General Details	
Dataset Title:	Population Density (UV02)
Time Period of Dataset(s):	2001
Geographic Coverage:	England and Wales
Lowest Area Output:	Output Area
Supplier:	Office for National Statistics
Department:	Neighbourhood Statistics and Census Output
National Statistics Data	National Statistics – this dataset fully complies with the National Statistics
	Code of Practice and related protocols

Data Quality

This document provides a range of information that describes the quality of the data and details any points that should be noted when using the data.

ONS has developed <u>Guidelines For Measuring Statistical Quality</u>; these are based upon the six European Statistical Service (ESS) Dimensions of Quality developed by Eurostat. The dimensions are:

- Relevance
- Accuracy
- · Timeliness and Punctuality
- Accessibility and Clarity
- Comparability
- Coherence

About the dataset

(including the quality dimensions: Relevance and Timeliness and Punctuality)

This is one of the set of Univariate tables produced as part of the Census Area Statistics from the 2001 Census. The Univariate tables give results for a single Census variable.

This table is about Population Density.

This table shows the Usual Resident Population and the size of the area in hectares. The table also shows the density (number of persons usually resident per hectare).

The population of this table is all people.

This dataset is available for the following geographies:

- Output Areas;
- Lower Laver Super Output Areas:
- Middle Layer Super Output Areas;
- Wards:
- Local Authorities;
- · Regions; and,
- National level

The confidentiality of personal information is paramount, and disclosure protection measures to prevent inadvertent disclosure of information about individuals or households have been applied to the dataset.

How the data are collected

The Census was designed to collect information on the resident population on Census Day - 29 April 2001. Enumerators delivered Census forms to every private household and every communal establishment in advance. Residents were asked to complete the forms with the information as correct on Census Day, and to post the completed forms back in a pre-addressed envelope. Where a form was not received through the post after a specified period, the enumerator visited the address in order to collect the form by hand. Arrangements made to enumerate special groups such as the Armed Forces and people sleeping rough.

The Census was followed by the Census Coverage Survey (CCS) which took place between 24 May and 18 June 2001. This was an independent doorstep survey of a sample of a third of a million households, covering every local authority, which was used to adjust the Census counts for under-enumeration.

Further information on the methodological procedures used in the 2001 Census may be found here.

To improve the quality of published Census results, the collected data have been subject to edit and imputation procedures for incorrect or missing data. Edit procedures applied to obviously incorrect responses (such as someone aged 180) and were designed to correct the mistake by making the least possible change to the data. Imputation procedures applied to missing data on a returned form, and drew on responses to the question from people with similar characteristics. Since missing data were imputed, there are no 'not stated' categories in tables, except for those tables relating to Religion. As this was a voluntary question responses were not imputed.

Concepts and Definitions

2001 Population

In the 2001 Census information was collected for usual residents. A usual resident was generally defined as someone who spent most of their time at a specific address. It included: people who usually lived at that address but were temporarily away (on holiday, visiting friends or relatives, or temporarily in a hospital or similar establishment); people who worked away from home for part of the time; students, if it was their term-time address; a baby born before 30 April 2001 even if it was still in hospital; and people present on Census Day, even if temporarily, who had no other usual address. However, it did not include anyone present on Census Day who had another usual address or anyone who had been living or intended to live in a special establishment, such as a residential home, nursing home or hospital, for six months or more.

The area in hectares.

Population density

Number of residents per hectare.

Data Classifications

Standard Classifications used (if any):

Where possible Census results are presented using standard classifications. Further information on classifications used in the 2001 Census is available here.

Validation and Quality Assurance

(including the quality dimensions: Accuracy, Comparability and Coherence)

Questions included on the Census form, the design of the form itself, and the administrative procedures involved in collecting the Census data underwent substantial testing. Coding of the data was subject to quality checks. The quality of the results was improved by the use of edit and imputation procedures for missing or incorrect data, and the One Number Census process was used to correct for under-enumeration. Following this, the results have undergone an extensive quality assurance process, including checks against administrative records and sources of information on particular groups such as students and the armed forces.

Information on Census response rates and the accuracy of the Census results is available <u>here</u>. Further information on data quality will be published in a Quality Report in 2003.

Geographic Referencing

Census data are aggregated within different boundaries by assembling small geographical 'building bricks' to which the data are coded. The most adaptable and unchanging 'building brick' is a National Grid co-ordinate reference. Reference to a grid square of one metre gives a building, the households and people within it, a unique geographical location. Data with such references may be 'captured' and aggregated for any area with a boundary represented by a line of co-ordinates - termed a digital boundary.

Every record on the output database of the 2001 Census has to co-ordinate reference to one metre resolution, as well as a postcode and more conventional area codes. This facilitates the ONS geographical referencing strategy and allows the data to be aggregated to current, new, old or ad hoc boundaries. It is also the basis of improved small areas for the presentation of statistics – the Output Areas.

Further information on the Output Geography used in the 2001 Census may be found here.

Disclosure Control

The confidentiality of personal Census information is paramount, and disclosure protection measures are used to prevent the inadvertent disclosure of information about identifiable individuals.

Small counts in all tables issued for England and Wales are adjusted. In addition there has been swapping of records in the output database, and broad limitations are placed on details in tables to be produced for small populations. There are also minimum thresholds of numbers of person and households for the release of sets of output. For Key Statistics these are 40 households and 100 persons. The adjustment of small counts means that each table will be internally consistent and sum to the totals given, however, different tables may show different counts for the same area or population.

More details on the ONS Census disclosure control strategy may be found here.

Sources for Further Information or Advice

(including the quality dimension: Accessibility and Clarity)

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