

# An Introduction to the UK Data Service

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# Overview

- Who are we?
- What is data?
- What types of data do we hold?
- Online resources
- Further help
- Questions?



# What is the UK Data Service?

- Comprehensive resource funded by the ESRC
- Access to secondary social science data
- The UK Data Archive is the lead organisation
- Support, training and guidance

# UK Data Service Website

Explore the UK's largest collection of social, economic and population data resources

Search data 

## How to cite data correctly



## Guides and resources

Dataset guides

Topic guides

Methods and software guides

Guides to exploring online

See more >



### Video tutorials

See our range of training videos

# Who is it for?

- Academic researchers and students
- Government analysts
- Charities and foundations
- Business consultants and data analysts
- Independent research centres and think tanks

# What is data?

- Facts and statistics collected together for reference or analysis
- Distinct pieces of information
- Surveys, administrative records, business records, censuses



# How do you get data?

- Primary data collection?
- Advantages of secondary data collection



# Sources of data

- National statistical authorities
- UK government departments
- Intergovernmental organisations
- Research institutes
- Individual researchers





# Types of data

## Survey Microdata

Major UK surveys

Cross-national

Longitudinal

## International Macrodata

Multi-nation aggregate  
databanks and survey  
data

## Census

Aggregate data for 1971-  
2011

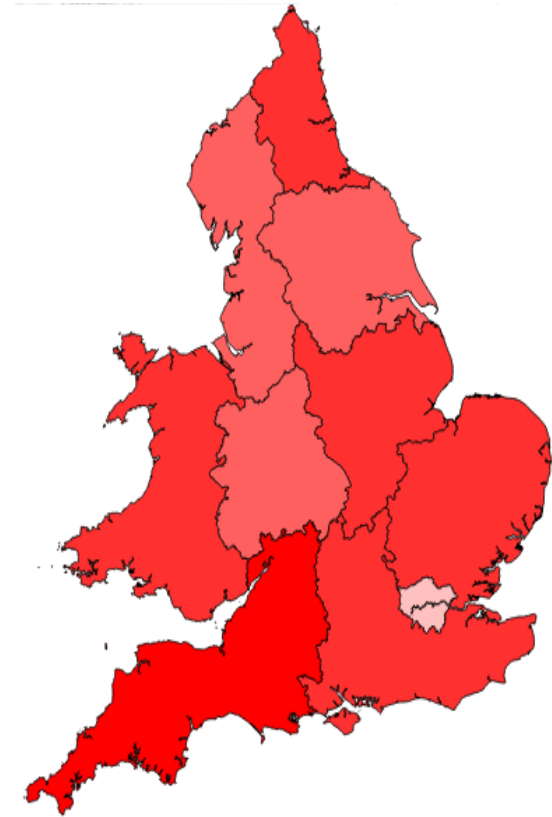
Microdata for 1991-2011

## Qualitative/Mixed methods

Range of multimedia  
qualitative data sources  
Mix of qualitative and  
quantitative data

# Micro data vs Macro data

- Micro data
  - Data at the individual level
  - Collected through surveys
- Macro data – aggregate data
  - Region or country level
  - Aggregated counts

















# Survey Microdata

# Survey Microdata

- Anonymised individual or household level data
- Large sample sizes
- Nationally-representative
- SPSS or Stata
- Flexible

# Survey Microdata: example

File Edit View Data Transform Analyze Graphs Utilities Add-ons Window Help



	rowlabel	sex	age	livharm1	ethgrp2	educat3	work
1	61302140	2	36	1	1	1	1
2	61384060	1	44	4	1	3	1
3	63684260	1	43	1	1	2	1
4	63790220	2	27	3	4	3	1
5	63843180	1	38	1	1	4	1
6	71105020	2	18	3	3	2	1
7	71105140	1	65	3	3	4	1
8	71106020	1	58	5	1	1	2
9	71106060	2	38	3	1	1	2
10	71108100	1	29	3	4	4	2
11	71110140	1	38	2	1	4	1
12	71110260	1	67	3	1	1	1
13	71114020	1	21	3	1	3	1
14	71115060	2	37	4	4	2	2
15	71119020	2	23	3	2	4	1
16	71119060	1	57	1	5	5	2
17	71119140	2	34	3	4	3	2
18	71119180	1	55	3	1	4	1
19	71119220	2	27	3	1	4	2

