

The Battle of Neighborhoods: Just Eat Belfast Bikes scheme

Introduction. Belfast is the capital and largest city of Northern Ireland (UK). Recently voted the best place to visit in 2018 by Lonely Planet, Belfast has been quietly evolving into one of the most exciting cities to explore in the United Kingdom. The modern style of the city, as well as the beautiful green areas and countryside, hills, rivers and parks make the city a very easy place to fall in love with. The city offers the Just Eat Belfast Bikes scheme providing a low cost, convenient and sustainable way to travel in the city. More specifically, there are 47 docking stations: in this project, we analyse the rentals and return statistics for six docking stations (Belfast City Hall, Waterfront, Queen's University Belfast/Botanic Gardens, St. Malachy's Church, Writer's Square, Odyssey) from 2015 to 2017. The purpose of the project is to understand how the different docking stations are used and if some of them are not offering a high amount of rentals.

Open Data. The Belfast City Council website furnishes a bunch of .csv files which can be used for the purpose. In the project, we make use of the following:

- i) BelfastBikesRH_APR15JUL17.csv which is a (985x13) dataset containing 'Place Name', 'Month', 'Year', 'Rentals' and 'Returns' for each docking station (from 2015 to 2017);
- ii) bikestations_belfast.csv which is a (38x8) dataset containing 'Station Number', 'Location', 'BNG_X', 'BNG_Y', 'Latitude', 'Longitude', 'IG_EASTING', 'IG_NORTHING';
- iii) parksdata_belfast.csv which is a (44x5) dataset containing 'Name', 'Address', 'Postcode', 'Latitude', and 'Longitude' of Belfast parks (which can stimulate bike activities and sharing).

We will use i) to understand how the monthly average number of rentals/returns has changed from 2015 to 2017. Since no information on Latitude and Longitude is contained in BelfastBikesRH_APR15JUL17.csv, we will make use of the ii) dataset to extract the coordinates of the docking stations. The iii) dataset is used to visualise the parks of the city in the Belfast map.

Methodology.

Results.

Discussion.

Conclusions.