

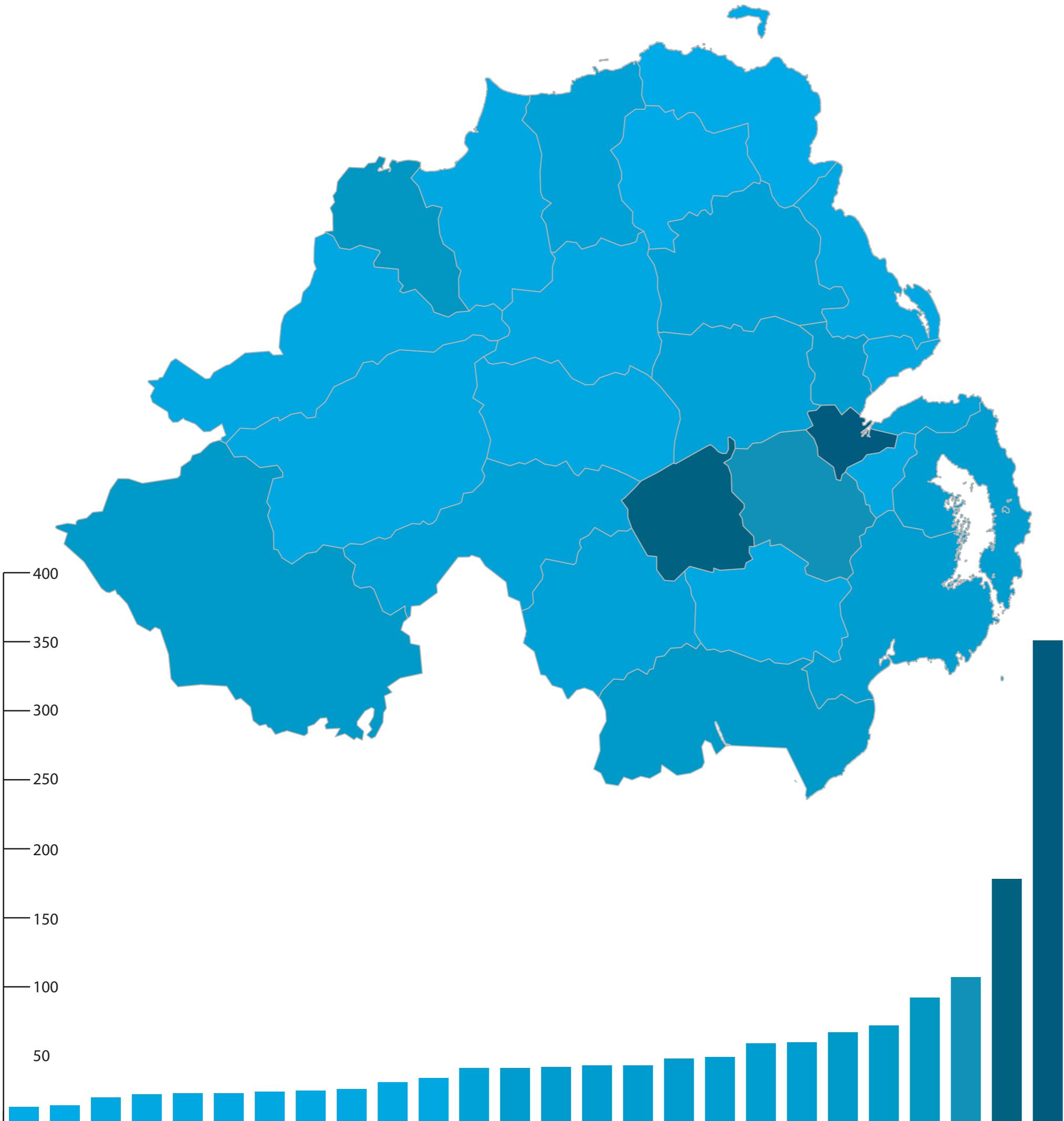
# Suicide Rate

The aim of this project is to look at the suicide rate and how this compares to the amount of jobs available and the population in Northern Ireland, the types of jobs available, the amount of people on job seekers and the average annual pay rate of people in Northern Ireland. Taking this data to raise awareness and create the argument that the suicide rate can be affected by aspects of your career. It is important that I show accurate data in a constructive way drawing attention to the data and creating connections between it. It is important that my way of layout, using colour and griding is used well to create these connections.

I will show my findings through a Data Visualisation and Infographic, showing the key data and present it in such a way that is effective and compare and contrasts the data efficiently and effectively.

I will then show the data's translation to an interactive project and how I can show the data online in an effective manner.

Hopefully by the end of the research and comparing I will be able to draw conclusions and see if there is any unique correlations in the data that are shown visually. Although if not the visual outcome will overall raise awareness for suicide numbers compare to employability aspects in Northern Ireland.



