

Longitudinal Studies Centre - Scotland

Home of the Scottish Longitudinal Study



The SCOTTISH LONGITUDINAL STUDY (SLS)

linking lives through time

www.lscs.ac.uk

E·S·R·C
ECONOMIC
& SOCIAL
RESEARCH
COUNCIL

What is the SLS?

- The SLS is a large-scale, anonymised linkage study designed to capture 5.5% of the Scottish population
- Sample based on 20 semi-random birthdates
- It actually contains information on a 5.3% sample
- It is built using data available from...
 - Census data (initial sample from 1991, then 2001)
 - Vital Events data (births, deaths, marriages etc...)
 - National Health Service Central Register (NHSCR) data (migration into or out of Scotland)
 - NHS data (cancer registrations, hospital episodes and maternity data)
 - Education data



Scotland's CENSUS

29 APRIL 2001

count me in

This section to be completed by the Census Enumerator

Household Form H4

Name

Address

Postcode

CD

ED

Form Number

* Form 1 of

To the Householder or Joint Householders

Dear Householder

The Census is a count every ten years of all people and households in the country. This is the first to be carried out for the Scottish Parliament, and will be used to improve the economic and social condition of Scotland. Central and local government, health authorities and many other organisations use Census information to allocate resources and plan services for everyone.

Your legal obligation

Completion of the Census form is compulsory, and the Scottish Parliament has approved the questions to be asked. If you refuse to complete the form, or give false information, you may be liable to a fine. Questions 13 and 14 about religion are voluntary.

Confidentiality

The information you provide is protected by law and treated in strict confidence. The information is only used for statistical purposes. Anyone using or disclosing Census information improperly will be liable to prosecution. The information on your Census form will be treated as confidential for a period of 100 years.

Thank you for your co-operation.

J.N. Randall

J.N. Randall
REGISTRAR GENERAL FOR SCOTLAND
Edinburgh

What you have to do

- ◆ Your household should complete this form in **black or blue ink**. A household is:
 - one person living alone, or
 - a group of people (not necessarily related) living at the same address with common housekeeping - sharing either a living room or sitting room, or at least one meal a day.
- ◆ Any other household at your address should complete its own form.
- ◆ In Table 1 on page 2 list the household members living at the above address on the night of 29/30 April 2001. It may help if you use Table 2 to list visitors.
- ◆ Answer the questions about your accommodation on page 3.
- ◆ Complete the Relationship Section on pages 4 and 5.
- ◆ Ensure that a Person Section (three pages) is completed for each household member listed in Table 1.
- ◆ When you have finished, please sign the Declaration at the foot of this page.
- ◆ Post the form back (with any other forms for the household) in the reply-paid envelope as soon as possible after 29 April 2001.

Census Helpline For extra forms or help in answering questions:

- Phone 0845 602 2001 (local rate number)
- Text phone for the Deaf 0845 303 2001 (local rate number)
- Website www.gro-scotland.gov.uk

Declaration This form is completed to the best of my (our) knowledge and belief.

Signature(s)

Date

Page 1



Household Questionnaire ^{HO}

27 March 2011

Official Use

CD	ED	Line Number
<input type="text"/>	<input type="text"/>	<input type="text"/>

If there is a **mistake** in the printed address, please write your correct address below

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
Duncan Macniven
Registrar General for Scotland

Need help?

- ☑ www.scotlandscensus.gov.uk
- ☑ Helpline 0300 123 1702
- ☑ Textphone 18001 0300 123 1703

Please fill in this questionnaire:

online at
www.scotlandscensus.gov.uk

Enter the Internet Questionnaire Access Code:

You can fill in this questionnaire online in English or Gaelic.

Or

Fill in this paper version and post it back using the pre-paid envelope provided.

Declaration

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

Signature(s)

