BUSINESS ANALYTICS NANODEGREE PROGRAM

PROJECT: INTERPRET A DATA VISUALIZATION

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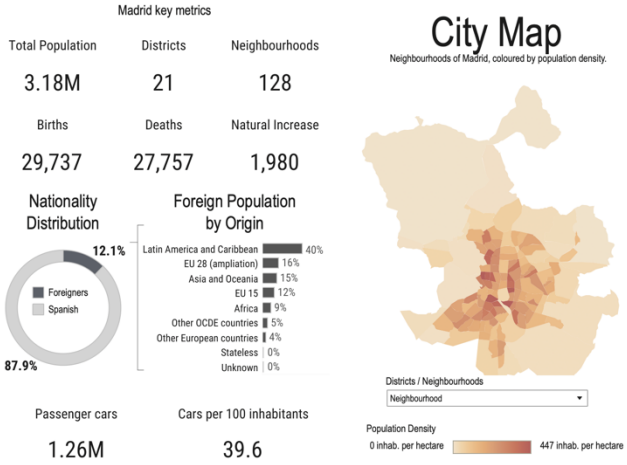
INSIGHT 1: DEMOGRAPHIC STRUCTURE



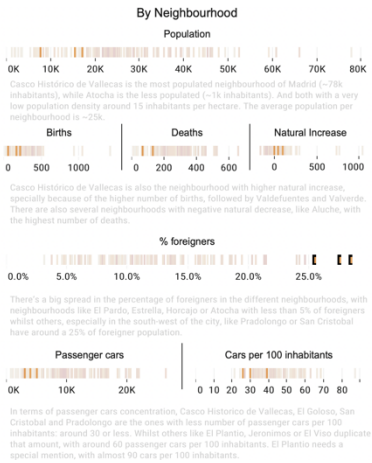
Madrid has a population of 3.18 million inhabitants, being the largest city and municipality in Spain and the 3rd largest city in Europe after London and Berlin. More in detail, is formed by 21 districts and 128 neighborhoods. And the moment they have a positive difference between births and deaths of around +2000/year.

The Nationality distribution shows that almost 9 out of 10 Madrid inhabitants are Spanish. The distribution of foreigners in Madrid also shows that almost half of them have Latin American or Caribbean origins.

From the map image, we can see the population density per neighborhood. More high-density population areas are situated in the center of Madrid community, what we can identify as Madrid's metropolitan area.

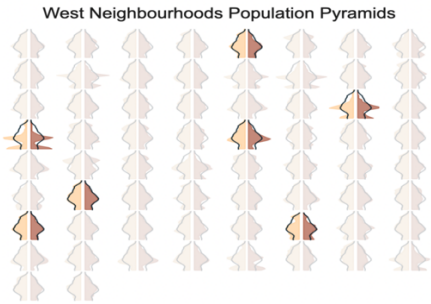
Madrid's neighborhoods have a wide range of population. Going from less than 1k inhabitants in the neighborhood of Atocha until 78k in Casco historico de Vallecas, but what it interesting is that both of them have low population density, meaning that Casco historico de Vallecas is much larger in size that Atocha.

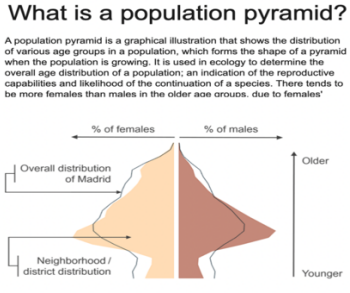
In the % foreigners, Madrid also presents a lot of difference between areas. In the screenshot of the right, I selected the 3 neighborhoods with the highest percentage of foreigners, and we can see that they are situated in the south-west part of Madrid.