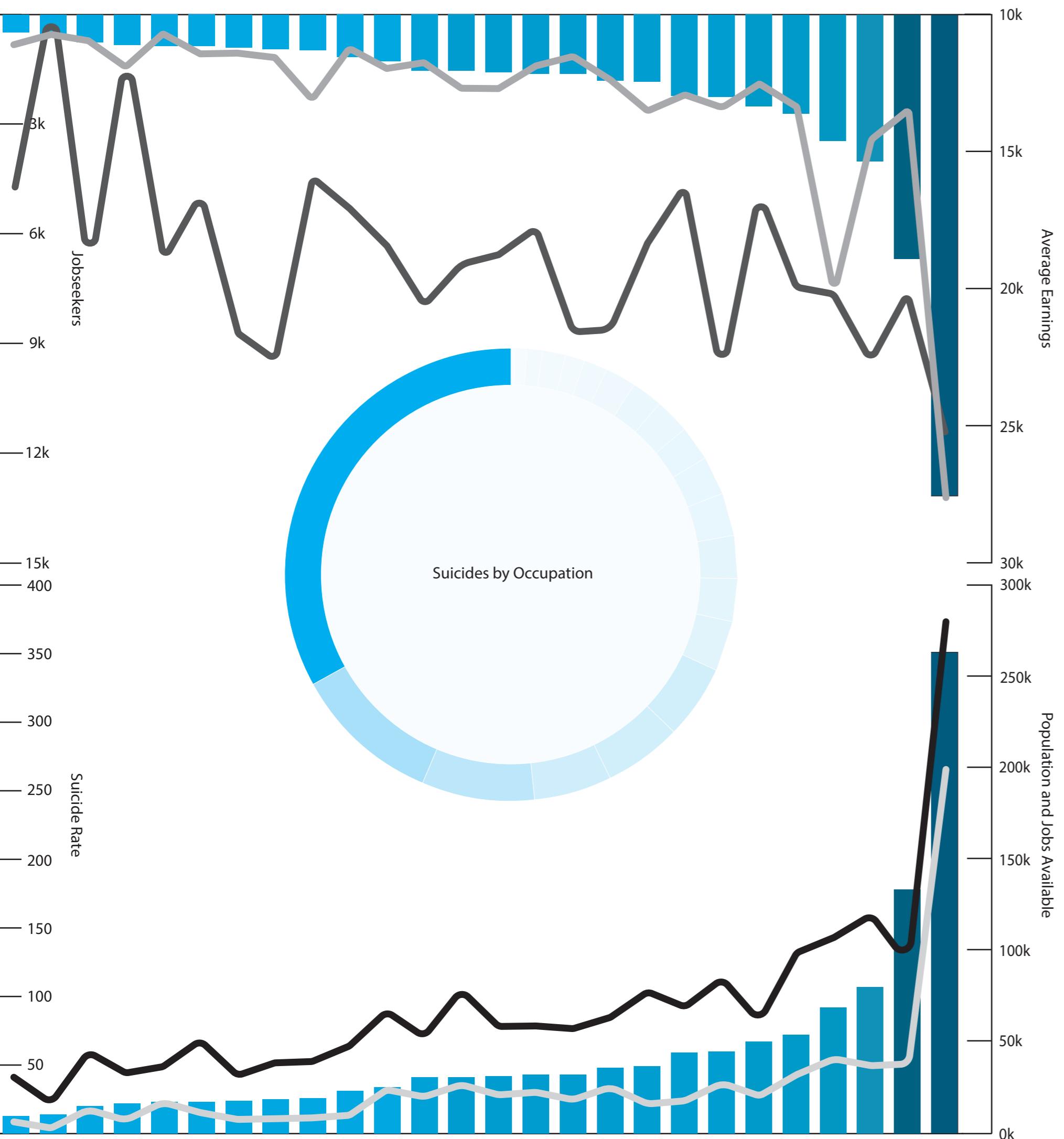
# Suicide & Jobs

Having created a data visualisation using two line and column graphs, we can begin to visualise the data. The bottom graph shows the comparison between, the suicide rate (shown in the bars), the population and the jobs available in Northern Ireland (shown through the lines). The top graph then shows the same bar chart conveying the suicide rate, the lines show the average earnings and the amount of people on job seekers within Northern Ireland.

There is then a donut chart in the middle of the graphs showing the jobs available in Northern Ireland and which have the highest suicide rate.

