

# Census Address Register

September 2011

# Overview

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- Recap – developing an Address Register for Census 2011
- Address Register in the operation
  - What worked well
  - Known gaps and how we handled them
- What are we doing now?
- Information sharing

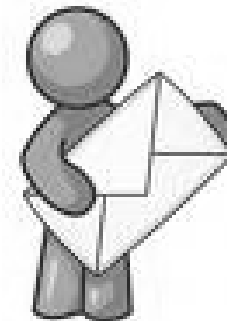
# Thanks!

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- Firstly, a big THANK YOU to Local Authorities for all your help:
  - Maintaining high quality address lists and
  - Resolving anomaly addresses

# Why so important for 2011?

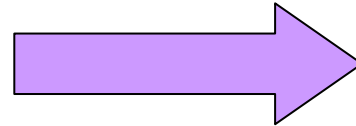
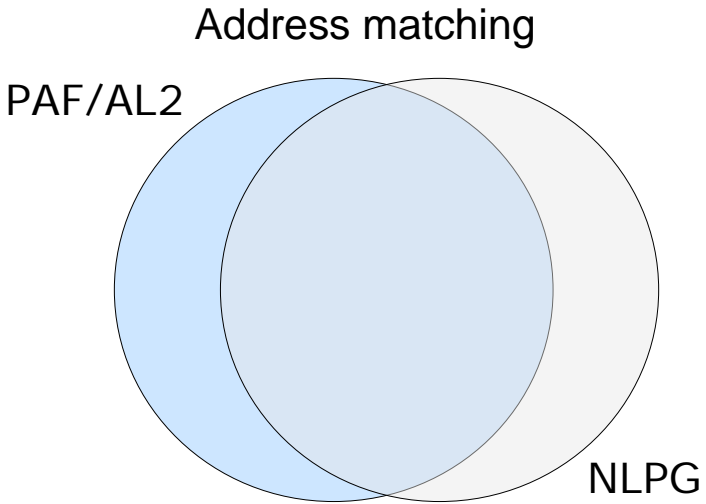
- An address register is required to **post-out** all the Census questionnaires
- **Questionnaire tracking** is linked via the address ID, and improves management and control of field operations
- **Flexible field force** allows the targeting of follow-up resources more effectively based on unreturned address IDs
- Key source for use in **Quality Assurance** of census estimates



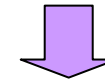
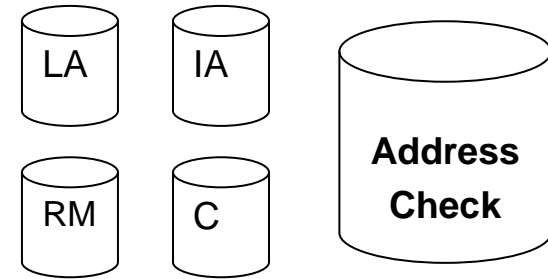
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# Creating the address lists

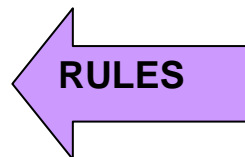
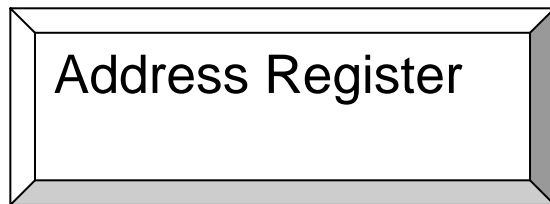
# Creating the residential household list



Evidence collected



Evidence	IA	RM	F	LA	3rd
9 High Street	1L	1F	1R	1L	1L
10 High Street	0C	1F	1R	0C	1L
11 High Street	0S	1F	0X	1L	1L
11a High Street	0X	1F	0X	0X	0X
11b High Street	0X	1F	0X	0X	1D
Flat 1/11 High Street	1L	0X	1R	1L	0X
Flat 2/11 High Street	1L	0X	1R	1L	0X