Date



HO 01

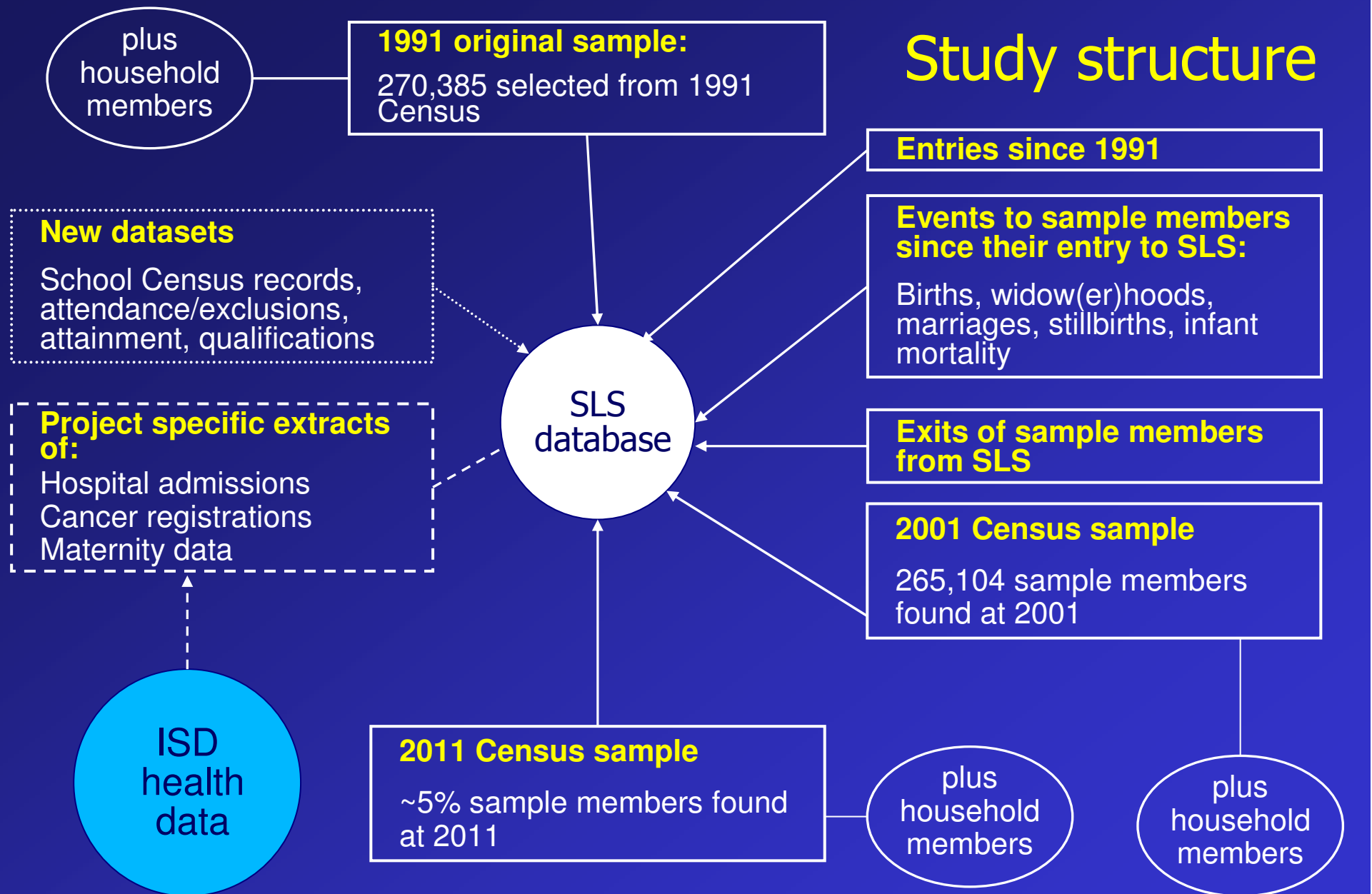
Page 1

linking lives through time

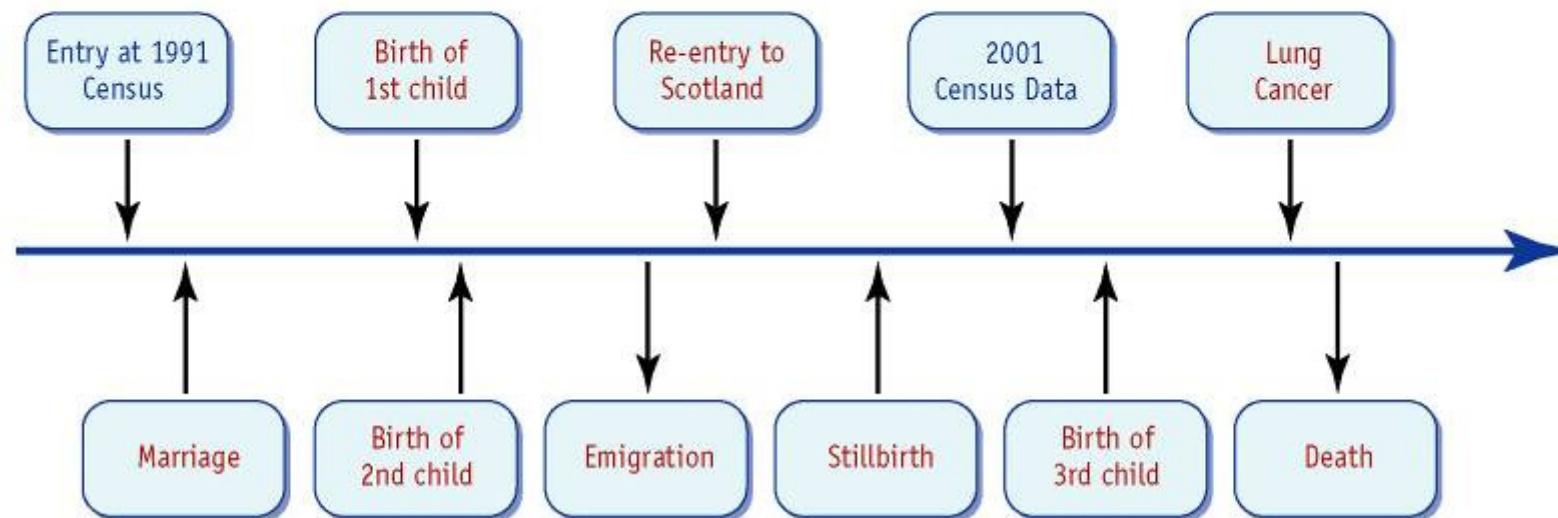
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Study structure