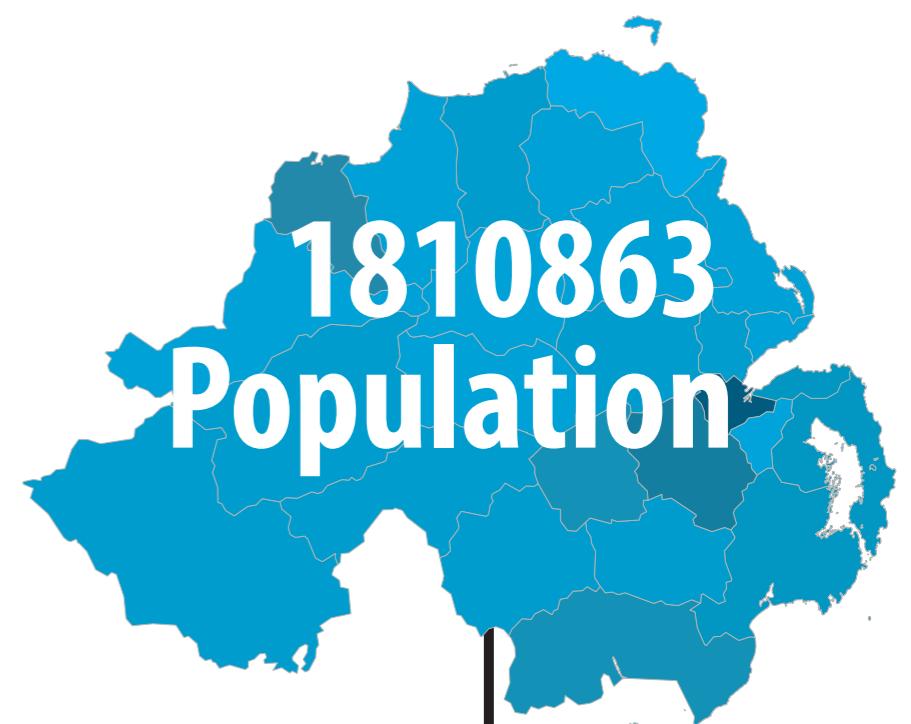
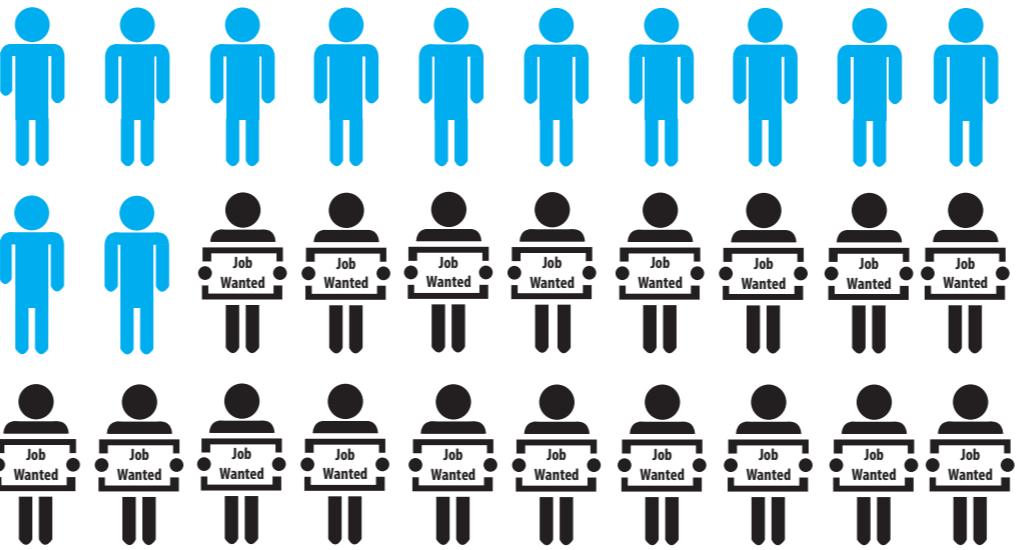
With reference to the first pages key, we can see that craigavon has a higher suicide rate than other districts of Northern Ireland. Belfast in each of the cases has the highest point on the charts, possibly due to its large population in Northern Ireland. Districts such as Moyle and Limavady show that the average earnings is lower in those areas and within Limavady there is a small increase in the amount of people on Jobseekers. Derry is also shown to have a larger than average amount of people on Jobseekers.

