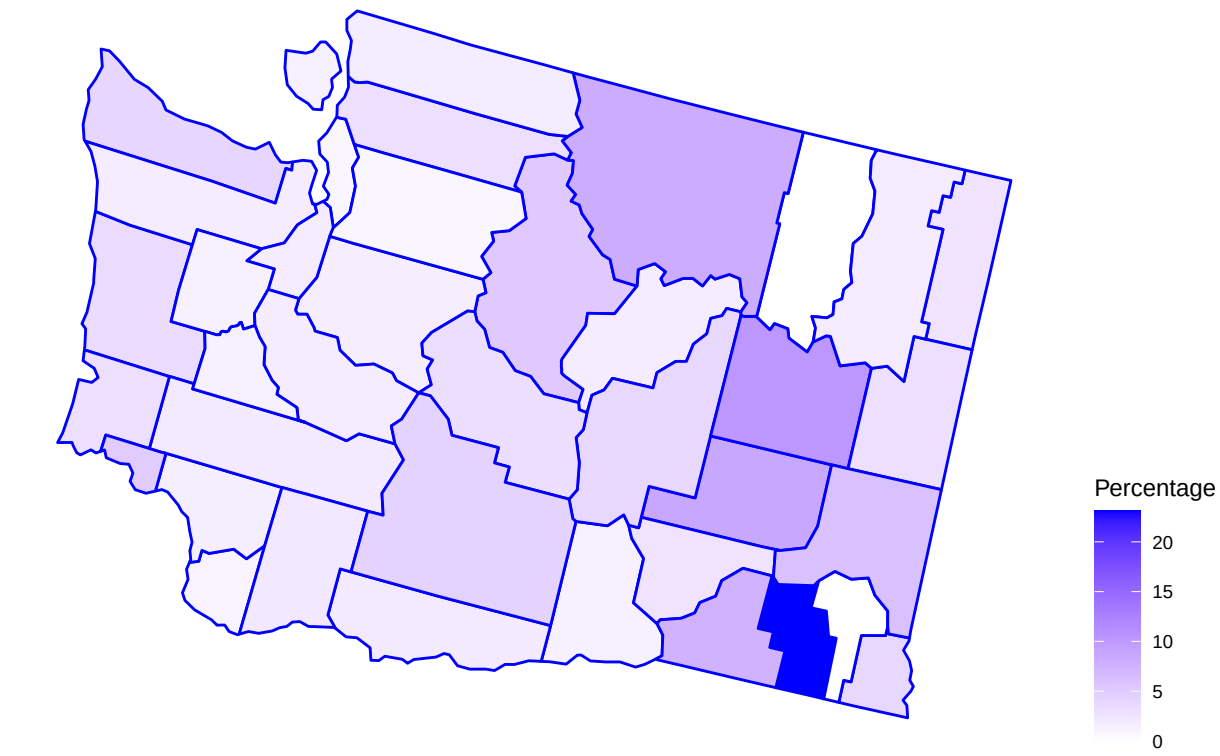
```
## `geom_smooth()` using formula 'y ~ x'
## `geom_smooth()` using formula 'y ~ x'
```