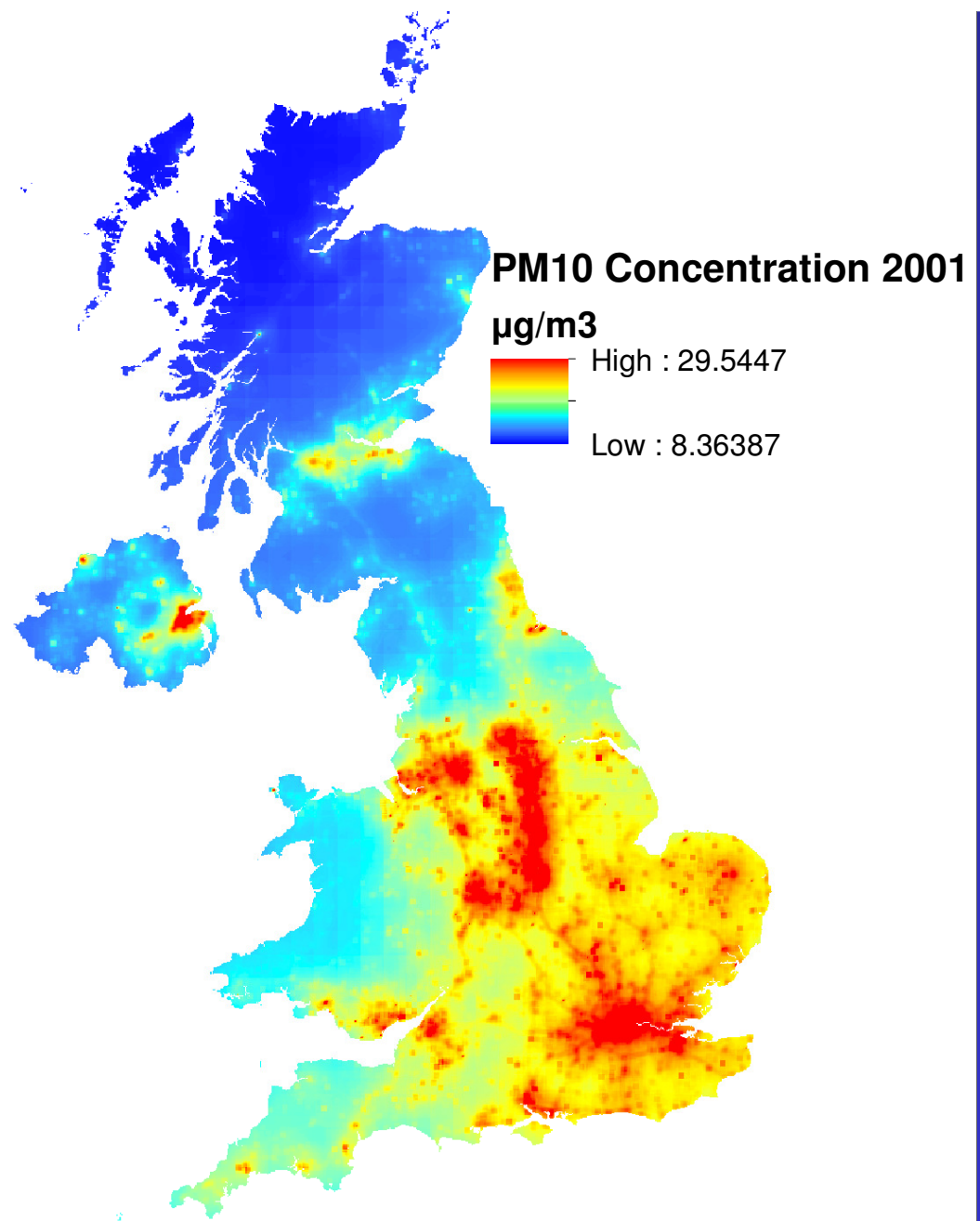


Example Event History of a Female SLS Member aged 21 at 1991 Census

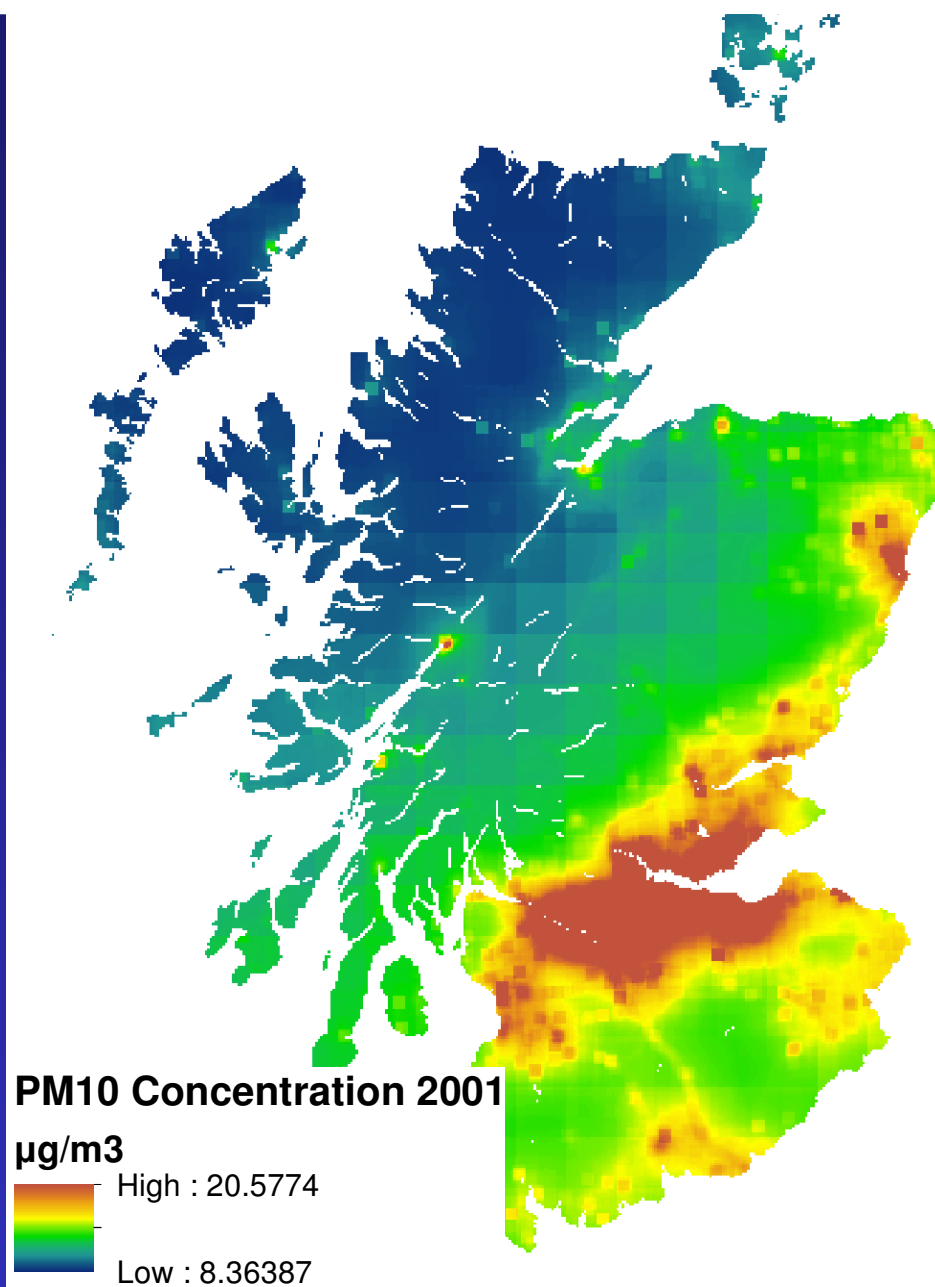


Uses of the SLS

Distribution of PM10 in UK



Distribution of PM10 in Scotland



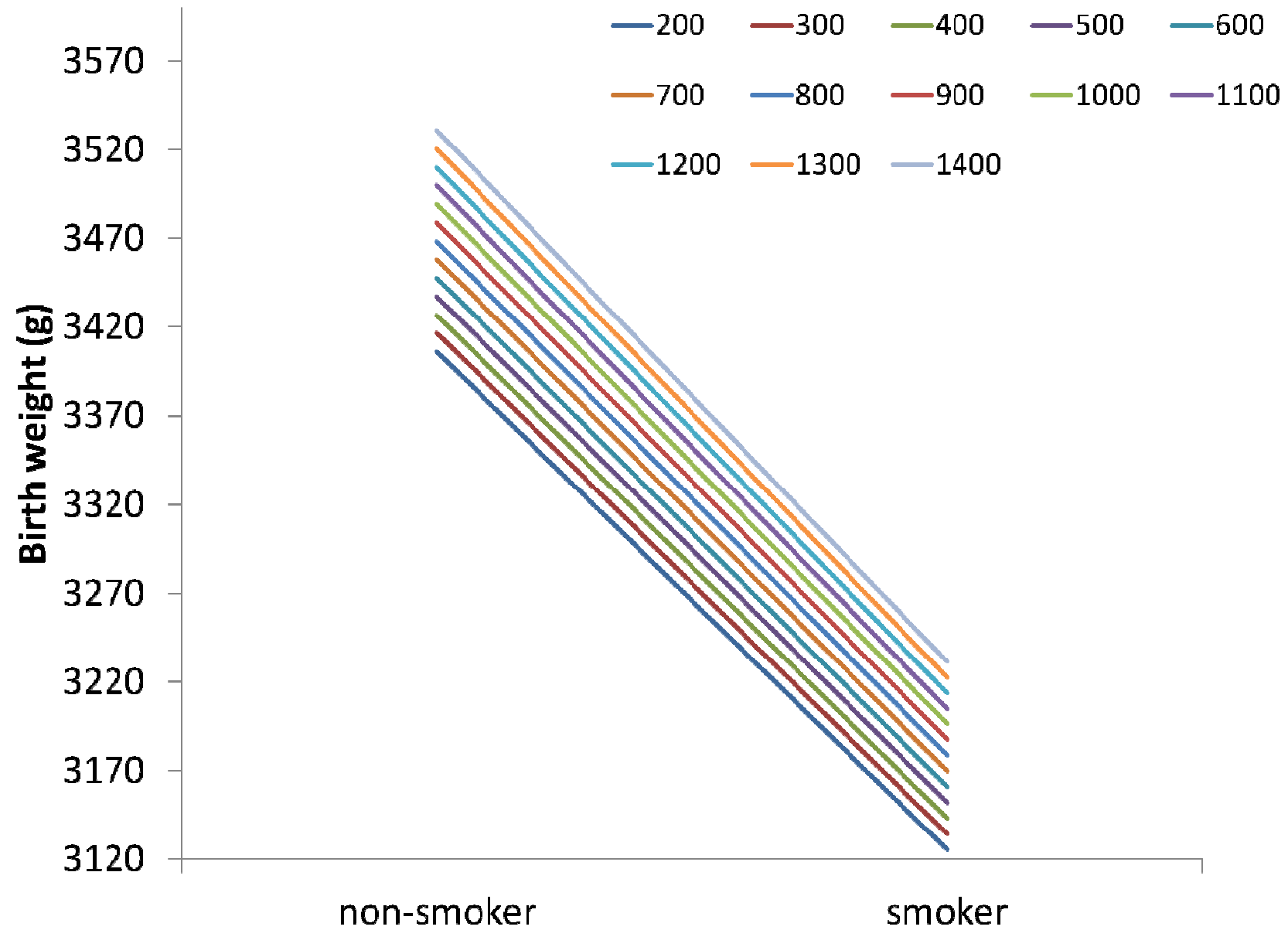
Effect of PM10 for birth-weight with adjustment for smoking, mothers age, ethnicity, parity and income

