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# UK Data Service Introduction to Census

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UK Data Service  
Census Support

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# Programme

- Introduction to Census 13.00
- Introduction to aggregate data 13.30
- Practical one: Aggregate data 14.00
- Tea/coffee 14.30
- Introduction to flow data 14:45
- Practical two: Flow data 15.15
- Questions 15:45
- Close 16:00



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# What is the UK Data Service?

- a comprehensive resource funded by the ESRC
- a single point of access to a wide range of secondary social science data
- support, training and guidance



# What data do we hold?

## Surveys

Large-scale government funded UK and cross-national surveys

## Longitudinal

Major UK surveys following individuals over time

## International

Multi-nation aggregate databanks and survey data

## Census

Census data 1971 – 2011

## Business

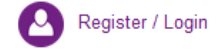
Microdata and administrative data

## Qualitative

Range of multimedia qualitative data sources

UK Data Service  
Census Support





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

Search data



### About the UK Data Service



### Guides and resources

Dataset guides

Topic guides

Methods and software guides

Guides to exploring online

See more >



#### Video tutorials

See our growing range of training videos

See data from all over the world

Browse our data map

### Data types

Census data

International macrodata

Longitudinal studies



Depositing data with the UK Data Service



### Latest data

Public Attitudes to Price Fixing in

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# Who are you?

- Where are you from?
- What do you do with data?
- Why are you here?



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# What is a census?

- Main function to count the ***population***
  - At one or more location
- Obtain some characteristics about the population
- Outputs at small geographies
- Informs public spending
- Used as a basis for other statistical systems



# The United Kingdom





Help tomorrow take shape

ce




# How were the data collected?

 **Household Questionnaire**  
England  
 Office for National Statistics



**Return to:**  
**FREEPOST 2011 Census,**  
**Processing Centre, UK**

**A message to everyone - act now**  
Everyone should be included in the census - all people, households and overnight visitors.  
It is used to help plan and fund services for your community - services like transport, education and health.  
Please complete your census questionnaire on 27 March 2011, or as soon as possible afterwards. You can fill it in online or on paper.  
Taking part in the census is very important and it's also compulsory. You could face a fine if you don't participate or if you supply false information.  
Your personal information is protected by law. Census information is kept confidential for 100 years.  
So help tomorrow take shape and be part of the 2011 Census.  
*J. N. Matheson*  
Jil Matheson  
National Statistician

**Complete online**  
 [www.census.gov.uk](http://www.census.gov.uk)  
Your personal internet access code is:


OR fill in this paper questionnaire and post it back using the pre-paid envelope supplied.

If your address is incorrect or missing, enter your correct address here:  
  
  
  
 Postcode

**Declaration**  
This questionnaire has been completed to the best of my knowledge and belief.  
Signature   
Date  Telephone number

We may contact you if we need to collect missing information.

If you have lost your envelope, please return to:  
FREEPOST 2011 Census, Processing Centre, UK

**Where can you get help?**  
 [www.census.gov.uk](http://www.census.gov.uk)

Self-completion

Post-out post back

Online completion

Census offices could focus resources on follow-up and hard to count areas

UK Data Service  
Census Support



# Census forms



## Household Questionnaire England

Office for  
National Statistics



### Complete online

[www.census.gov.uk](http://www.census.gov.uk)

Your personal internet access code is:

OR fill in this paper questionnaire and post it back using the pre-paid envelope supplied.

If your address is incorrect or missing, enter your correct address here:

### Declaration

This questionnaire has been completed to the best of my knowledge and belief.

Signature

Date

Telephone number

We may contact you if we need to col missing information.

If you have lost your envelope, please



Scotland's  
Census 2011  
Shaping our future

Household

27 March 2011

Official Use	CD	ED	Line Number
If there is a mistake in the please write your correct			
House name / number			
Street / Town / City			
Postcode			

### Why the census matters

The census is the official count of every person and household in Scotland. It is held every 10 years and helps to plan our future public services.

Please fill in this questionnaire on, or around, Sunday 27 March. Please include everyone at this address. It shouldn't take long and you can fill it in online.

As a householder, you have a legal duty to fill in this questionnaire. If you don't, or if you supply false information, you may be fined up to £1,000.