# Survey Microdata: Working

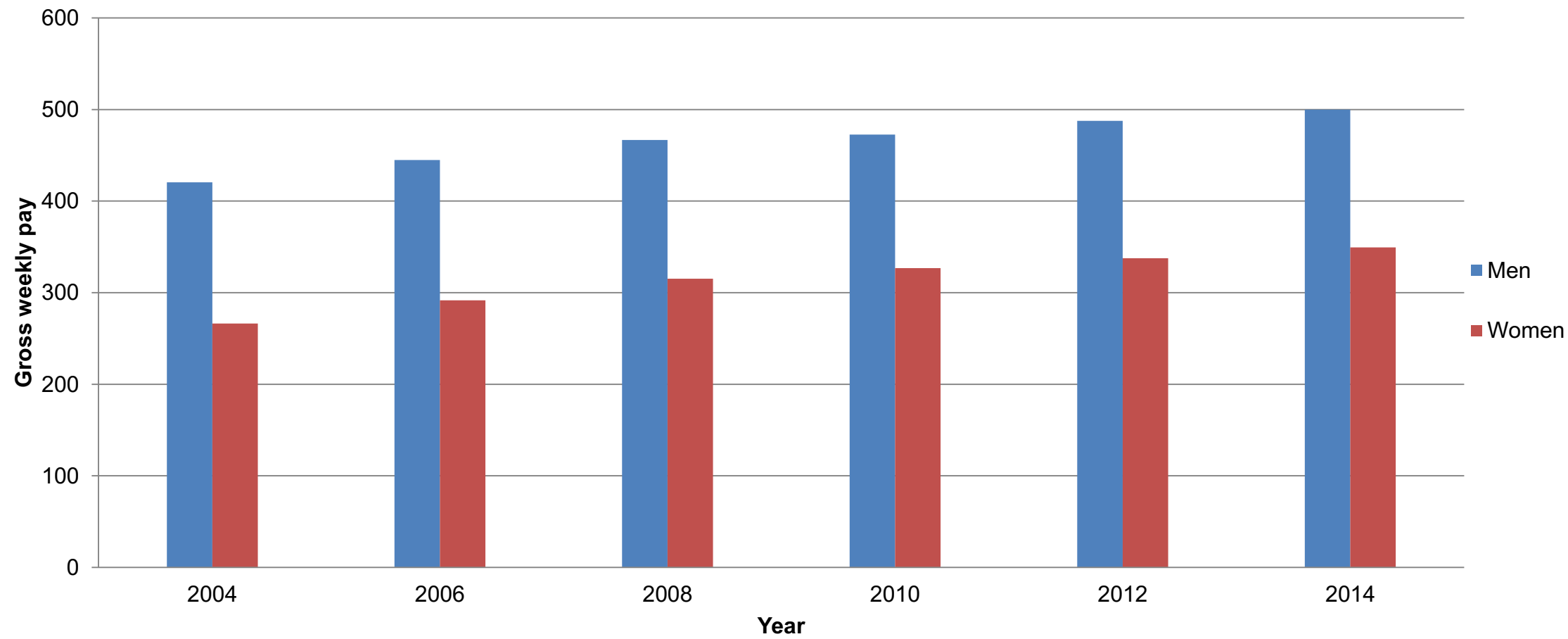
**(D) Age 16-65+ in ten year age bands ^ (D) BMI grouped with Obese categories I, II, III Crosstabulation**

Count

		(D) BMI grouped with Obese categories I, II, III						Total
		Underweight: less than 18.5	Normal: 18.5 to less than 25	Overweight: 25 to less than 30	Obese I: 30 to less than 35	Obese II: 35 to less than 40	Obese III: 40 or more	
(D) Age 16-65+ in ten year age bands	16-24	25	235	84	29	14	9	396
	25-34	9	306	180	83	37	11	626
	35-44	5	302	324	134	43	20	828
	45-54	5	301	341	190	68	33	938
	55-64	4	210	322	184	58	25	803
	65+	9	328	591	274	71	17	1290
Total		57	1682	1842	894	291	115	4881

# Survey Microdata: Outputs

**Gross Weekly Pay (£) in Main Job by Sex, 2004-2014**  
**Annual Population Survey**



# Cross- sectional surveys

- Many repeated annually
- Different people interviewed
- Snapshot at a specific time point
- Covers- health, work, crime