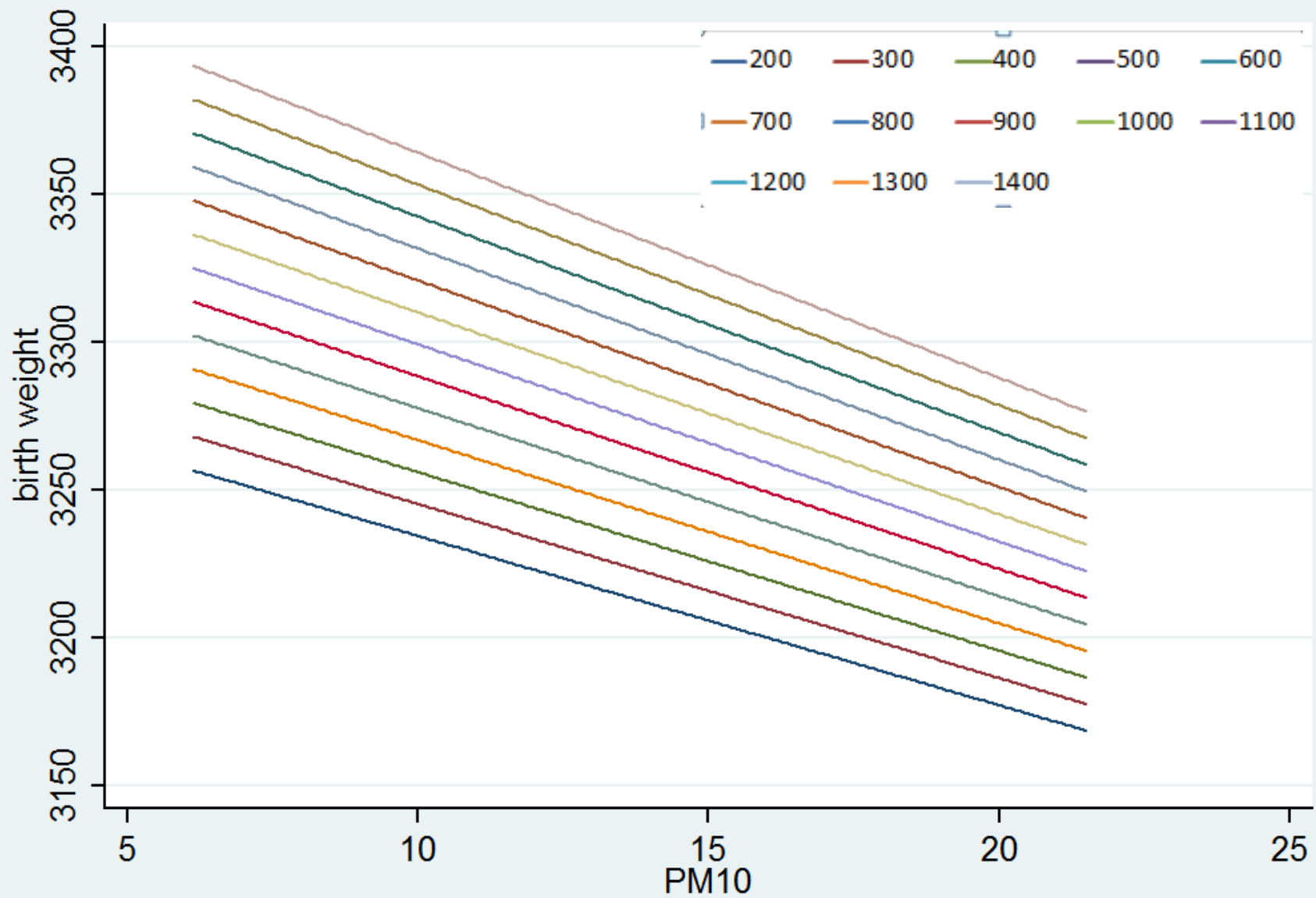
Variable (referent category)	Coefficient (Sig) Increase in Birth weight (grams) per unit increase in variable
PM10 exposure only	-6.52(**)
Smoking (no)	
Yes	-284.3642(***)
Mothers age (17-18)	
(19-24)	59.21902(ns)
(25-29)	30.35456(ns)
(30-34)	2.005686(ns)
(35-39)	-36.86792(ns)
(39+)	-101.8226*
Ethnicity (non South Asian)	
South Asian	-359.8231(***)
Parity	90.5013(***)
Income (estimated)	.1031521(***)

n = 7558

*** p > 0.01, ** p > 0.05, * p > 0.1, ns not significant

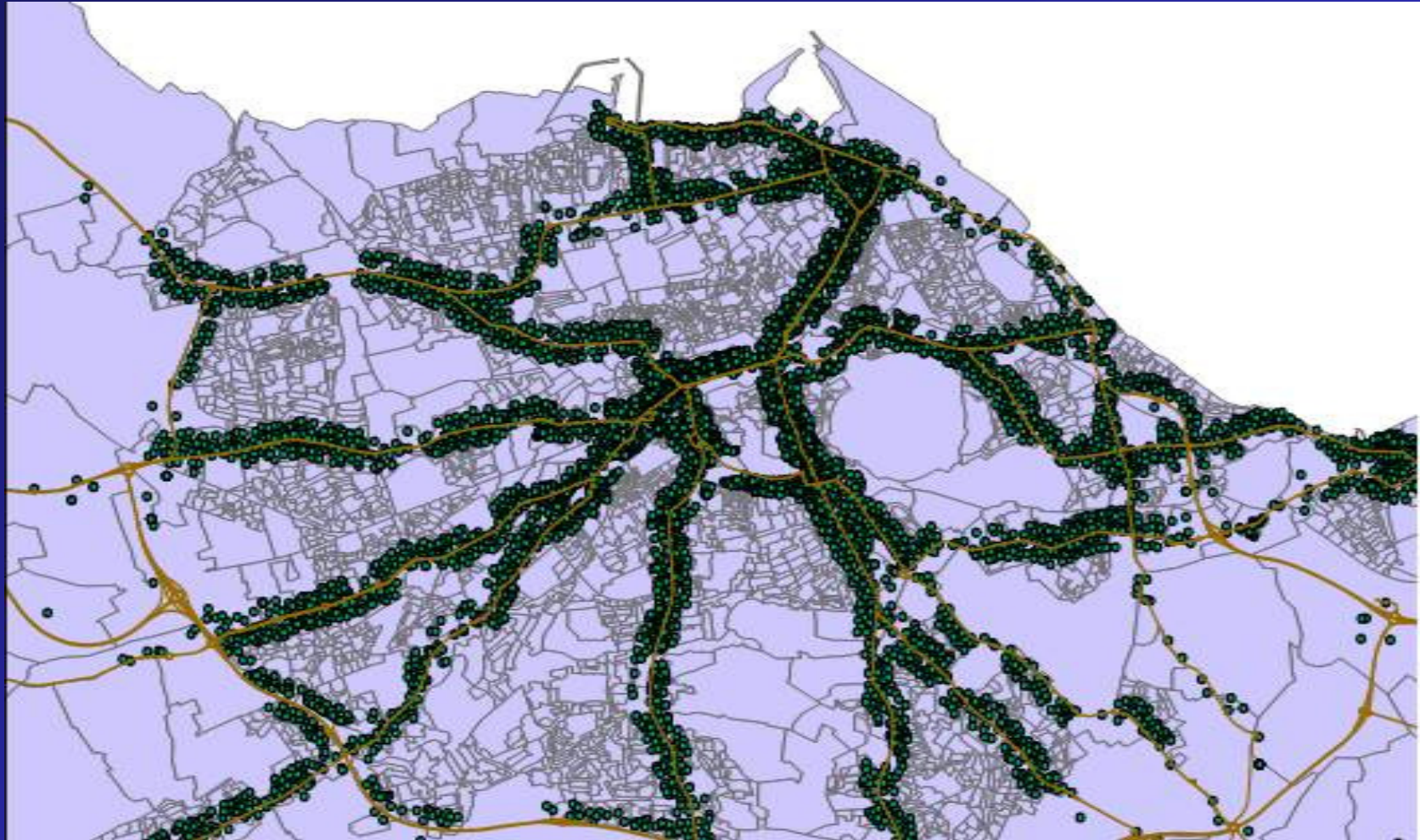
Coefficients for social class not reported





