Data Visualisation – DWP Out-of-Work benefit statistics

Background

The Department for Work and Pensions (DWP) release a range of National Statistics quarterly of people claiming benefits, via both the DWP Tabulation Tool and NOMIS.

The Statistical Summary released on 18th May 2011 included a section focussing on visualisation of data, giving examples using Google Public Data Explorer.

On 20th July, DWP publicly released a version of Google Public Data Explorer using already published DWP Out-of-Work benefit statistics (consisting of claimants of Jobseekers Allowance, Employment Support Allowance, Incapacity Benefit / Severe Disability Allowance, and Income Support). This provides an example of one of the many ways that official statistics from the DWP Tabulation Tool / NOMIS can be downloaded and analysed. The statistics used are an example of how official statistics can be explored and, depending on purpose, users may find other statistics available on the DWP Tabulation Tool / NOMIS more appropriate for their needs.

The Data Explorer includes statistics at country, regional and local authority level between August 1999 and November 2010 (latest published data).
It includes the proportion of 16-59 year olds classified as 'Jobseekers', 'Employment Support Allowance / incapacity benefits', and 'Lone Parents', as well as total 'Out-of-Work benefits'.

Proportions of out-of-work benefit claimants *directly* published by NOMIS relate to the 16-64 year olds age group.
The age group 16-59 year olds has been used in line with guidance published on the DWP website regarding the equalisation of state pension age and its implications on DWP benefit statistics.

The data used for this version of Data Explorer is released DWP benefit National Statistics and ONS mid year population estimates – both obtained via NOMIS. Proportions were calculated and comma separated (csv) files created for uploading to Google. These csv files and the metadata xml files are also being released alongside the release of the Data Explorer.

Google Public Data Explorer
The data explorer consists of four visualisation tools:

The line chart allows a breakdown to be visualised over time, by a geographical breakdown:
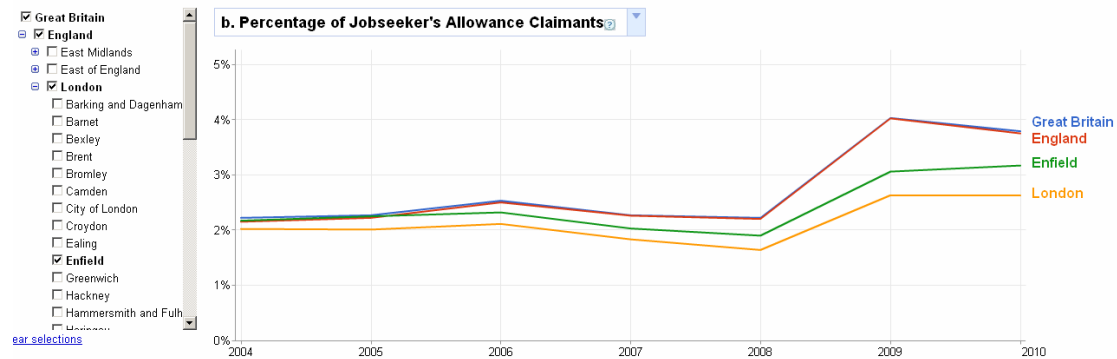
This example shows the proportion of Jobseekers within the 16-59 year old population and includes breakdowns for Great Britain, England, London and Enfield, demonstrating that comparisons across geographical breakdowns are possible. The effect of the recession can be clearly seen.