# Key data: Cross-sectional surveys

- Labour Force Survey (1975-)
- Annual Population Survey (2004-)
- Family Expenditure Survey (1961-2001)
- Crime Survey for England and Wales (1982-)
- British Social Attitudes Survey (1983 -)

# Labour Force Survey

- Annually then quarterly
- International definitions of employment, unemployment & economic inactivity
- Informs social, economic & employment policies
- Topics include: occupation, training, working hours

# Longitudinal data – Panel & Cohort data

- Similar to cross-sectional surveys
- One key difference!
  - Use the same individuals
  - Change over time
  - Temporal order of events studied



# Panel Studies

- Measurements are called waves
- Random sample of individuals
- Questionnaires core content remains the same
- Additional questions can be asked

# Understanding Society

- 40,000 households
- Data collected from all household members
- Employment; family networks; religion, ethnicity, health
- Consents to administrative data linkage



# Cohort studies

- Individuals with a common event
- Measurements are called sweeps
- Examine generational change
- Questionnaire content is age-specific

# Birth Cohort studies- sweeps

1958 National Child Development Study	1970 British Cohort Study	Millennium Cohort Study
1958 - birth	1970 - birth	2000-02 – birth
1965 - age 7	1975 - age 5	2001-03 – 9 months
1969 - age 11	1980 - age 10	2006 – age 5
1974 - age 16	1986 - age 16	2008 - age 7
1981 - age 23	1996 - age 26	2012 - age 11
1991 - age 33	1999-2000 – age 29-30	2015 - age 14
1999-2000 – age 41-42	2004-05 - age 34-35	2018– age 17
2004-05 – age 46-47	2008-09 - age 38-39	
2008-09 – age 50	2012 - age 42	
2013-14 – age 55	2016 – age 46	
2018 – age 60	FUTURE: 2020 – age 50	

# Cross- national surveys

- Individual or household level data
- Allow comparisons across different countries
- Topics: education and income
- Example- European Quality of Life Survey





# International Macrodata

# International Macrodata

- Time series data aggregated to country/region
- Regularly updated
- International governmental organisations
- Certain access conditions



# International Macrodata themes

Databanks cover:

- Economic performance and development
- Trade, industry and markets
- Employment
- Demography, migration and health
- Governance