Your personal information is protected by law and we will keep it confidential for 100 years.

Thank you for helping to shape Scotland's future.

Duncan Macniven  
Registrar General for Scotland

### Need help?

[www.scotlandscensus.gov.uk](http://www.scotlandscensus.gov.uk)

Helpline 0300 123 1702

Textphone 18001 0300 123 1703

### Please fill in this ques

online at  
[www.scotlandscen](http://www.scotlandscen)

Enter the Internet Questionnaire

Or

Fill in this paper version an using the pre-paid envelop

### Declaration

I have filled in this questionnaire accurately, as far as I know.

Signature

Date



In strict confidence

## 1981 Census England

### H Form For Private Households

A household comprises either one person living alone or a group of persons (who may or may not be related) living at the same address with common housekeeping. Persons staying temporarily with the household are included.

### To the Head or Joint Heads or members of the Household

Please complete this census form and have it ready to be collected by the census enumerator for your area. He or she will call for the form on Monday 6 April 1981 or soon after. If you are not sure how to complete any of the entries on the form, the enumerator will be glad to help you when he calls. He will also need to check that you have filled in all the entries.

This census is being held in accordance with a decision made by Parliament. The leaflet headed 'Census 1981' describes why it is necessary and how the information will be used. Completion of this form is compulsory under the Census Act 1920. If you refuse to complete it, or if you give false information, you may have to pay a fine of up to £50.

Your replies will be treated in STRICT CONFIDENCE. They will be used to produce statistics but your name and address will NOT be fed into the census computer. After the census, the forms will be locked away for 100 years before they are passed to the Public Record Office.

If any member of the household who is age 16 or over does not wish you or other members of the household to see his or her personal information, then please ask the enumerator for an extra form and an envelope. The enumerator will then explain how to proceed.

When you have completed the form, please sign the declaration in Panel C on the last page.

A R THATCHER  
Registrar General

Office of Population Censuses and Surveys  
PO Box 200 Portsmouth PO2 8HH  
Telephone 0239-42511

Please answer questions H1 - H5 about your household's accommodation, check the answer in Panel A, answer questions 1-16 overleaf and Panel B on the back page. Where boxes are provided please answer by putting a tick against the answer which applies. For example, if the answer to the marital status question is 'Single', tick box 1 thus:

Please use ink or ballpoint pen.

1 Single

### To be completed by the Enumerator

Census District	Enumeration District	Form Number
Name	Address	
Postcode		

pleted by the Enumerator and amended, if by the person(s) signing this form.

old's accommodation is:  
an  20  
er, mobile or temporary structure  30  
result built kind of flat or maisonette  40

## 1971 CENSUS - ENGLAND

### H Form For Private Households

Household, for collection on Monday 24th April, 1971, by the census enumerator. Please complete this form as necessary to help him to complete

be treated as CONFIDENTIAL, and used only about census statistics will be Government Department or any other organisation, especially the Home Office, unless you consent in writing (e.g. a letter or leaflet) given you who

### H1 Rooms

Please count the rooms in your household's accommodation. Do not count:

small kitchens, that is those under 2 metres (6ft 6ins) wide, bathrooms, WCs.

Number of rooms .....

Note: Rooms divided by curtains or portable screens count as one; those divided by a fixed or sliding partition count as two. Rooms used solely for business, professional or trade purposes should be excluded.

### H2 Tenure

How do you and your household occupy your accommodation? Please tick the appropriate box.

As an owner occupier (including purchase by mortgage):

- 1 of freehold property
- 2 of leasehold property

By renting, rent free or by lease:

- 3 from a local authority (Council or New Town)
- 4 with a job, shop, farm or other business
- 5 from a housing association or charitable trust
- 6 furnished from a private landlord, company or other organisation
- 7 unfurnished from a private landlord, company or other organisation

In some other way:

- Please give details

### Note

- a If the accommodation is occupied by lease originally granted for, or since extended to, more than 21 years, tick box 2.
- b If a share in the property is being bought under an arrangement with a local authority, New Town corporation or housing association, for example, shared ownership (equity sharing), a co-ownership scheme, tick box 1 or 2 as appropriate.

### H3 Amenities

Has your household the use of the following amenities on these premises? Please tick the appropriate boxes.