The bar chart similarly shows a geographical breakdown, but this time with animation of the chart over time:
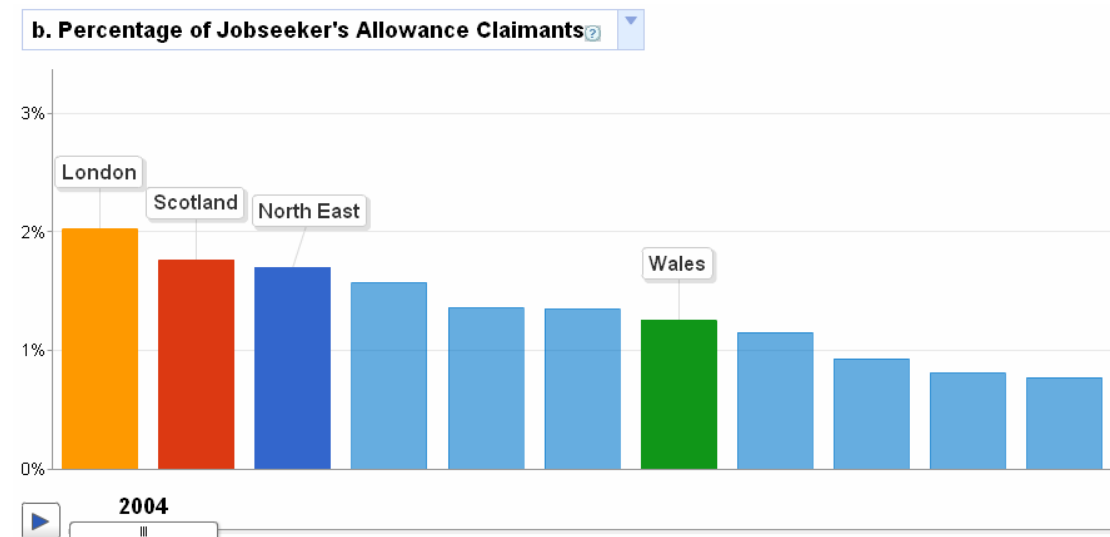
The example shows a regional breakdown of Jobseekers within the 16-59 year old population, with four regions highlighted with labels. By clicking on the play button, the chart is animated showing movement over time.

The bubble chart allows an extra dimension to be included in the chart, as well as allowing the size of the bubbles to be determined by an additional breakdown (for example, population size).
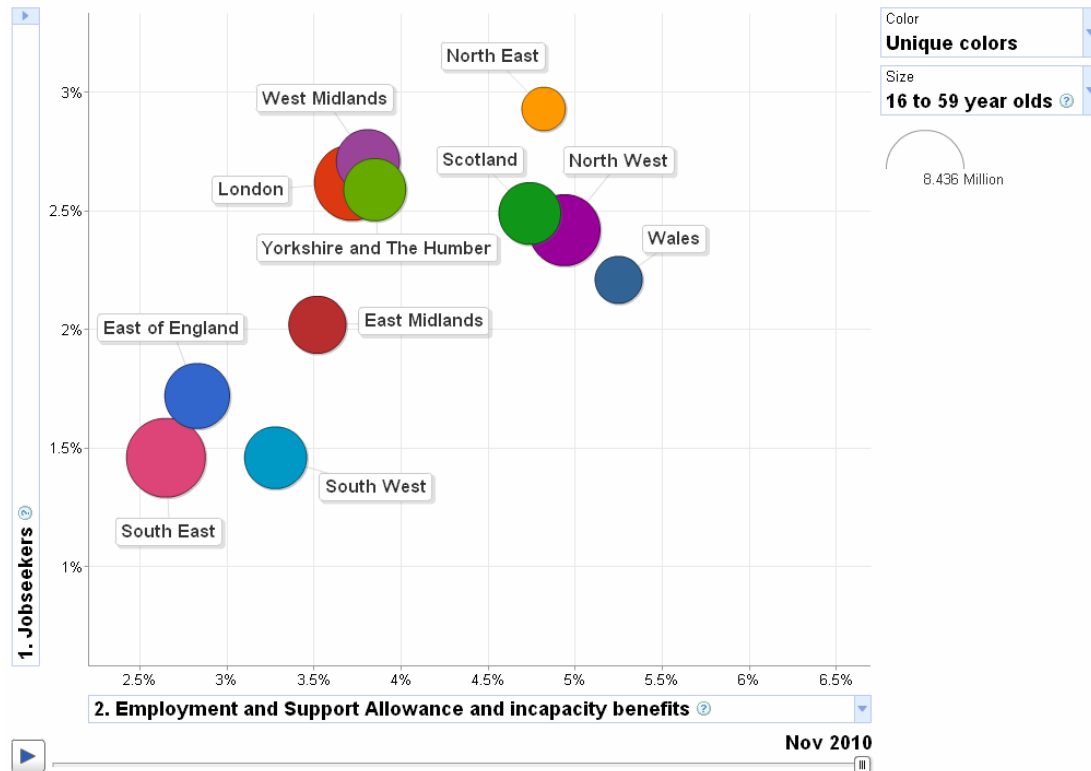
This example shows the relationship between Jobseekers and ESA/incapacity benefit claimants (x and y axis) by region, with the size of the region bubble reflecting the size of the 16-59 year old population. Again, by clicking on the play button the chart is animated to show movement over time.