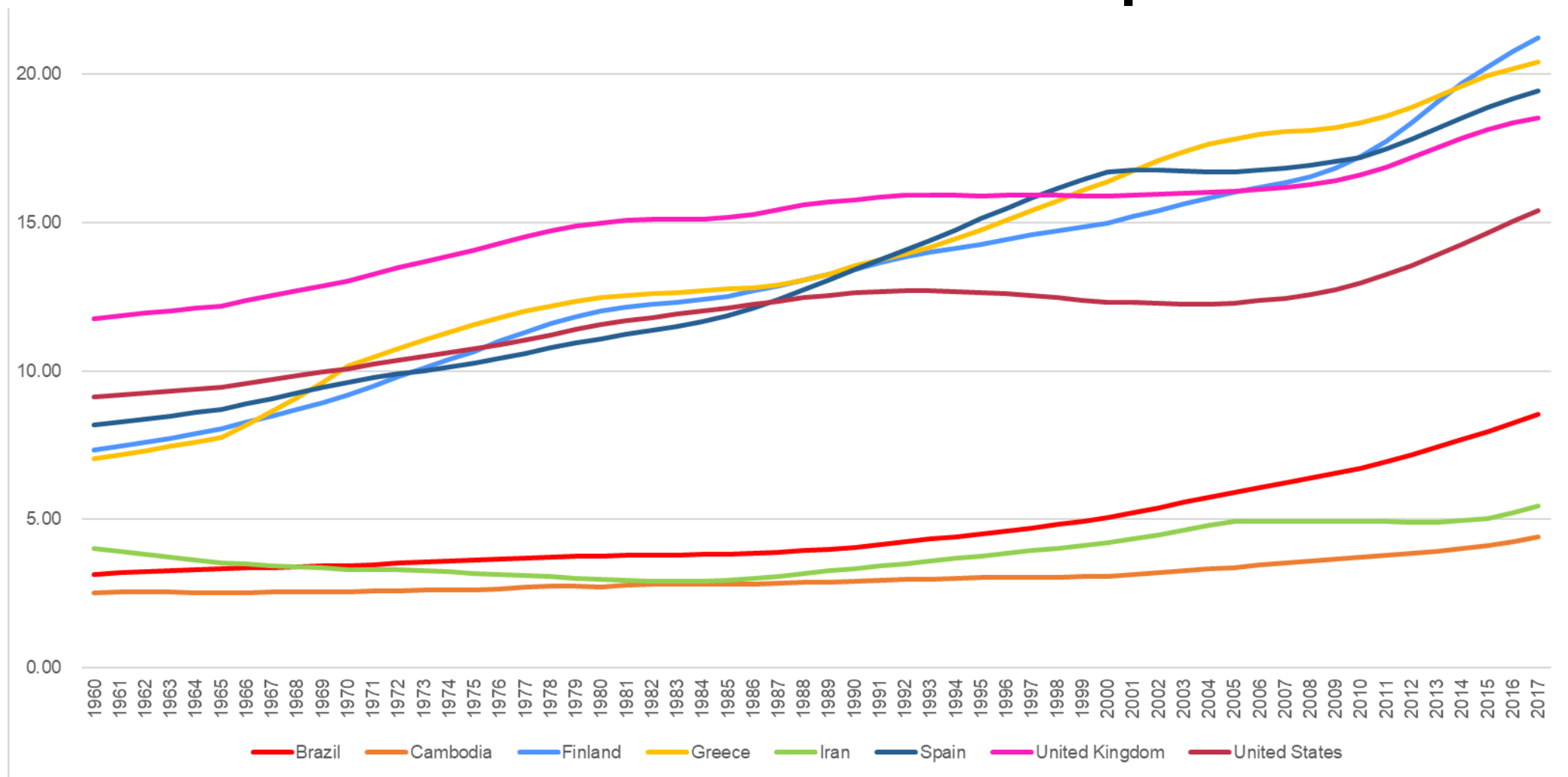


# International Macrodata: Tools

- UKDS.Stat or IMF e-library
- View the data by provider
- Extract the information you require



# International Macrodata Outputs



Population ages 65 & over (% of total population) 1960 – 2017  
World Bank (October 2019): World Development Indicators

# Census Data

# UK Census Data

- 1971-2011 census data
- Used as baseline for other statistics
- Detailed combinations of characteristics
- Small geographies



# Census Aggregate data

- Counts of people with particular combinations of characteristics
- Large to very small areas





# Census tools - InFuse

UK Data Service  
Census Support



## InFuse: 2011 Census data



Steps: **1** 2 3 4

[Start Again](#)

### Topics

[+ Show Guidance](#)

#### Filters

[Clear filters](#)

Showing 90 topic combinations

Page 1 of 6

[First](#) < [1](#) [2](#) [3](#) > [Last](#)

#### Topics

- ☐ Accommodation type
- ☐ Adult lifestage (alternative adult definition)
- ☐ Adults in household, number of
- ☐ Age
- ☐ Age of arrival in the UK
- ☐ Age of children
- ☐ Age of household reference person
- ☐ Age of schoolchildren and