- A fixed bath or shower permanently connected to a water supply and a waste pipe
  - 1 YES - for use only by this household
  - 2 YES - for use also by another household
  - 3 NO fixed bath or shower

- A flush toilet (WC) with entrance inside the building
  - 1 YES - for use only by this household
  - 2 YES - for use also by another household
  - 3 NO inside flush toilet (WC)

- A flush toilet (WC) with entrance outside the building
  - 1 YES - for use only by this household
  - 2 YES - for use also by another household
  - 3 NO outside flush toilet (WC)

H4 Please answer this question if box 11 in Panel A is ticked. Are your rooms (not counting a bathroom or WC) enclosed behind your own front door inside the building?

1 YES  2 NO

If your household has only one room (not including a bathroom or WC) please answer 'YES'.

### H5 Cars and vans

Please tick the appropriate box to indicate the number of cars and vans.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

## 29 April count me in Census2001

### England Household Form

H1			
Name			
CD			
Address			
ED			
Form Number			
Postcode			
* Form 1 of			
* Multi-form households only			
To the Householder, Joint Householders or members of the household aged 16 or over			
What you have to do			
Your household should complete this form in black or			

# What questions were asked?

## Demographics

Age  
Sex  
Country of Birth  
Short-term residence  
Ethnicity  
Religion  
Passports  
Language  
National identity  
Household relationships  
Marital status  
Second residence  
Migration

## Household

Tenure  
Accommodation  
type  
Cars  
Central heating  
No. of bedrooms

## Socio-economic

Health  
Unpaid care  
Qualifications  
Economic activity  
Occupation  
Industry  
Supervision  
Travel to work  
FT / PT



# Religion UK 2011

## Northern Ireland

20 What is your religion?

→ This question is voluntary

- No religion
- Christian (including Church of England, Catholic, Protestant and all other Christian denominations)
- Buddhist
- Hindu
- Jewish
- Muslim
- Sikh
- Any other religion, write in

England

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

20 What is your religion?

→ This question is voluntary

- No religion
- Christian (all denominations)
- Buddhist
- Hindu
- Jewish
- Muslim
- Sikh
- Any other religion, write in

Wales

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

13 What religion, religious denomination or body do you belong to?

◆ This question is voluntary.

- None
- Church of Scotland
- Roman Catholic
- Other Christian, please write in below
- Muslim
- Buddhist
- Sikh
- Jewish
- Hindu
- Another religion or body, please write in

Scotland

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

17 What religion, religious denomination or body do you belong to?

- Roman Catholic → Go to 19
- Presbyterian Church in Ireland → Go to 19
- Church of Ireland → Go to 19
- Methodist Church in Ireland → Go to 19
- Other, write in → Go to 19

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

None

18 What religion, religious denomination or body were you brought up in?

- Roman Catholic
- Presbyterian Church in Ireland
- Church of Ireland
- Methodist Church in Ireland
- Other, write in

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

None





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# Ethnicity

- Great Britain data from 1991 onwards
- Northern Ireland 2001 onwards



# 2011 ethnicity questions

**16** What is your ethnic group?  
 Choose **one** section from A to E, then tick **one** box to best describe your ethnic group or background

- A White**
- English/Welsh/Scottish/Northern Irish/British
  - Irish
  - Gypsy or Irish Traveller
  - Any other White background, write in

- B Mixed/multiple ethnic groups**
- White and Black Caribbean
  - White and Black African
  - White and Asian
  - Any other Mixed/multiple ethnic background, write in

- C Asian/Asian British**
- Indian
  - Pakistani
  - Bangladeshi
  - Chinese
  - Any other Asian background, write in

- D Black/African/Caribbean/Black British**
- African
  - Caribbean
  - Any other Black/African/Caribbean background, write in

- E Other ethnic group**
- Arab
  - Any other ethnic group, write in

England

**16** What is your ethnic group?

Tick **one** box only.

- White
- Chinese
- Irish Traveller
- Indian
- Pakistani
- Bangladeshi
- Black Caribbean
- Black African
- Black Other
- Mixed ethnic group, write in

- Any other ethnic group, write in

Northern Ireland

**15** What is your ethnic group?

Choose **ONE** section from A to F, then tick **ONE** box which **best describes** your ethnic group or background.

