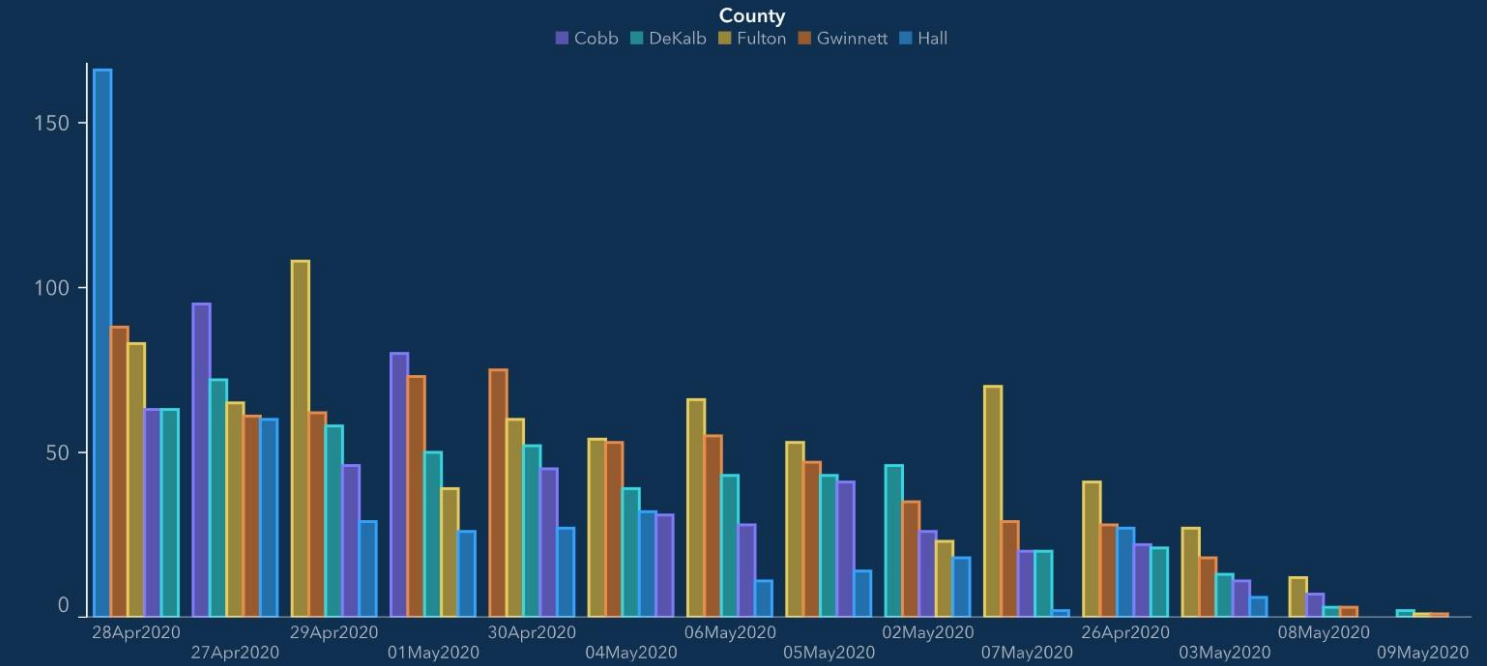# Top 5 Counties with the Greatest Number of Confirmed COVID-19 Cases

The chart below represents the most impacted counties over the past 15 days and the number of cases over time. The table below also represents the number of deaths and hospitalizations in each of those impacted counties.

The graph I have chosen is collected from vox.com and is supposed to represent the top five counties with the greatest number of confirmed COVID-19 Cases. There are multiple reasons why this is not a good graphic representation. The graph itself is simple enough at first glance, without too many unnecessary design choices included. It's a simple bar graph with values on the y-axis and dates on the x-axis with bars representing each of the counties. Even though it's easy enough to figure out in which country these counties are, it should also be included in the graph to make it completely clear what its giving information on. The graph shows a decrease in cases of deaths and hospitalizations by regions.

Neither of the axis's are named though. For the x-axis it isn't that big of an issue since it's clear that its dates. On the y-axis on the other hand, it's difficult to understand what the scale is. In the info text below the headline, they claim to show both the number of deaths and the number of hospitalizations. We can therefore assume that's what the numbers are supposed to represent, even though it's possible to understand, it should be made clear in the graph to avoid misinterpretation.

Another big issue with this graph is the order of the dates on the x-axis not being chronological. You will have to read the graph very thoroughly to be able to understand what the order of the dates are, and then being able to visualize how the graph is supposed to look based on that.

The last issue the graph is facing is the randomly changing order of the counties within each date. The creators have made the bars decreasing in size within each of the dates, which gives a wrongful presentation of the evolution within each county.