• Accommodation type

Select

• Age  
• Dependent children  
• Family status  
• Sex

Select

• Age  
• Economic activity  
• Industry

Select

• Age  
• Economic activity

Select

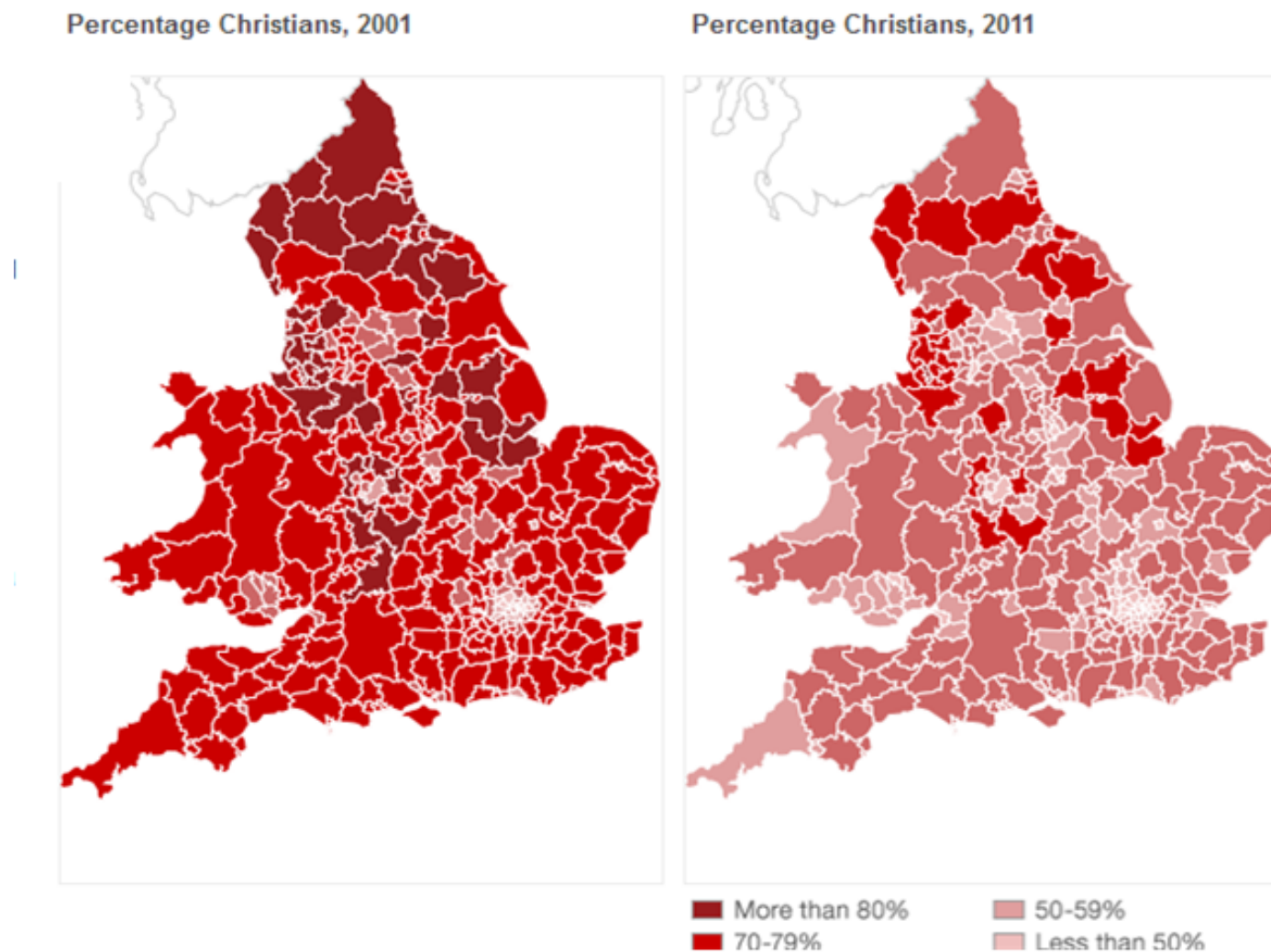
• Accommodation type  
• Usual resident population