Zooming out on Washington

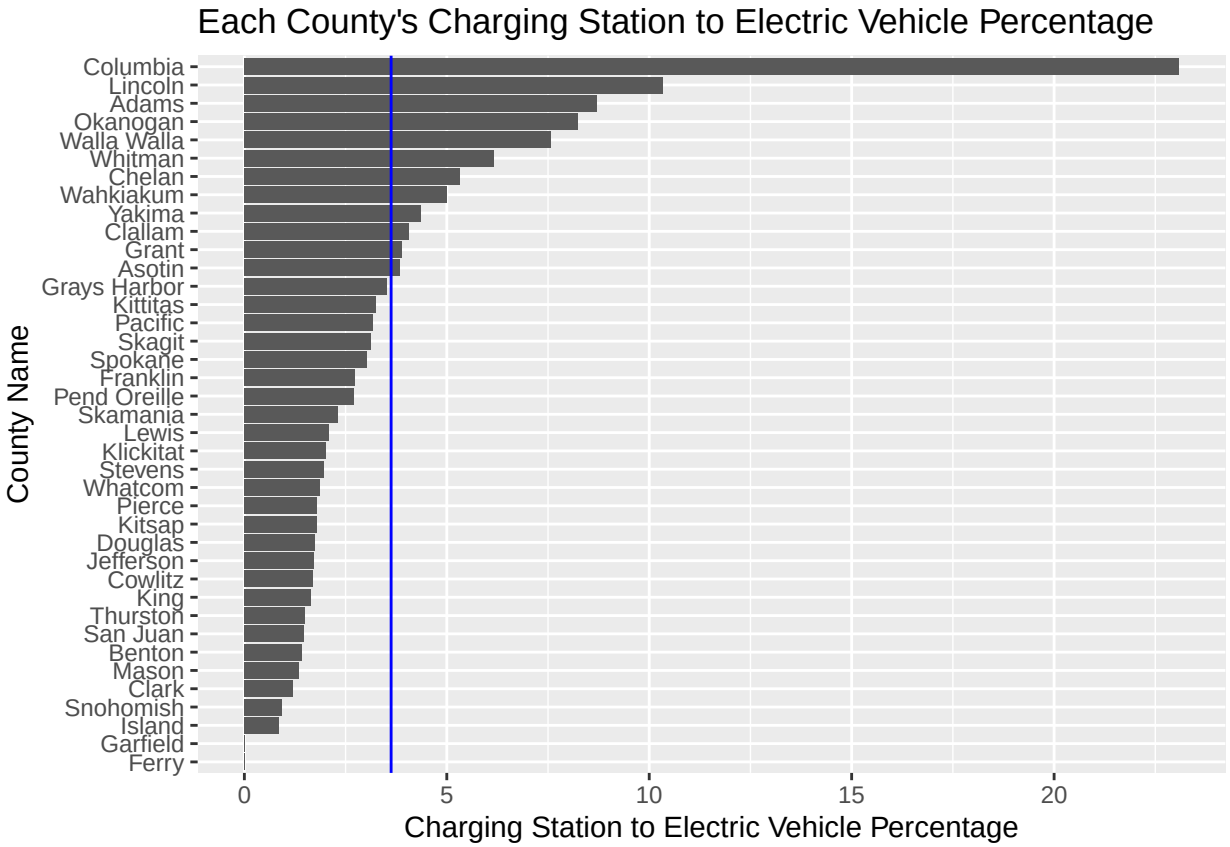
In this map we zoomed out on all the zip codes and grouped them into counties in Washington state. We then made a density map analyzing each county and which county had the highest charging station to electric vehicle percentage. The higher the percentage, the darker the color blue for the county. For this map, I had to use another library to plot the map instead of ggplot, and I used usmaps for this map.

```
## Warning: Ignoring unknown parameters: linewidth
```



Comparing Percentages

In this bar chart, I analyzed each county's charging station to electric vehicle percentage and ordered the counties from highest to lowest percentage. The blue vertical line refers to the average percentage of all the counties. In the chart, you can see that there are a couple counties (Garfield, Ferry) with a percentage of 0%, and a county (Columbia) with a very high percentage.


Each County's Charging Station to Electric Vehicle Percentage
County Name
Columbia
Lincoln
Adams
Okanogan
Walla Walla
Whitman
Chelan
Wahkiakum
Yakima
Clallam
Grant
Asotin
Grays Harbor
Kittitas
Pacific
Skagit
Spokane
Franklin
Pend Oreille
Skamania
Lewis
Klickitat
Stevens
Whatcom
Pierce
Kitsap
Douglas
Jefferson
Cowlitz
King
Thurston
San Juan
Benton
Mason
Clark
Snohomish
Island
Garfield
Ferry
0
5
10
15
20
Charging Station to Electric Vehicle Percentage