□

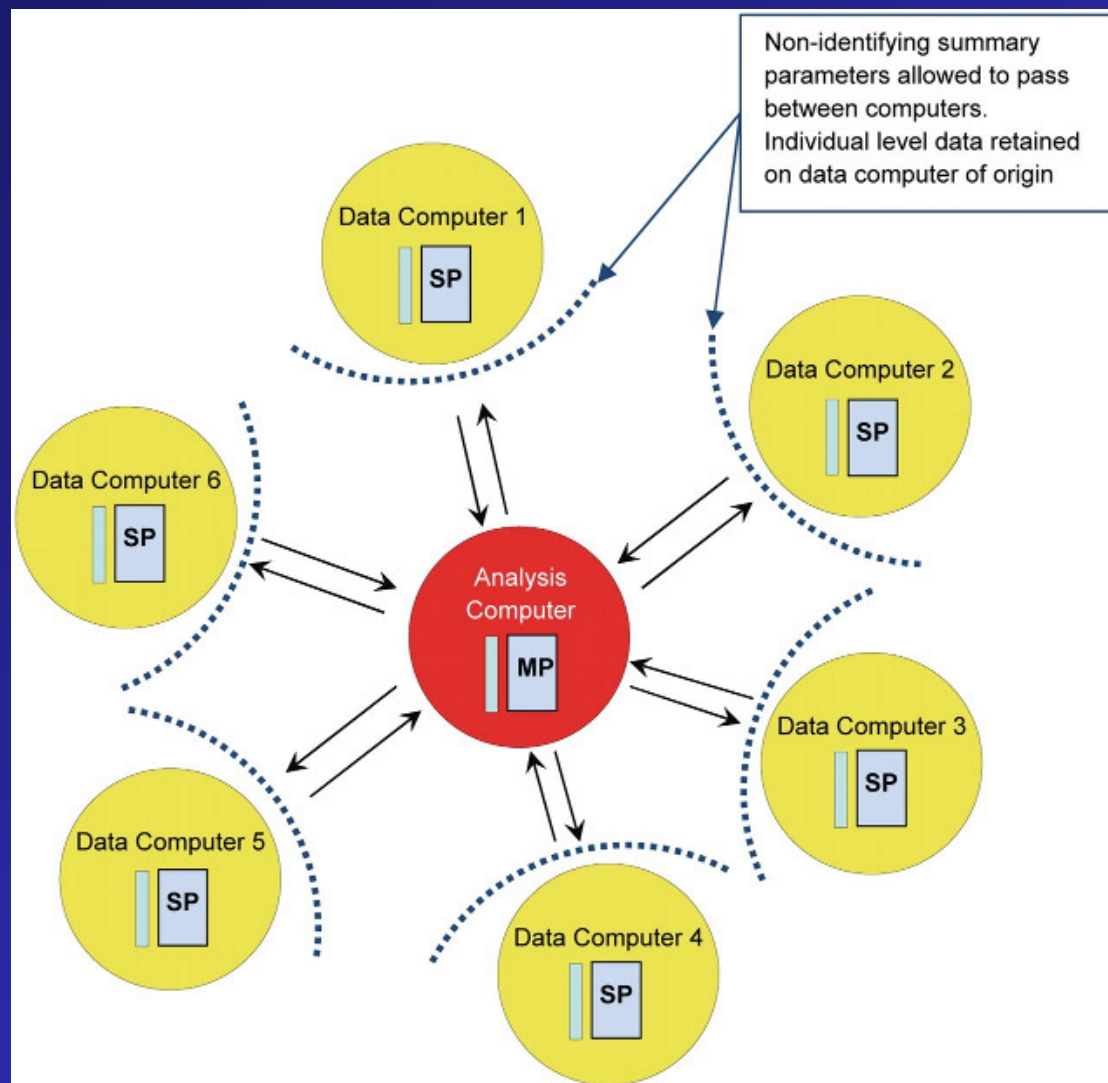
Postcodes in Edinburgh within 228.6m of a major road



Structural and data developments

DataSHIELD

Data Aggregation Through Anonymous Summary-statistics from Harmonized Individual-level Databases



Source: P3G

What do you feel is your national identity?

- To be used in combination with ethnic group, and will allow people to more fully express different aspects of their identity.
- Information will inform better understanding of community cohesion

14 What do you feel is your national identity?

◆ Tick **ALL** that apply.

☐ Scottish

☐ English

☐ Welsh

☐ Northern Irish

☐ British

☐ Other, please write in

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2011 Census – Other key changes

- Marital status question expanded to allow people to indicate their civil partnership status following the Civil Partnership Act 2004

4 On the 29 March 2009, what is your legal marital or same-sex civil partnership status?

- | | |
|--|--|
| <input type="checkbox"/> Never married and never registered a same-sex civil partnership | <input type="checkbox"/> In a registered same-sex civil partnership |
| <input type="checkbox"/> Married | <input type="checkbox"/> Separated, but still legally in a same-sex civil partnership |
| <input type="checkbox"/> Separated, but still legally married | <input type="checkbox"/> Formerly in a same-sex civil partnership which is now legally dissolved |
| <input type="checkbox"/> Divorced | <input type="checkbox"/> Surviving partner from a same-sex civil partnership |
| <input type="checkbox"/> Widowed | |

2011 Census – Other key changes

- General Health - Expanded from a 3 point scale in 2001 to a 5 point scale in 2011
- Limiting long term illness - expanded

19 How is your health in general?

Very Good	Good	Fair	Bad	Very Bad
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

21 Are your day-to-day activities limited because of a health problem or disability which has lasted, or is expected to last, at least 12 months?