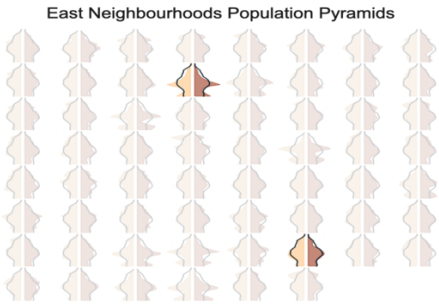


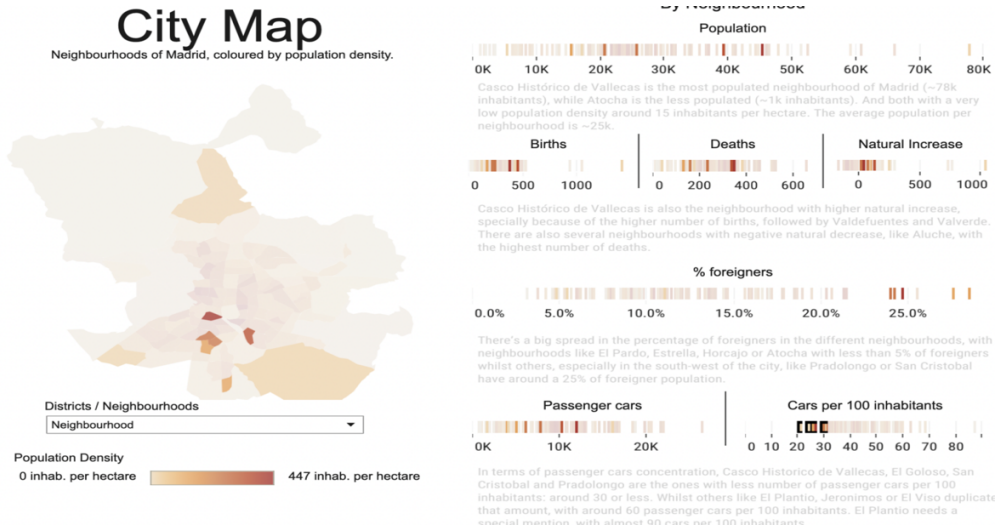
INSIGHT 2: CARS PER 100 INHABITANTS

Also, looking at the ratio of cars per 100 inhabitants, which normally can be an indicator of the purchasing power of the people living there, it shows that people living in western and southern areas of Madrid have less purchasing capacity compared to their peers in the center and north parts (except for el coloso neighborhood which has also low density of cars per inhabitants). The next 2 screenshots show the 9 neighborhoods with less cars per 100 inhabitants

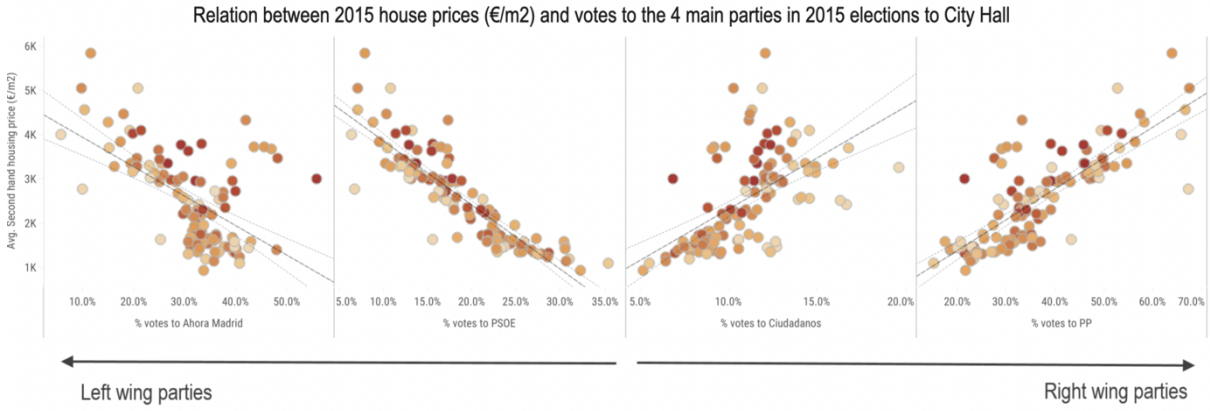




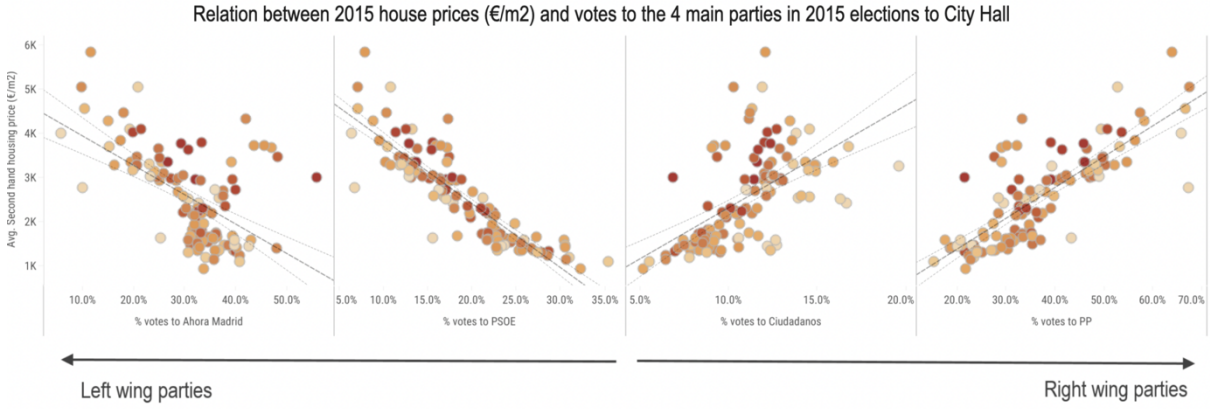




And to strengthen our assumption about the relation between purchasing power or economic status and cars per 100 inhabitants, at the bottom of the dashboard we find another image that compares house values and cars per 100 inhabitants. Here a direct relation between them is found, where areas with higher price per square meter have greater number of cars per inhabitants which tell us that the people leaving there can afford expensive houses plus having a car.



INSIGHT 3: HOUSE PRICES AND POLITICAL ORIENTATION



The above image compares 2015 house prices against the votes to the main 4 political parties in Madrid. If we look at the extremes in the political spectrum, we see a very marked relation between house prices and votes, where areas with high housing prices vote for right wing parties and areas with cheaper housing prices vote for left wing parties. This relation is also maintained in the more central parties but with more variety and less marked as for the extreme parties.