Bibliography

Collins, S.(2020,may 18th). *Georgia's Covid-19 cases aren't declining as quickly as initial data suggested they were". VOX. https://www.vox.com/covid-19-coronavirus-us-response-trump/2020/5/18/21262265/georgia-covid-19-cases-declining-reopening?fbclid=IwAR3DB_sTbO0Vcf9c8MBbBhO43bsHj1bEAgt7ov2q1-3WAS7QxLJpNd1KPPE*
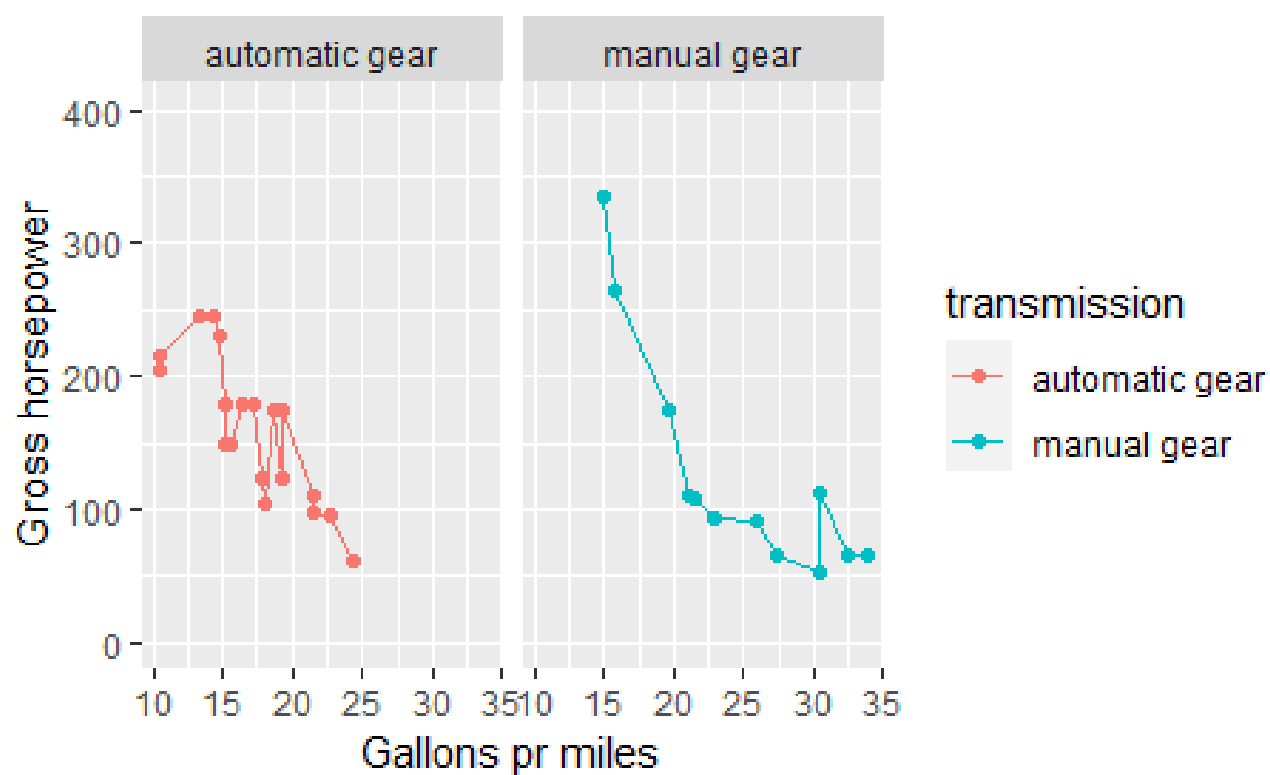
The graph shows how a car's horsepower affects its usage of fuel and is divided by transmission type. The horizontal axis, or the x-axis, gives us a scale of the usage of fuel from 10 to 35. The vertical axis, or the y-axis, gives us a scale of a car's horsepower from 0 to 400. This is a choice made because to clearly show that there are a hundred horsepower between each bar. The limit is given because the maximum horsepower a car is documented in the data to have, is a little under 350, and to keep the consistency of a hundred between each number, I set the limit to 400. This is also to avoid any lie-factor and have the size of effect shown in the graphic true to the size of effect in the original data.

The first facet, showing only cars with automatic gear, shows us that there is a positive correlation between a car's horsepower and the usage of fuel. The second facet, showing only cars with manual gear, is giving the same results where the scores start higher than with automatic geared cars. This can tell us that cars with manual gear do in general have a higher level of horsepower than the ones with automatic gear.

I have chosen to keep the graph simple when it comes to layout. I have tried to stick to the gestalt principles when it comes to simplicity to avoid any confusion regarding what the graph intends to show. The colors are only applied to the plots, in order of easing the readability of the graph. I changed the name of the facet variable from am to transmission to avoid any confusion. All in all, I focused on the "less is more" principle and kept the graph as simple as possible, while still including everything necessary.