Looking at the donut chart we can see that the unemployed have the highest suicide rate. Whereas Construction jobs have the second highest. Whereas Teaching jobs have the lowest amount of suicides.

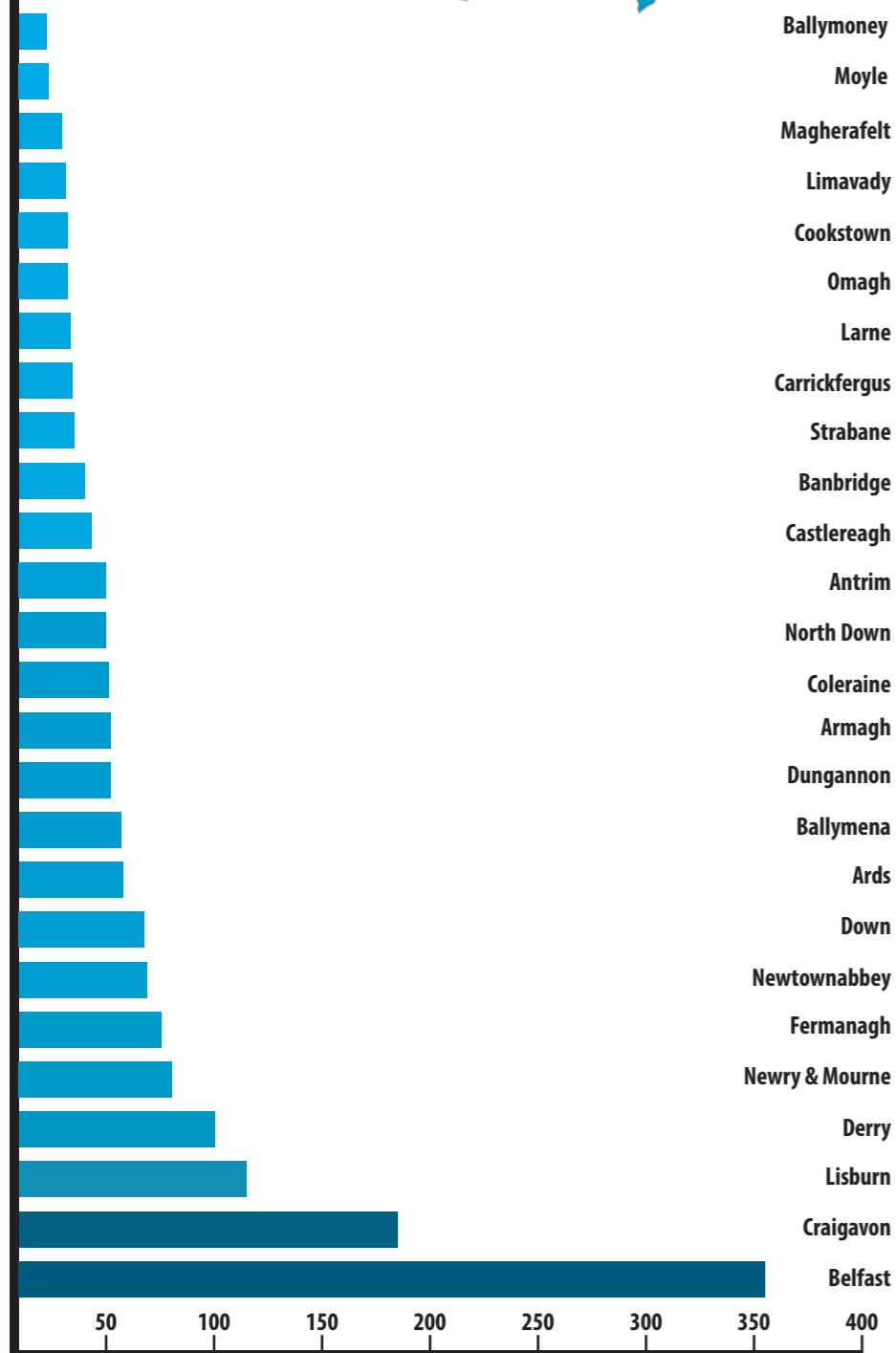
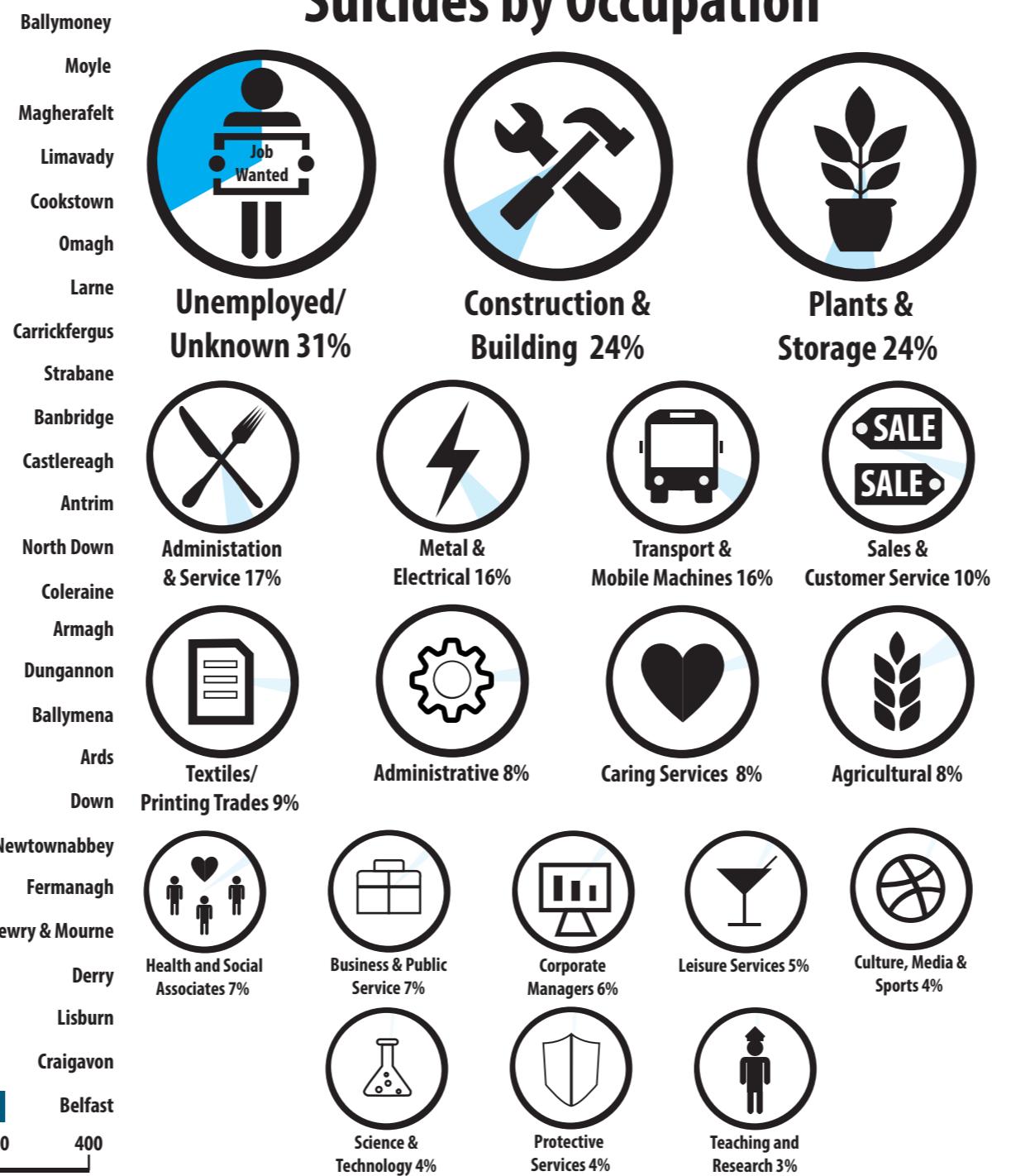