**A White**

- Scottish
- Other British
- Irish
- Gypsy / Traveller
- Polish
- Other white ethnic group, please write in

Scotland

**B Mixed or multiple ethnic groups**

- Any mixed or multiple ethnic groups, please write in

**C Asian, Asian Scottish or Asian British**

- Pakistani, Pakistani Scottish or Pakistani British
- Indian, Indian Scottish or Indian British
- Bangladeshi, Bangladeshi Scottish or Bangladeshi British
- Chinese, Chinese Scottish or Chinese British
- Other, please write in

**D African**

- African, African Scottish or African British
- Other, please write in

**E Caribbean or Black**

- Caribbean, Caribbean Scottish or Caribbean British
- Black, Black Scottish or Black British
- Other, please write in

**F Other ethnic group**

- Arab, Arab Scottish or Arab British
- Other, please write in





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# Getting a complete count

- Establishing a high quality address register
- Focusing resources on hard to count areas
- Target response rate of 94% achieved – no local authority below 80%
- Lower response rates for young men, those born overseas, those who live alone
- Coverage survey used to estimate undercounts, to enable imputation



# The promise of confidentiality

The information you provided to us in the 2011 Census is confidential and protected by law.

The confidentiality of personal information is a top priority for the census. Your personal census information is not shared with any other government department, local councils or marketing companies.

Information collected in the 2011 Census will be used solely to produce statistics and for statistical research. These statistics will not reveal any personal information.

The paper questionnaires are scanned, then shredded, pulped and recycled. Census records are kept confidential for 100 years before being made available to the public. Census records remain closed while they are in the custody of the census offices. Records from the 2011 Census for England and Wales are not scheduled for public release before January 2112

