## Changing Places: Lessons using data skills

Royal Geographical Society with IBG

Advancing geography and geographical learning

# **Lesson 1**: Comparing Places: Is Greenwich West the best place to live in the borough?

### Lesson objective

To use the London Datastore 'big data' set to compare Greenwich West and another ward in the Royal London Borough of Greenwich.

### Setting the scene

We can find out about a place by studying qualitative data (with a focus on words) and quantitative data (with a focus on numbers). Read the *Data skills in geography: Changing Places article* which introduces the key aspects of place (meanings and representations, relationships and connections) and provides an initial profile and range of representations about Greenwich which is the focus of this five lesson series.

This lesson is focused on exploring large data sets collected from a range of formal sources. Data can be longitudinal (collected using the same method repeatedly over time) and/or geospatial (collected using the same method across space). Technology is now advanced enough to allow large datasets to be collected, mapped and stored in such a way that they are available for the public to access, view and analyse for themselves.

The London Datastore is an open data-sharing portal site where a range of data from the Greater London Authority can be freely accessed by anyone. At the time of writing, the London Datastore's <u>website</u> has 666 datasets grouped into 17 topics (including demographics, environment, education and transport) from 50 different publishers. Data is available at a range of scales from small Lower Layer Super Output Areas (LSOAs) with an average of roughly 1,500 residents and 650 households, to borough and city scale.

### Tasks

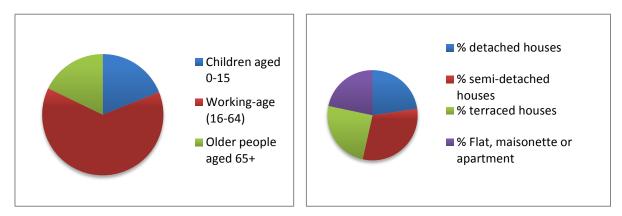
### 1. What is the nature of Greenwich West ward?

Discuss what you have read about Greenwich in the *Data skills in geography: Changing Places* article. What are your first impressions of Greenwich? Who might live there? What might be the characteristics of the local population? What might life be like? What are the connections it has with the past and other places? Who might feel welcome in Greenwich? Might any groups of people feel unwelcome?

Download the Microsoft Excel Ward Profiles for London available <u>here</u>. Choose the ward Greenwich West from the drop-down box. Choose some of the data for Greenwich West to be presented in graphic form, for example this might be in the form of pie charts for the demographic characteristics and housing types, Council Tax bands and owned or rented data. Include a reference to the data source on each graph; see the examples below.

### **Figure 1.** Demographics for Greater London (GLA Population Projection data, 2015)

**Figure 2.** Housing types for London (ONS Census, 2011)



### 2. Comparing the nature of Greenwich West with the rest of Greenwich and London

Compare the data for Greenwich West in the Microsoft Excel spreedsheet and your graphs with that for Greenwich Borough and Greater London (see Figure 1 and 2 above). Use the statistics and images from page 4-7 of the *Data skills in geography: Changing Places* article to support your ideas.

### **Take it Further**

Write a short presentation with no more than five slides to share your results with the rest of the class.

### 3. Comparing wards

Return to the Microsoft Excel Ward Profiles for London available <u>here</u>. Choose a second ward to compare with Greenwich West from the drop-down box. Spend some time researching this second place with the objective of comparing it to Greenwich Ward. Think about the following aspects of place:

- **Demographics** population structure, average age
- Health life expectancy, obesity
- Ethnicity % British. Black, Asian, and minority ethnic (BAME), born overseas
- Housing type, owner/rented, council tax bands
- Deprivation those in households with no adults in employment
- Education people with and without different levels of qualifications
- Environment open spaces, transportation and crime levels

### **Take it Further**

Write a short report to compare these two wards, include a range of graphs or statistical data to support each point that you write. Don't forget to include the source of information you use.

### Plenary

Return to the main lesson question; is it possible to answer using the findings from the lesson? Is Greenwich West really the best place to live in the borough? What do we mean by 'best' place to live in the Royal Borough? (Are we measuring the economy, quality of life, housing or education?)

Students should discuss then write down three questions, which have arisen as a result of exploring the data about Greenwich, these should form the starting point for a homework task. Questions should go beyond the 5Ws (What, When, Why, Who, How) perhaps by using a Question Matrix or Bloom's taxonomy to devise more challenging questions.