For every 30 people there are 12 Jobs



### Suicides by Occupation



# Interactive Project

Taking the data I have researched and visualised I am now going to translate it into a Interactive online project in the form of a website. I will be taking from the Javascript library D3 to do this, and be using the same coherent visual style to form the interactive project. I will be using the SVG's, the data I have researched and visual elements I have created to create visual data in the project and allow it to be interactive and altered through an interface.

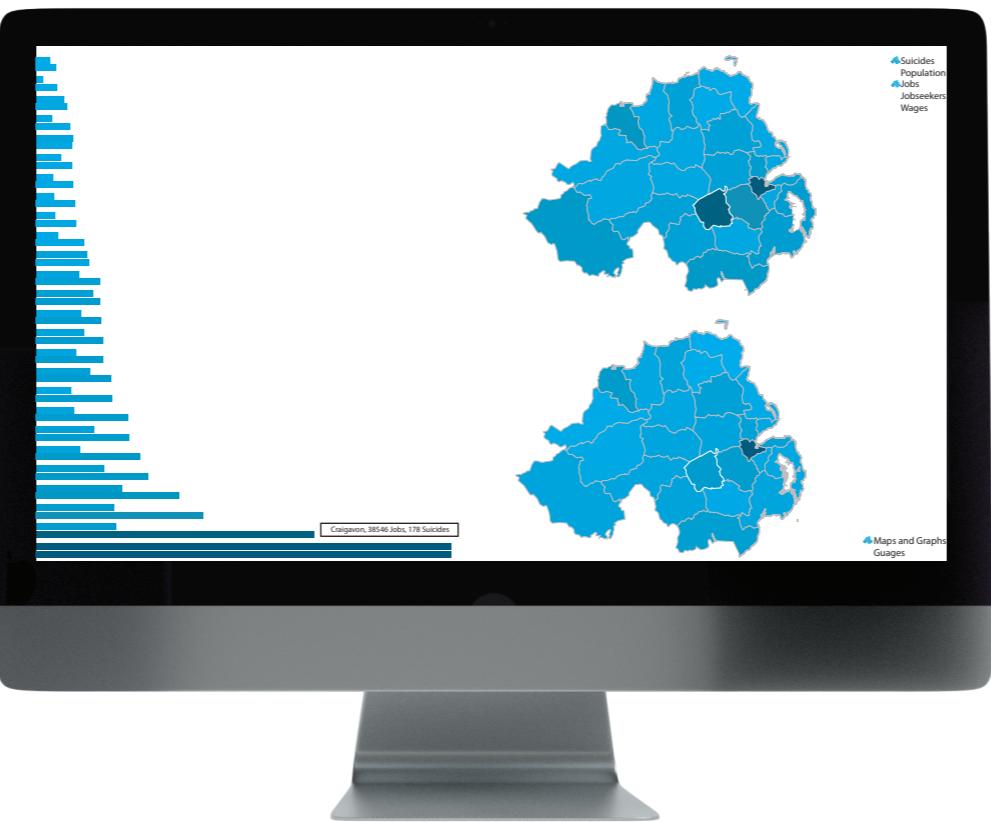
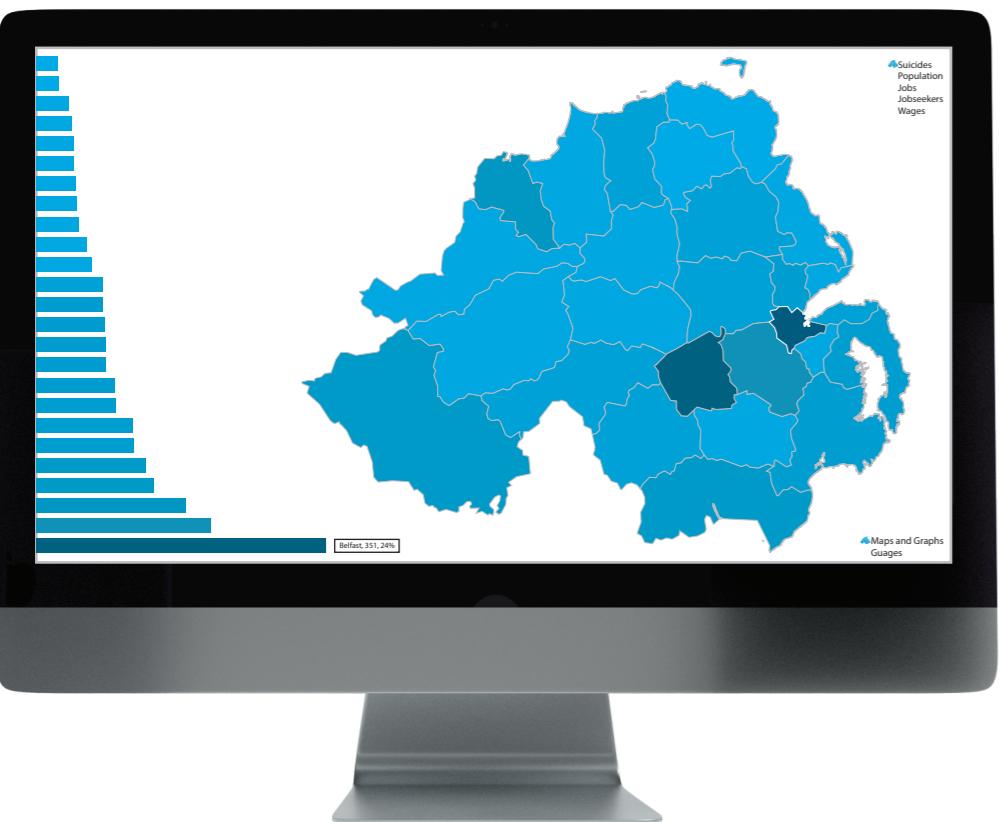
I have decided to split my Interactive project into two tabs, one showing the data and comparisons of suicides, population, jobs, people on jobseekers and average wage. The other is to show the occupations of those who commit suicide and how they compare to each other. The interface will allow for the user to alternate between both in the bottom right hand corner and also alternate between which data is shown in the selected tab in the top right.

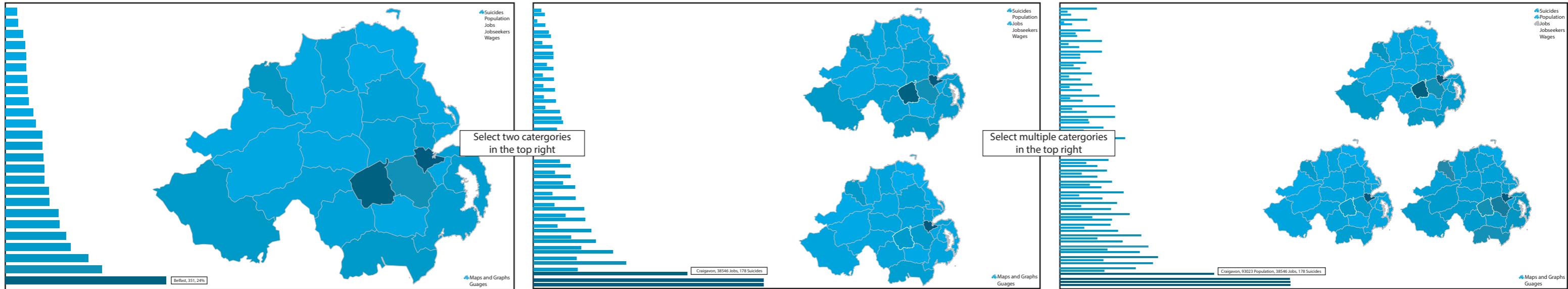
Within the first tab showing the map and graphs, I have decided to take the visual element in the map and use this as the main image when you first go to the site, creating a choropleth that shows the data as it is spread throughout the districts of Northern Ireland. I have also decided to use a bar chart down the left hand side of the screen that will show the corresponding data needed for the choropleth map. I will use hover overs to show the precise numbers and highlight the bar with the corresponding area on the map, creating links between the data visually.