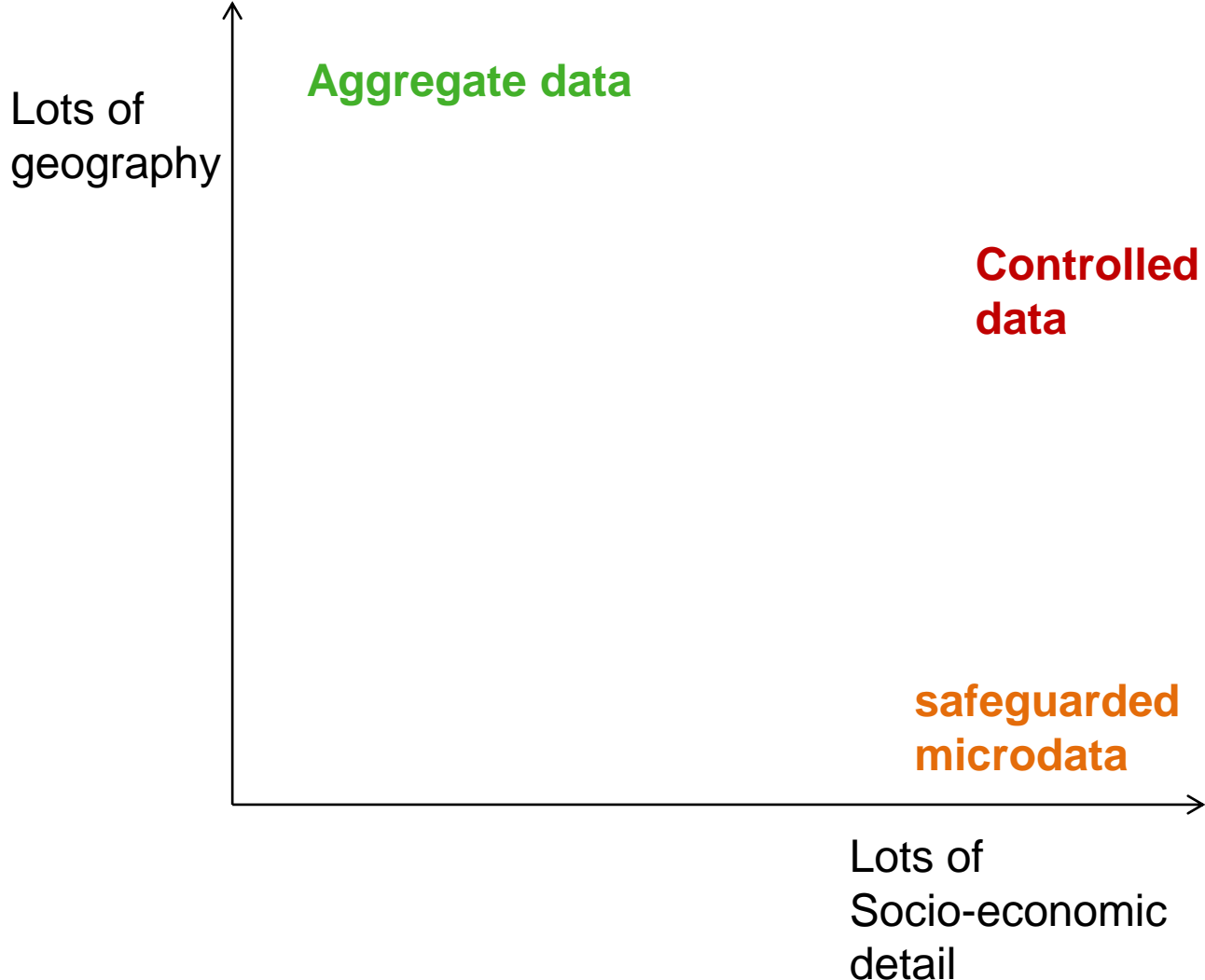
Office for National Statistics,

<http://www.ons.gov.uk/ons/guide-method/census/2011/confidentiality/index.html>

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# Reflecting confidentiality in output planning



# UK census data

- 1971-2011 UK census data
- used as baseline for other statistics
- detailed combinations of characteristics
- small geographies
- census outputs
  - aggregate data
  - boundary data
  - flow data
  - microdata



# Microdata (Individual level detail)

- Individual records contain person and household characteristics
- Sample data only
- Limited geography

	agegpt	aprxsocgr	cofbt	econacit	ethewit	famcomp	health1	indusit	marstatit	numhrs	occupat
1	55 to 6	DE	UK	Economi	White	Married	Good he	Mining/	Married	No code	Proce
2	35 to 4	C2	UK	Economi	White	Lone pa	Very go	Transpo	Single	Full-ti	Proce
3	35 to 4	DE	UK	Economi	White	Cohabit	Very go	Human h	Single	Full-ti	Carir
4	16 to 2	C1	UK	Economi	White	Cohabit	Good he	Financi	Single	Full-ti	Sales
5	45 to 5	C1	UK	Economi	White	Cohabit	Very go	Wholesa	Divorce	Full-ti	Manag
6	55 to 6	C2	UK	Economi	White	Married	Good he	Mining/	Married	Full-ti	Elem
7	35 to 4	C2	UK	Economi	White	Lone pa	Good he	Human h	Separat	Part-ti	Carir
8	0 to 15	No code	UK	No code	White	Cohabit	Good he	No code	Single	No code	No co
9	65 to 7	C1	UK	Economi	White	Married	Very go	Mining/	Married	No code	Proce
10	55 to 6	DE	UK	Economi	White	Not in	Fair he	Accommo	Divorce	No code	Elem
11	25 to 3	DE	UK	Economi	White	Not in	Fair he	Mining/	Single	Full-ti	Proce
12	0 to 15	No code	UK	No code	White	Married	Very go	No code	Single	No code	No co
13	16 to 2	C1	UK	Economi	White	Not in	Very go	Mining/	Single	Full-ti	Sales
14	16 to 2	C1	UK	Economi	White	Not in	Good he	No code	Single	No code	No co
15	16 to 2	DE	UK	Economi	White	Lone pa	Good he	Wholesa	Single	Part-ti	Sales
16	16 to 2	C1	UK	Economi	White	Not in	Good he	Transpo	Single	No code	Sales
17	16 to 2	DE	UK	Economi	White	Cohabit	Very go	Constru	Single	Full-ti	Proce
18	16 to 2	C1	UK	Economi	White	Cohabit	Very go	No code	Single	No code	No co
19	35 to 4	DE	UK	Economi	White	Not in	Fair he	Mining/	Single	Full-ti	Proce
20	0 to 15	No code	UK	No code	White	Married	Very go	No code	Single	No code	No co
21	65 to 7	DE	UK	Economi	White	Married	Fair he	Mining/	Married	No code	Elem

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# Why use this type of data?

