

Birthrate prediction model

Introduction

- **This project aims to predict London boroughs GFR (general fertility rate) based on data from various sources, including Foursquare location data.**
- **This is a proof-of-concept, estimating GFR based on publicly available data.**
- **This can be of interest to social science researchers who investigate the impact of POIs availability on the fertility rate, or to city planners, etc..**

Data

- [Wikipedia - List of areas of London](#) - Table of neighborhoods in London, the borough(s) they belong to.
- [Wikipedia - List of London boroughs](#) - Table of boroughs, their area and population and co-ordinates.
- Python geopy Nominatum - to identify the co-ordinates of each London neighborhood.
- Foursquare API - location data - POI (Point Of Interest) categories rates for each neighborhood.
- [London Datastore - Births and Fertility Rates, Borough](#) - Live births by local authority of usual residence of mother, General Fertility Rates and Total Fertility Rates.
- [London Datastore - The Economics of London's Housing Market](#) - average house prices per borough.