I also want my data on to be comparable. In the top left hand corner you can see all of the catergories of data that are assembled in that tab. It is identified with a blue symbol of Northern Ireland which data is currently presented on the screen. When one is selected the data shown will respond and scale the data accordingly. If multiple are selected it will scale the data down and create a grouped bar on the screen. The possiblity of this stacking up to 5 times so that there are 5 bars per district and 5 maps of Northern Ireland on screen, if one district is hovered over it will show the bars conveying that data. Unfortunately due to the amount of data that can be displayed at once the use of hovering over the data is essential to seeing the percise numbers.

Within the second tab which has taken the aspect of a liquid fill guage to create a visual representation of the percentage of suicides in that working sector. The user will again have the catergory options of what data is shown on screen in the top right hand corner, although due to the large amount of working sectors, I have decided to again use the aspect of being able to compare the data, but when you chose specific data on screen the bars will also alter so that less or more bars are shown. The Guages will also scale in size depending on which data is shown on the screen. Hover overs and highlighting the visuals selected will again be essential to getting exact numbers from the visualistation.

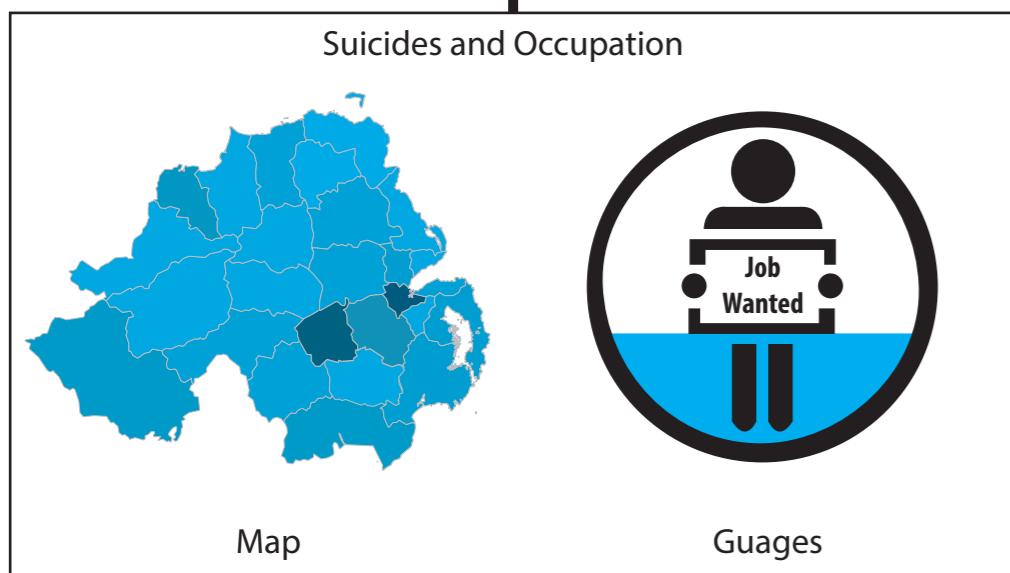
I have considered the idea of merging both of the tabs together although I feel this would make the site feel too cluttered and the draws of both sets of data can not be visually represented effectively together.





Click on Map

### Suicides and Occupation

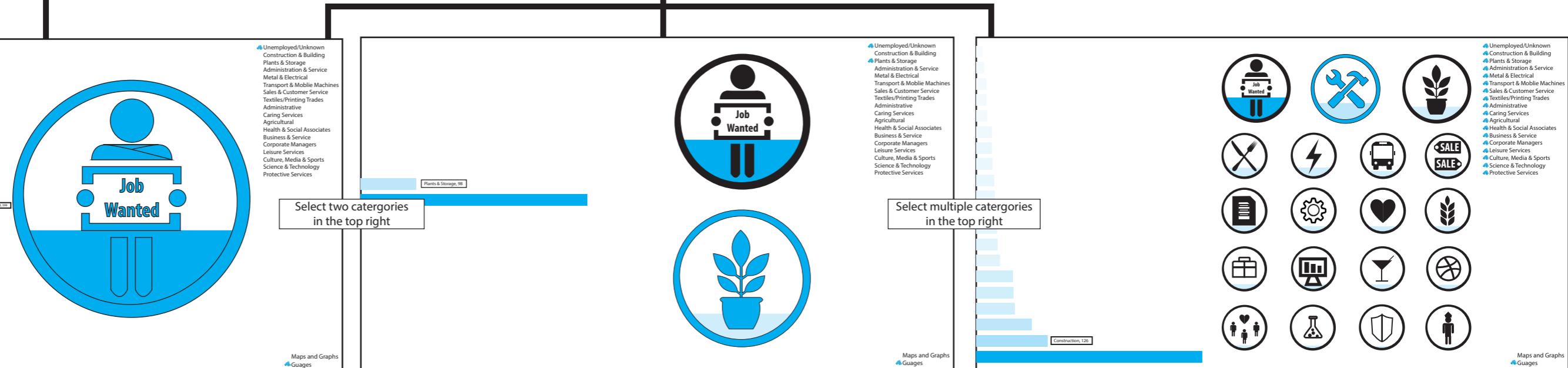


Change tab in the bottom right

Map

Guages

Click on Guages



# Summary

Here I will summarise my findings and limitations of the project. Whilst also looking at my choices in terms of design and aesthetic. When I initially started my project I expected to find correlation that gave a causation. Although there are many different aspects apart from occupation which can affect suicides within Northern Ireland. The highest statistic in all of the data sets was always within the Belfast district. This is probably due to the large population scale compared to the other districts. Although if you take Belfast out of the data set you find some other interesting results. For example then the highest place for people on Jobseekers in Derry, perhaps suggesting that there are not enough job opportunities in Derry compared to its population. It does appear the job opportunities are spread evenly throughout Northern Ireland with the core amount of jobs being in the Belfast, Lisburn, Craigavon and Derry districts although these places also have larger populations compared to the other districts..