• Age  
• Economic activity  
• Hours worked  
• Sex

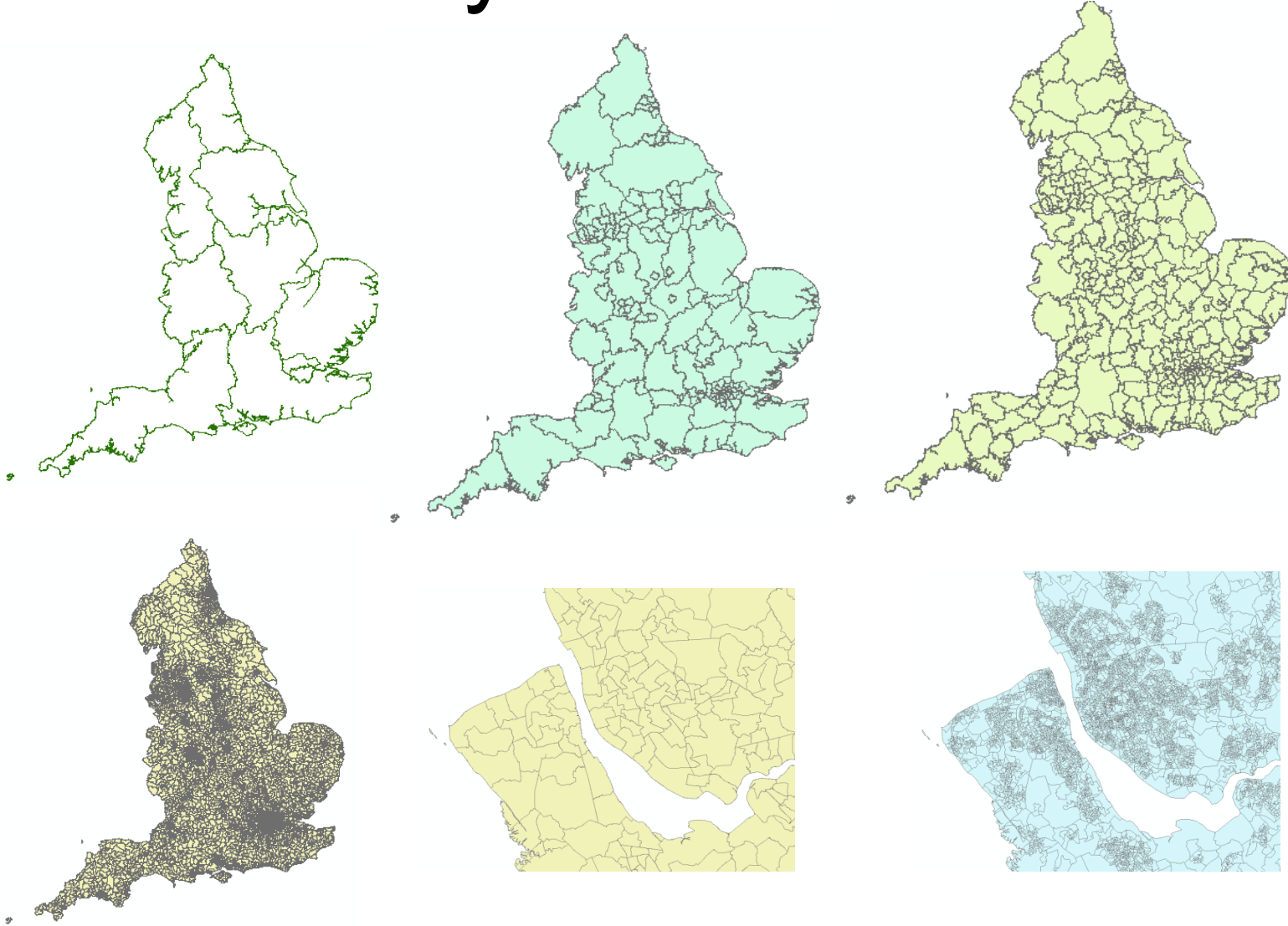
• Age  
• Economic activity  
• Occupation  
• Sex

• Age  
• Qualification, highest level of

# Census data Output: Religion



# Census Boundary data



# Census tools- Boundary data

## ACCESS BOUNDARY DATA

These tools are restricted to staff and students from UK further/higher education institutions.



### [EasyDownload](#)

The most regularly requested census boundaries available as ready-to-use national datasets in popular formats



### [Boundary Data Selector](#)

This facility lets you select the boundaries you want, for the area you want, in the format you want



### [Postcode Directory Download](#)

This facility allows you to download complete versions of current and historical postcode directories (sometimes referred to as look-up tables)



### [Postcode Data Selector](#)

This facility allows you to download the set of postcodes that you want from postcode directories released between 2001 and the present day



### [GeoConvert](#)

A geography matching and conversion tool. Obtain and manipulate complex geographical and postcode data in a straightforward way



### [Thematic Mapper](#)

Create Choropleth thematic maps from your own uploaded CSV file and boundary data from Census Support



### [Metadata Viewer](#)

This facility allows you to search for and view metadata records associated with the census geographic datasets



### [WICID \(Web-based Interface to Census Interaction Data\)](#)

This facility allows users to select and download migration and journey-to-work flow data collected by the Census of Population.