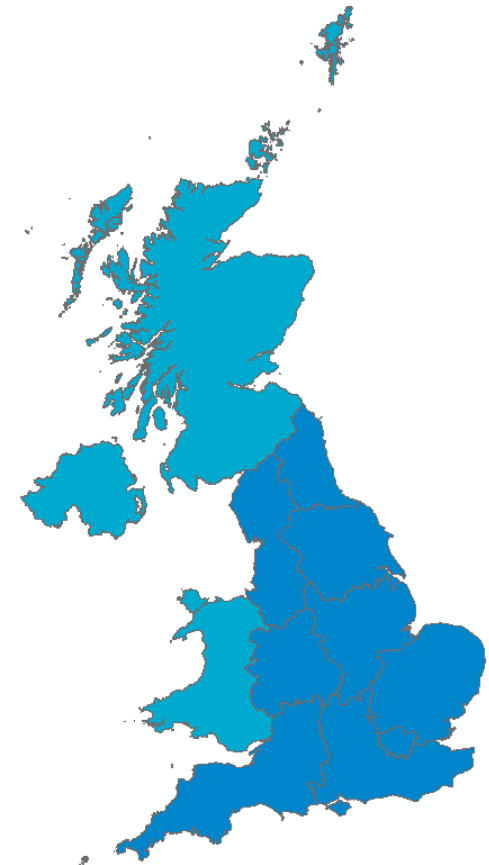
- Very flexible
  - Can create your own tables
  - Can combine characteristics to create new ones
  - Can define sub populations
  - Can undertake multivariate analysis
- But
  - Sample data, means that results are estimates
  - Geographical detail is limited



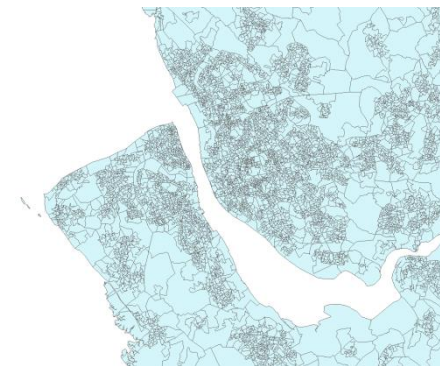
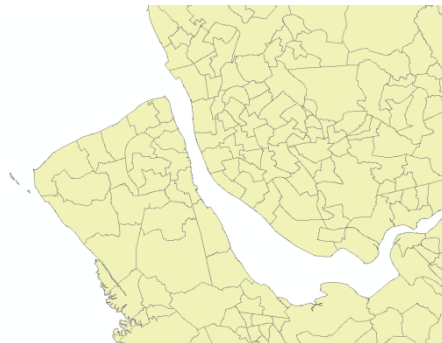
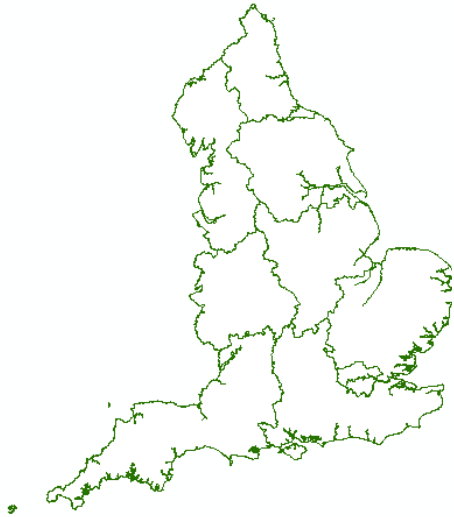
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# Boundary data

- 1971-2011 (also some historical boundaries)
- most data open to all (some restricted to UK FE/HE)
- GIS formats
- delivered through:
  - Easy Download
  - Boundary Data Selector
- Thematic Mapper