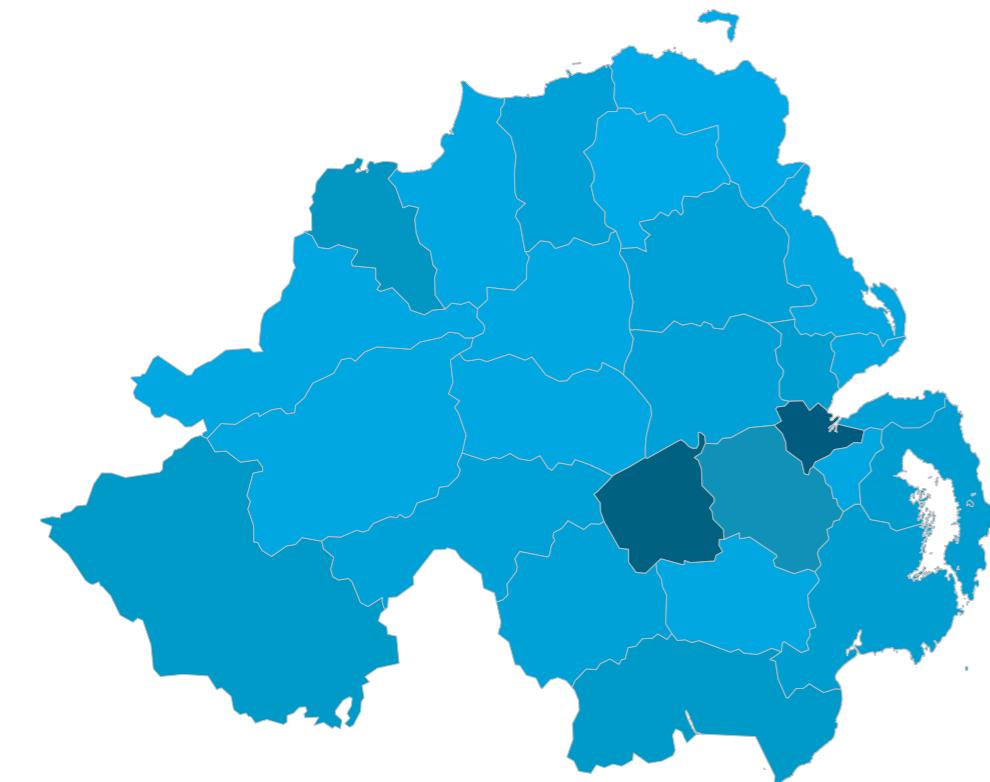
When looking at the suicides comparing to occupation we can see some interesting comparisons. I expected to find the unemployed to be the highest suicide rate, but in terms of occupation, construction shown to have the highest suicide rate. There tends to be a larger construction presence within Craigavon, possibly causing the suicide rate in Craigavon to go up although it is important to not assume that the correlation is happening because of the causation. There is perhaps a link between the types of jobs people work and how strenuous or repetitive they are on them physically and emotionally which could effect how likely they are to suicide.

When looking at the average wage in Northern Ireland I never found the data to be relevant enough to include within the Infographic, although I will still keep it on the website for comparison.

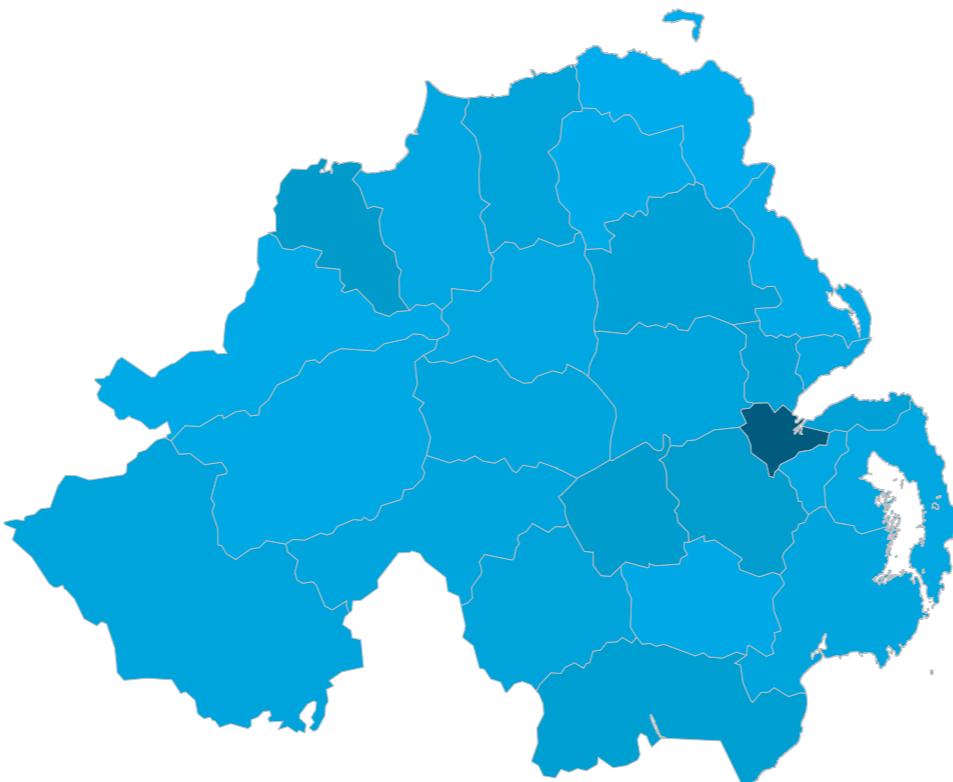
Throughout the design I have used a dark blue to almost navy colour, this is to go along with the feelings on depression in suicide and almost provide sympathy towards the project. I also wanted to stick to the rule of black, white and one colour although to show the data effectively it may have been better to use 2 or 3 colours, instead I choose to use blue and have the scale of cyan and black change depending on the data displayed. I have used a bar with line graph as this shows the data effectively when comparing two things. I have worked in Northern Irish districts as this allows for a wider range of data and more accurate number to specific areas across the country. I decided to then use a pie chart to show the suicides by occupations. Still sticking to the blue. Within the infographic I tried to use more graphical symbols that fitted together nicely whilst still keeping the colours of the data visualisation and overall graphical style.