◆ Include problems related to old age.

<input type="checkbox"/>	Yes, limited a lot
<input type="checkbox"/>	Yes, limited a little
<input type="checkbox"/>	No

Long-term health conditions

20 Do you have any of the following conditions which have lasted, or are expected to last, at least 12 months?

◆ Tick all that apply.

- ☐ Deafness or partial hearing loss
- ☐ Blindness or partial sight loss
- ☐ Learning disability (for example, Down's Syndrome)
- ☐ Learning difficulty (for example, dyslexia)
- ☐ Developmental disorder (for example, Autistic Spectrum Disorder or Asperger's Syndrome)
- ☐ Physical disability
- ☐ Mental health condition
- ☐ Long-term illness, disease or condition
- ☐ Other condition, please write in

☐☐

or

☐ No condition

- Long-term health conditions – new question
- Avoids the word 'disability'
- Great analytical potential

School Education data

– 3 datasets:

- School Census data
- SQA attainment data
- Attendance/ absence & exclusions data available

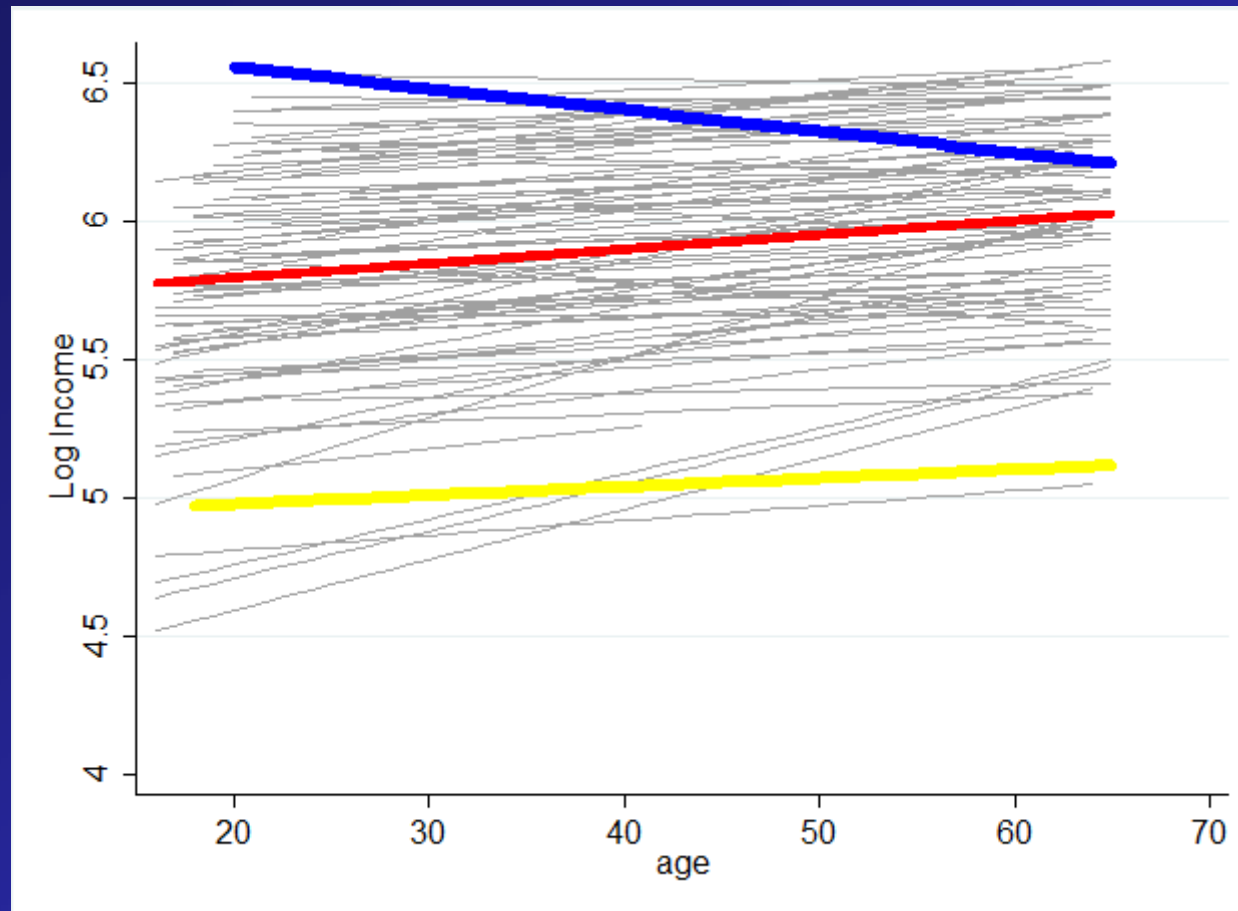


Estimating income

SOC 2000 Major groups

- Managers and senior officials
- Professional occupations
- Associate professional and technical occupations
- Administrative and secretarial occupations
- Skilled trades occupations
- Personal service occupations
- Sales and customer service occupations
- Process, plant and machine operatives
- Elementary occupation

Variation in log salary by SOC minor occupation categories



Fixed effects lines in red and SOC minor random effects in grey. For comparison, blue and yellow lines represent SOC minor groups 111 (Corporate managers and senior officials) and 924 (Elementary security occupations) respectively. This illustrates the varying coefficients in models used to predict income.

Analysis of synthetic income with self-rated general health

Testing the independence of the synthetic income estimates against other components of SEP and compared to real income

	Income (synthetic)		Income (real equivalised income)	
	Odds Ratio	CI	Odds Ratio	CI
1. Age, Sex and Income	0.9971***	0.9967-0.9975	0.9982***	0.9980-0.9984
2. As 1 + social class	0.9982***	0.9976-0.9989	0.9986***	0.9983-0.9988
3. As 2 + SIMD	0.9986***	0.9979-0.9992	0.9989***	0.9986-0.9991
4. As 1 + SIMD	0.9979***	0.9974-0.9983	0.9986***	0.9984-0.9989
5. As 1 + NSSEC8 and SIMD	0.9992**	0.9986-0.9999	0.9989***	0.9987-0.9992

Linkage back through time – two examples



THE SCOTTISH COUNCIL FOR
RESEARCH IN EDUCATION

1932
*MENTAL SURVEY
TEST*

*SUITABLE FOR PUPILS OF
TEN AND ELEVEN YEARS OF AGE*

MENTAL SURVEY TEST, 8 pp., 4d.