# Census boundary data

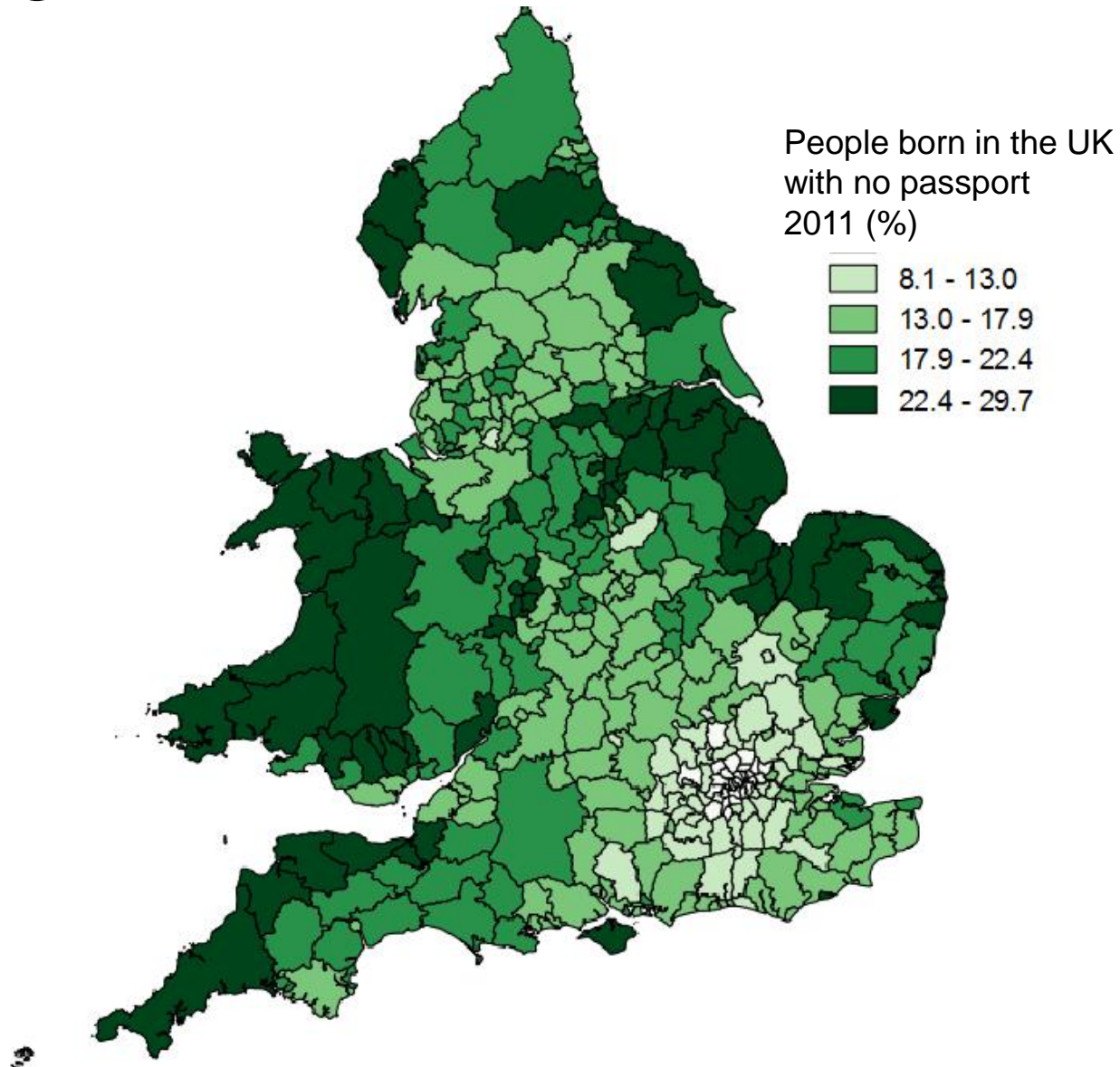


Service  
Support





# Putting data in maps



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# How are census data used?

- Government departments
- Local authorities
- Emergency services
- Third sector
- Business and commerce
- Research



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# 2021

- Predominantly online census
- Researching areas:
  - Gender identity
  - Sexual orientation
  - Volunteering
- Administrative data
  - Valuation Office Agency: rooms
  - Qualifications
  - Commuter flows from mobile phone data



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# Questions

[ukdataservice.ac.uk/help/](http://ukdataservice.ac.uk/help/)

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UK Data Archive  
Census Support