I feel this project needs more data to feel fulfilled for example the types of jobs available over each district, I would fear of the argument and visualising of the data would be too complex if I added more data. It is something I should consider adding in if there is a place for it when developing the site.

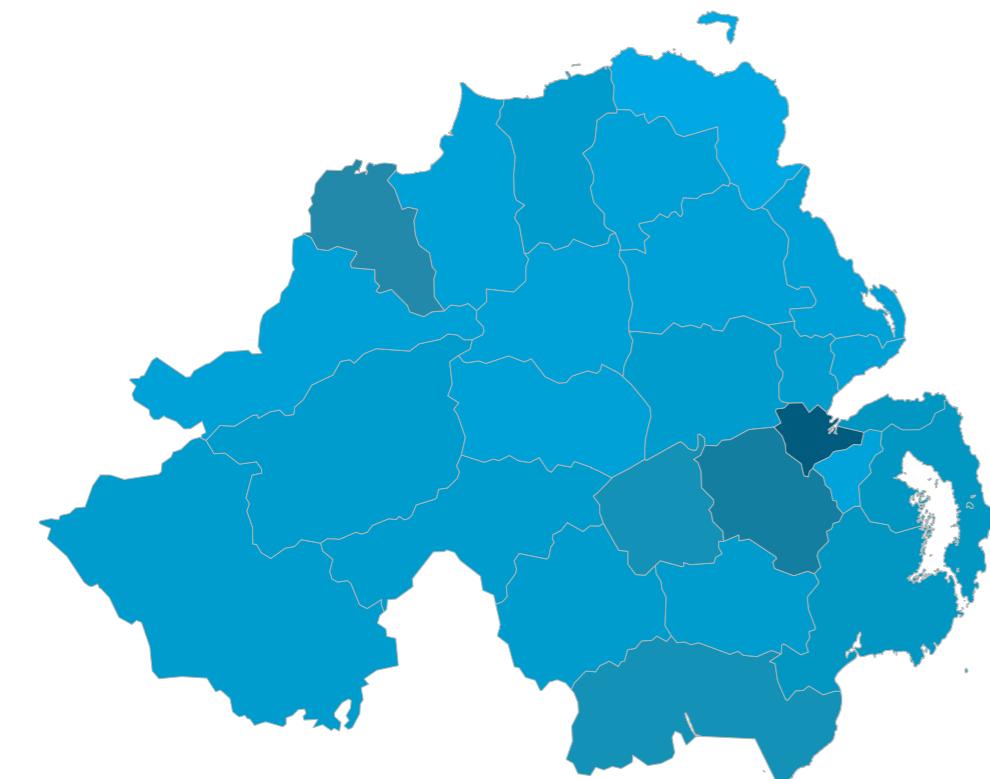
Overall I think the project has been a success although it does have its limitations of whether the correlation means the causation although it definitely raises awareness that the data may cause these issues and under closer inspection may prove useful to investigate further.



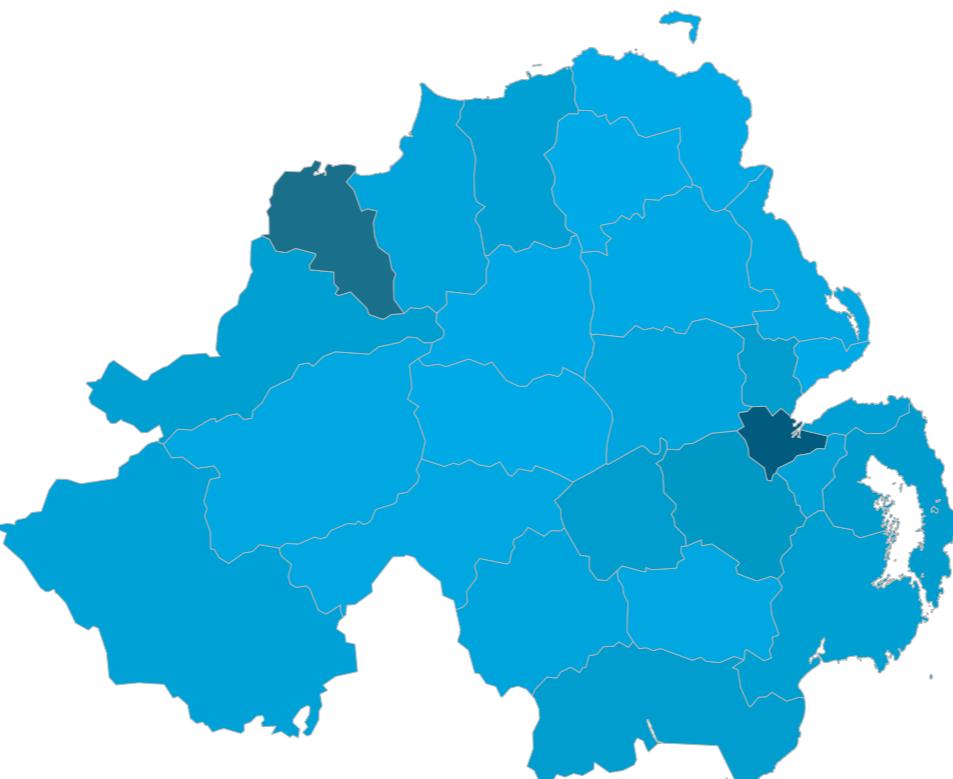
Suicides



Jobs



Population



Jobseekers