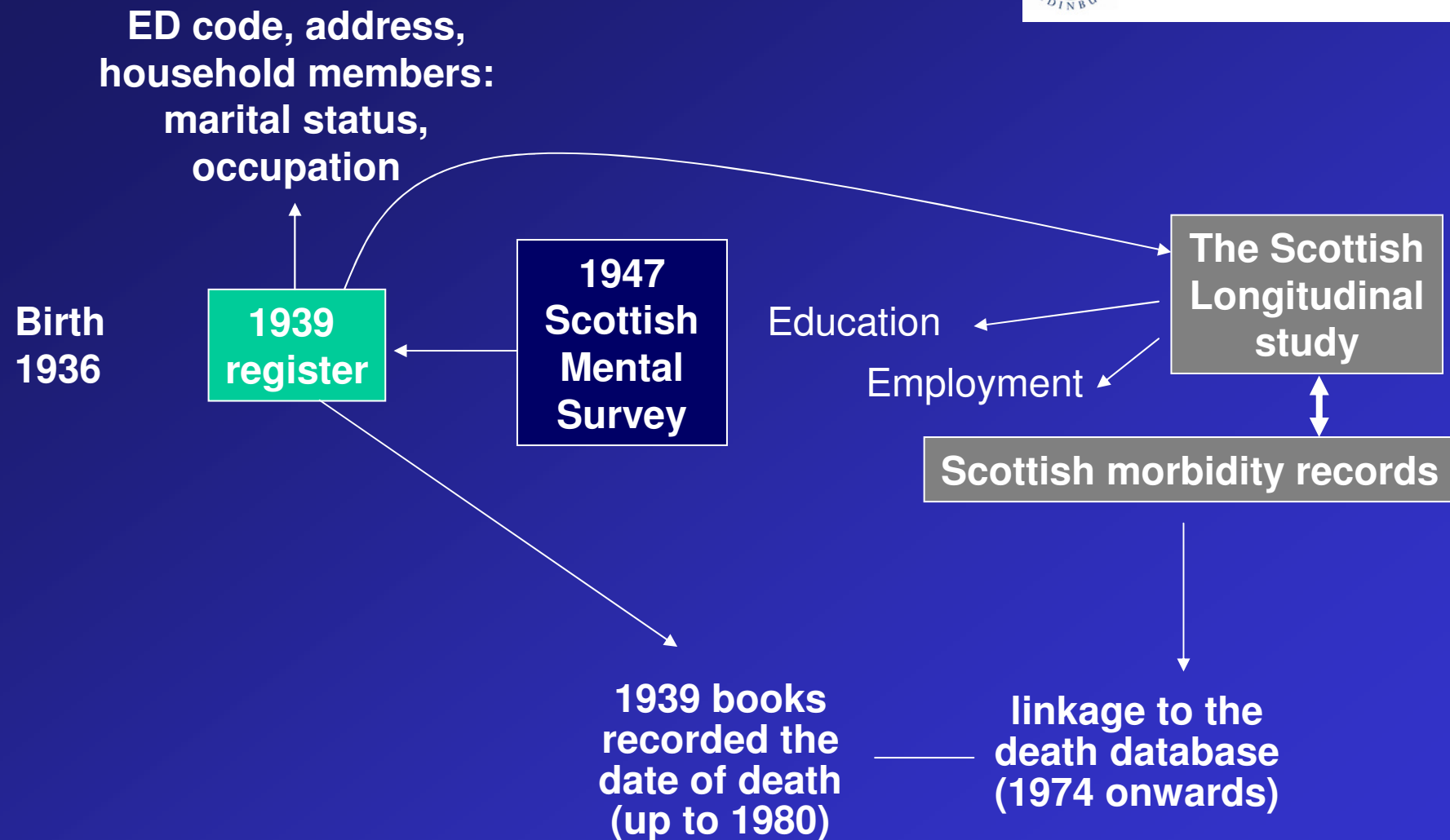
PRELIMINARY PRACTICE TEST, 2 pp., 1d.

*INSTRUCTIONS FOR ADMINISTRATION,
8 pp., 4d.*

SPECIMEN SET - 9d., post free

UNIVERSITY OF LONDON PRESS LTD.

WAR-TIME ADDRESS:
ST HUGH'S SCHOOL, BICKLEY, KENT

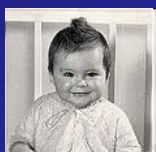
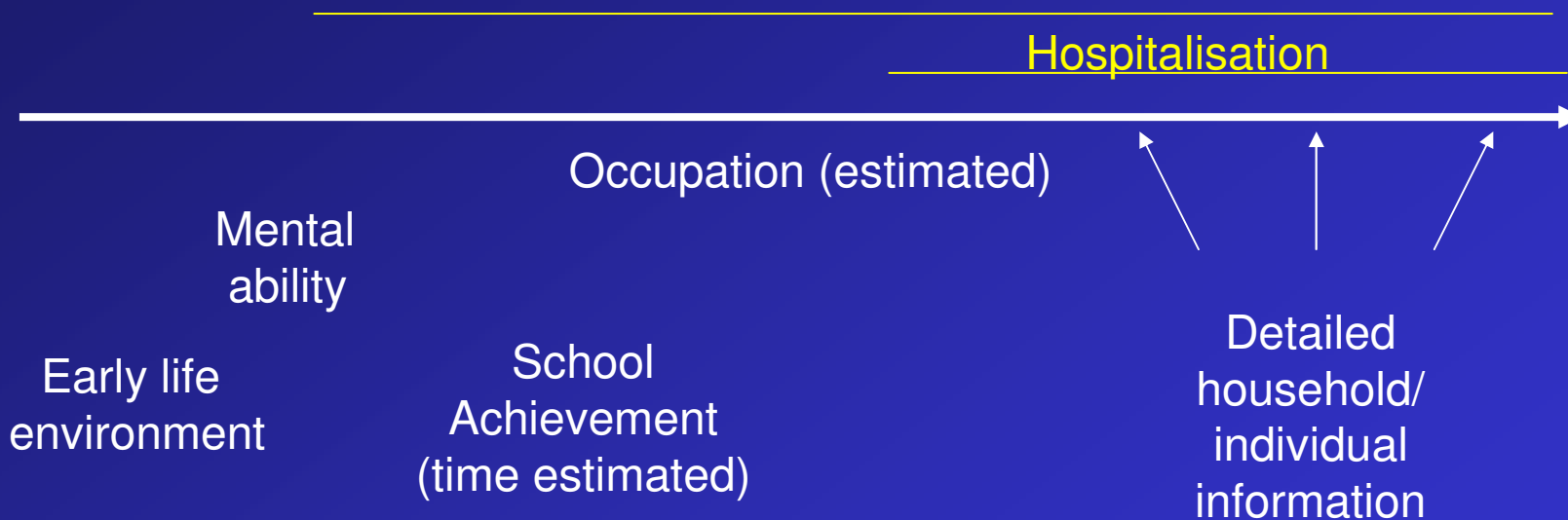