Google maps shows a breakdown on a map, with the geographical area represented by a bubble which is centred within the geographical area of interest. The size of the bubble can again reflect the population size and the colour of the bubble can be set to represent another breakdown, for example, the proportion of Jobseekers.
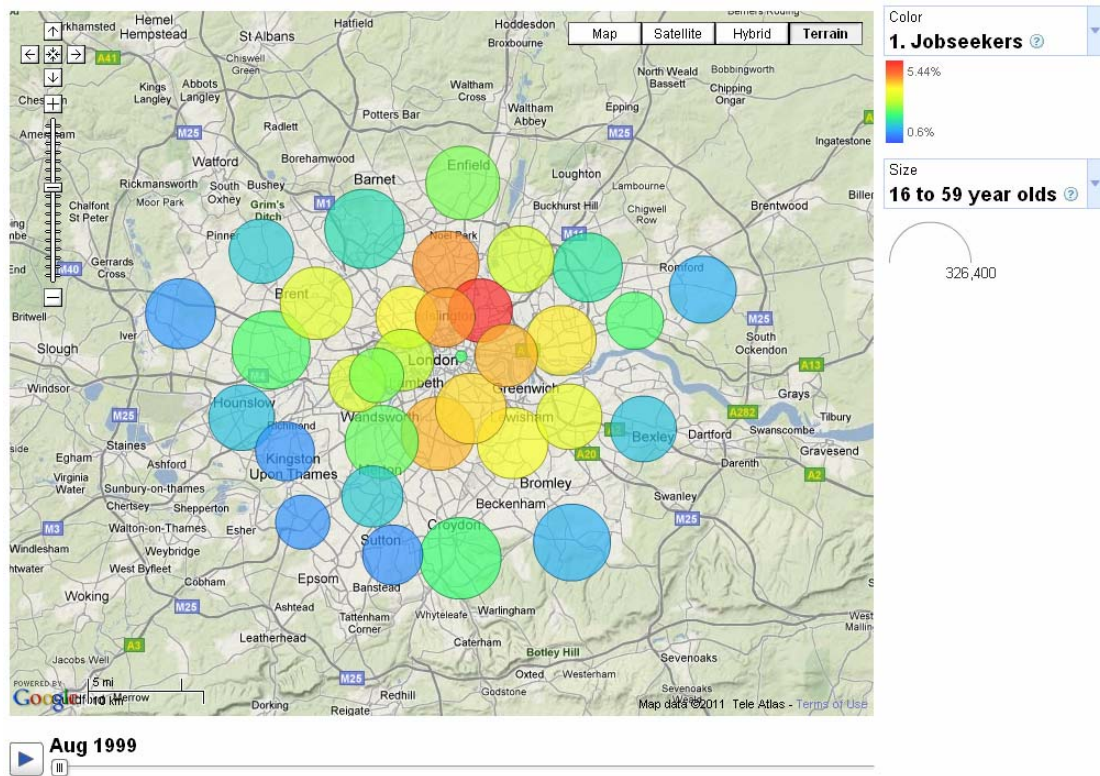
This example shows a local authority breakdown within the London region, with the bubbles centred within each relevant local authority. The size of the bubble represents the size of the 16-59 year old population, and the colour of the bubbles represent the proportion of Jobseekers. Clicking on the play button allows the map to animate over time.