### [Casweb](#)

This facility contains boundary data bundled with census aggregate data for the 2001 and 1991 Censuses

# Census Flow data

- Special type of aggregate data
- There is an origin and destination
- Two main types: commuting and migration
- WICID tool





# Census Microdata

- Anonymised individual-level data
- Analysed using SPSS or Stata
- Flexible
- 1991, 2001 and 2011 SARs available



# Registering with the UK Data Service

# Registering with the UK Data Service

- UK university- register through institution
- Apply for a username





# Registering on the website

UK Data Service



About our data

Key data

Data by theme

Data by geography

Open data

How to access

Registration

Download and order

Access Secure Lab

Charges

Terms and conditions of access

Other providers

Explore online

Data access policy

Thesauri

About us

Get data

Use data

Manage data

Deposit data

News and events

Home > Discover data > How to access > Registration

## Registration

Information on the registration and ordering process is available by selecting one of the following options:

UK university or college users

Other UK users

Non UK users

Commercial users

SHARE

If you are a student or member of staff at a UK institution of higher or further education (UK HE/FE), you can register with us using the username and password issued to you by your institution.

### To register with the UK Data Service:

1. Click 'Register'
2. Click 'Register with the UK Data Service' under New users
3. Enter/select your organisation\*, then click 'Continue'
4. Login using your username and password
5. Select 'New user' and then complete the registration form
6. Agree to the End User Licence (EUL), which outlines the terms and conditions of use of the Service, and then follow the instructions to complete your registration

Once registration is complete you will be able to [download/order](#) data from us.

\* Note: If your username was issued to you by the UK Data Archive and begins with 'ukd', you need to enter 'UK Data Archive' as your organisation.

LOGIN / REGISTER

DISCOVER UK DATA SERVICE

GO

Data Website

QUICK ACCESS TO

FAQ - Login and registration

Get in touch: registration

Searching for Data

# Searching for Data

- Something for everyone
- Politics - British Election Study
- Economics - Labour Force Survey
- Sociology - British Household Panel Survey
- Survey methods - UKHLS Innovation Panel



# Searching function

UK Data Service

About us


Get data

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Manage data

Deposit data

News and events



[in](#)

[f](#)

[t](#)

[v](#)


[it](#)

[Register](#)


Explore the UK's largest collection of social, economic and population data resources

education

Search data



About the UK Data Service



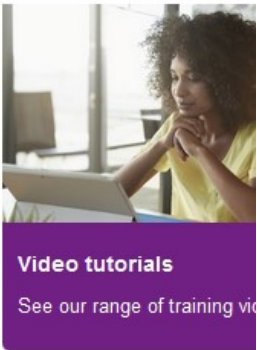
Dataset guides

Topic guides

Methods and software guides

Guides to exploring online

See more



Video tutorials

See our range of training videos

Useful resources and further help

# Advice for new users

We have webpages for new users about:

- How to register and access data
- How to find data with our search tools
- What kinds of data we hold
- How to contact us

## Advice for new users

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"Learn about our service and how to use our resources"



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The UK Data Service provides access to, and support for, the use of an extensive range of key economic and social data, spanning many disciplines and themes. Find out [about us](#).

Our search and browse application, [Discover](#), provides access to data and related resources, such as case studies, support guides and publications. Discover contains over 6,000 digital data collections for research and teaching purposes.

### Using our data

Anyone can register for our service but access to our resources may differ depending on your affiliation.

Academic	Public Sector	Voluntary Sector	Commercial	Personal
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# Interactive events

- Webinars
  - Introduction to key types of data
  - Specialised webinars for topic area, methods
  - Can be collaborative



# Resources for using data

UK Data Service



Advice and training

Guides

Video tutorials

Data in use

Citing data

Secure Lab

Teaching with data

Student resources

Data Skills Modules


Secondary analysis


About usGet dataUse dataManage dataDeposit data

Home > Use data

Use data

"Information,  
training and support  
for our users"



SHARE 

Behind everything we do is the desire to see data used to its maximum potential. To help you to make best use of our collection we offer resources and support for users.

This section contains information on:

- [advice and support](#), including information about our helpdesk and training
- a number of [guides](#), [video tutorials](#) and pointers to other useful information
- examples of [how the data have been used](#) by others
- information and resources designed for [teachers and learners](#)



# User Support Helpdesk

- Data-related queries
  - Finding suitable data
  - Identifying specific variables
  - Understanding the data
  - Data problems or anomalies

Help

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"How can we help?"



# Questions

[help@ukdataservice.ac.uk](mailto:help@ukdataservice.ac.uk)

<https://ukdataservice.ac.uk/>

<https://twitter.com/ukdataservice>