Age	0	11		34	55	65	75
Year		1947		1970	1991	2001	2011

Mortality

Hospitalisation

Birth
1936



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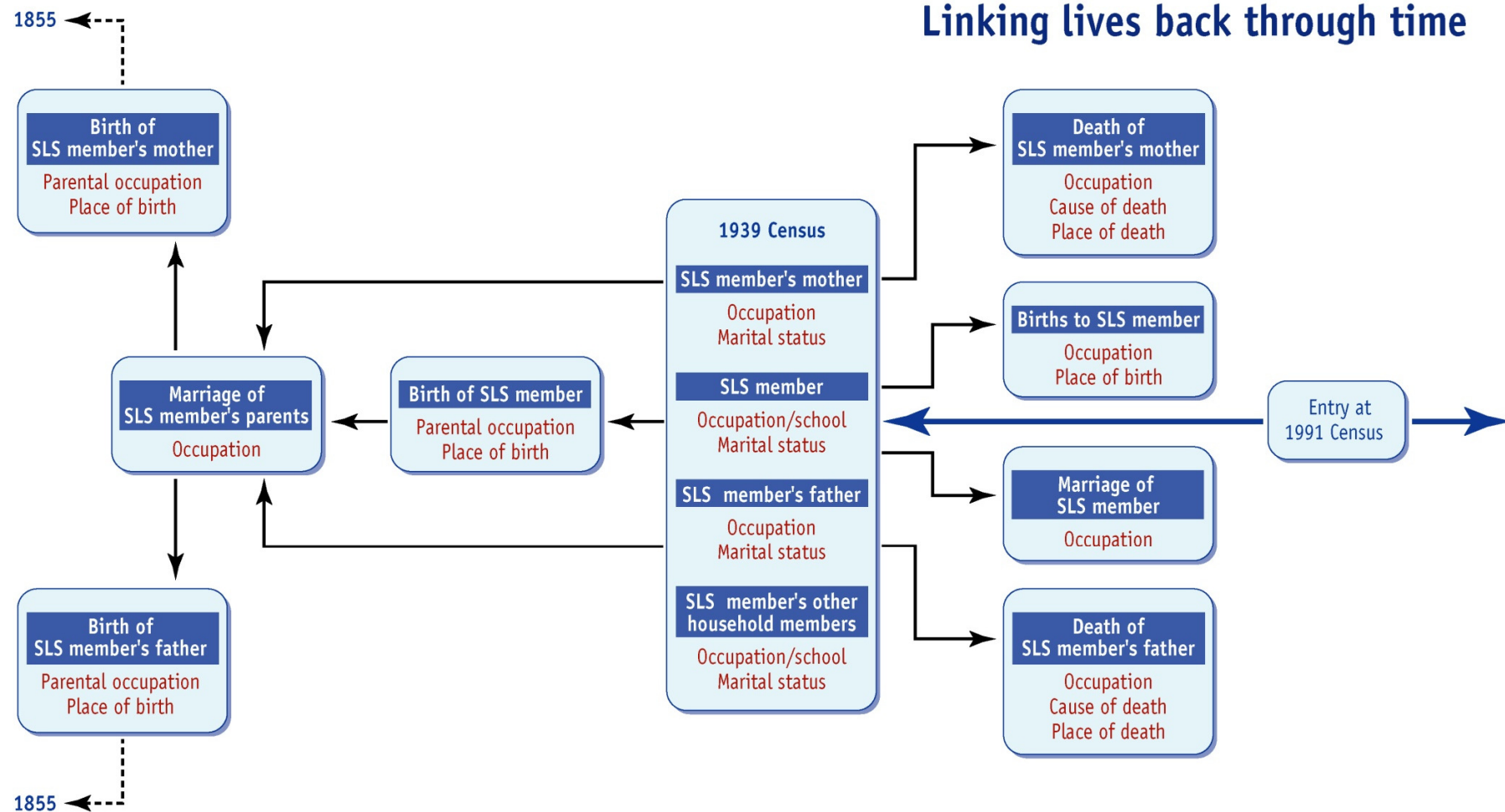
Page 44.

1903. BIRTHS in the District of *Rathven* in the County of *Banff*

No.	Name and Surname.	When and Where Born.	Sex.	Name, Surname, & Rank or Profession of Father. Name, and Maiden Surname of Mother. Date and Place of Marriage.	Signature and Qualification of Informant, and Residence, if out of the House in which the Birth occurred.	When and Where Registered, and Signature of Registrar.
120	<i>Lurgie Bowie</i> <i>Bowie</i>	<i>1903,</i> <i>June</i> <i>December 16</i> <i>2 h on P.M.</i>	<i>M.</i>	<i>James Bowie</i> <i>Cooper</i> <i>Barbara Bowie</i> <i>M.S. Wm. Cooper</i>	<i>James Bowie</i> <i>Father</i> <i>(Present)</i>	<i>1903,</i> <i>June 16</i> <i>As Registrar</i> <i>John Webster</i> <i>Registrar.</i>
131	<i>Annie Anderson</i> <i>Campbell</i>	<i>1903,</i> <i>May</i> <i>December 16</i> <i>3 h on a.m.</i>	<i>F.</i>	<i>Lurgie Campbell</i> <i>Christie</i> <i>Kellie Campbell</i> <i>M.S. Christie</i>	<i>Katharine Christie</i> <i>Aunt</i> <i>(Present)</i>	<i>1903,</i> <i>June 16</i> <i>As Registrar</i> <i>John Webster</i> <i>Registrar.</i>
132	<i>Caroline</i> <i>Healdes</i>	<i>1903,</i> <i>May</i> <i>March first</i> <i>8 h on P.M.</i> <i>1892, 4</i> <i>Portlouis</i> <i>Buckie</i>	<i>F.</i>	<i>Alexander Healdes</i> <i>James Carpenter</i> <i>Elizabeth Healdes</i> <i>M.S. Robertson</i>	<i>Alexander Healdes</i> <i>Father</i> <i>(Present)</i>	<i>1903,</i> <i>June 18</i> <i>As Registrar</i> <i>John Webster</i> <i>Registrar.</i>
				<i>1902, August 22</i> <i>Seafiel</i>		

John Webster Registrar.


Linking lives back through time





More information

Website: www.lscs.ac.uk



Scotland's
CENSUS
ORGANISATION

Longitudinal Studies Centre - Scotland

Home of the Scottish Longitudinal Study

Home

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Linking lives through time

The Longitudinal Studies Centre - Scotland (LSCS) is responsible for the establishment and maintenance of the Scottish Longitudinal Study (SLS). This dataset includes a large sample of the Scottish population and links together various demographic, socio-economic and health data about these individuals. The data are available to academics and support is provided *free of charge* by a team of researchers.

Training courses introducing the dataset are run regularly and information about these is made available on this website. In addition, the LSCS provides training in longitudinal data handling, analysis and modelling. It also hosts events designed to encourage the use of longitudinal data and to identify state-of-the-art research in the field. The LSCS involves staff from a variety of backgrounds, providing an inter-disciplinary team who are also engaged in longitudinal research themselves.

The LSCS is funded by the:

- [Scottish Funding Council](#) (SFC)
- [Chief Scientist Office](#) (CSO)
- [General Register Office for Scotland](#) (GROS)
- [Economic and Social Research Council](#) (ESRC)
- [The Scottish Executive](#) (SE)

Latest News

Consistent Areas Through Time lookup tables now available for download

SHIP international conference and workshop (9-11 September 2011) now open for registration

Workshop "An Introductory Training Workshop for the Scottish Longitudinal Study", 20 April, University of Edinburgh

SLS Research Working Paper 9 now online

SLS Research Working Paper 8 now online

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Acknowledgements

- The help provided by staff of the Longitudinal Studies Centre - Scotland (LSCS) is acknowledged. The LSCS is supported by the ESRC/JISC, the Scottish Funding Council, the Chief Scientist's Office and the Scottish Government. The authors are responsible for the interpretation of the data. Census output is Crown copyright and is reproduced with the permission of the Controller of HMSO and the Queen's Printer for Scotland