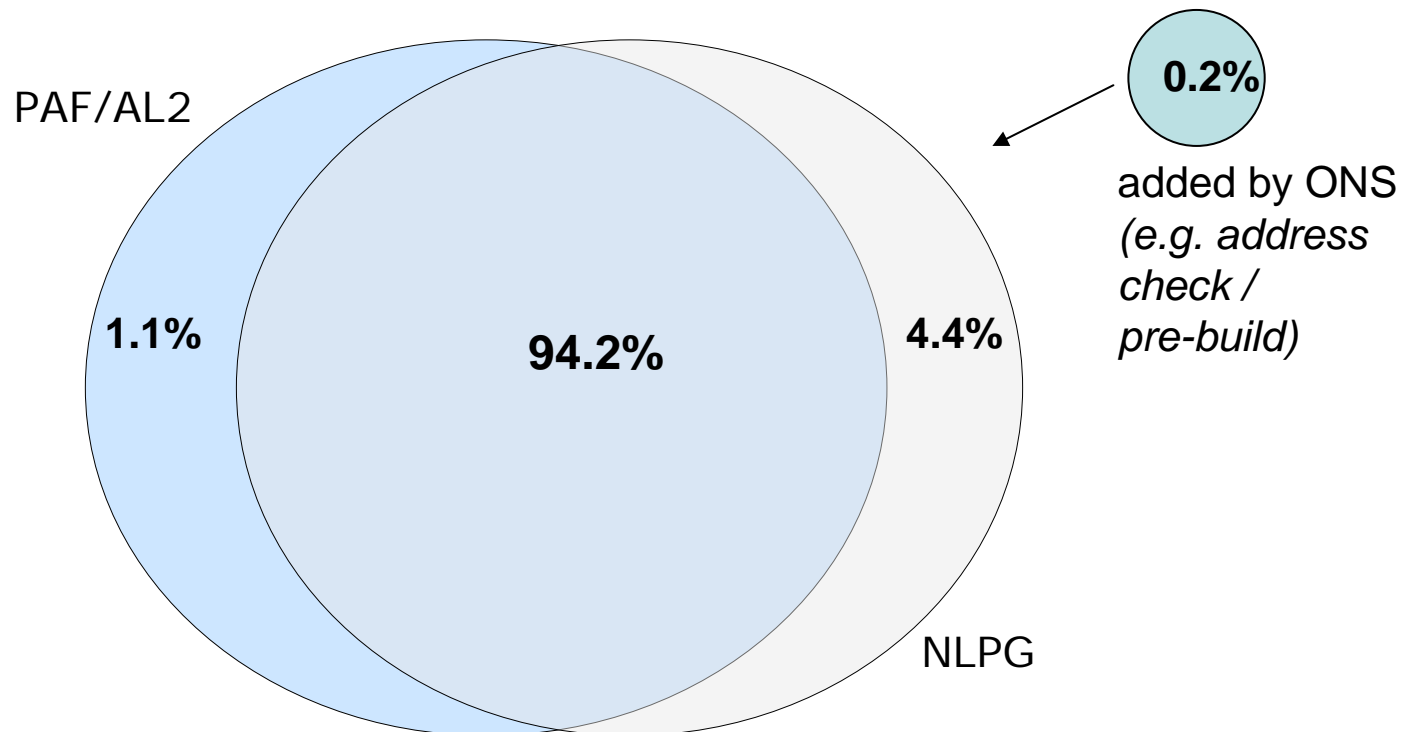
# Evidence Base Rules

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- 4.8 million pieces of evidence collected
- Where evidence sources disagreed, rules applied
- Rules developed following qualitative analysis
  - e.g. if LA says residential but address check couldn't find, send a questionnaire
- 'erred on the side of caution' – addresses were included unless there was strong evidence to remove.

# Make-up of addresses register

- Total to post out = 25.4 million





# Creating the communal establishment list

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- Collation of over 80 third party data sources
  - e.g. Edubase and Universities UK for education establishments
- Evidence collated and rules applied
- Over 84,000 CE establishment forms hand delivered (containing 1.7 million people)
- Over 85,000 household forms hand delivered to 'special' households
  - e.g. caravans on sites, boats in marinas

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# The address register in the operation

# What went well

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- ALL QUESTIONNAIRES PRINTED AND DELIVERED ON TIME
- Address list only 3 months out of date
  - But pre-build data included
- Improvements seen in source address products over time (e.g. NLPG classifications)



# Gaps and how we handled them

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- Address Register errors:
  - Missing addresses
  - Undelivered as addressed
  - Addresses incorrectly included
- Errors were anticipated
- Field and data processing procedures are in place to correct for any address problems

# Missing Addresses

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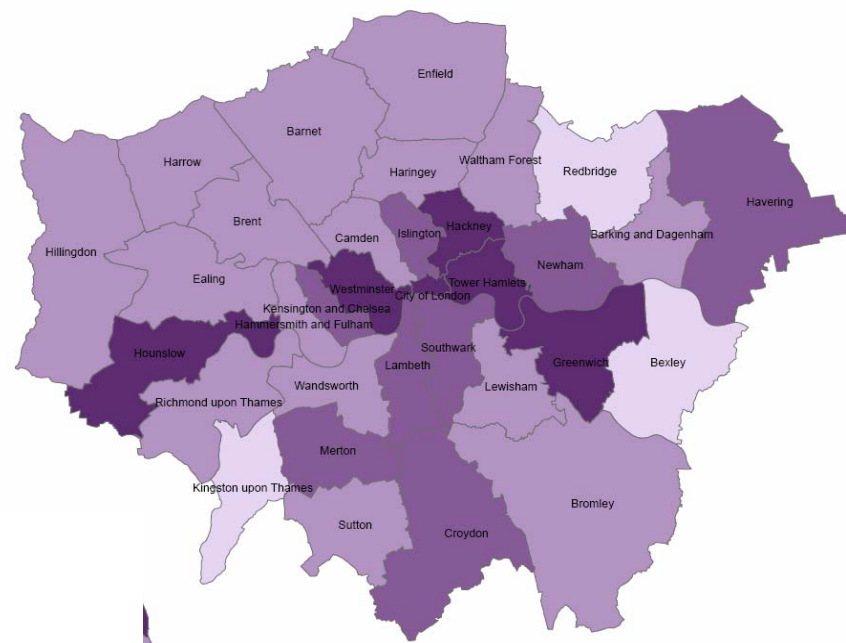
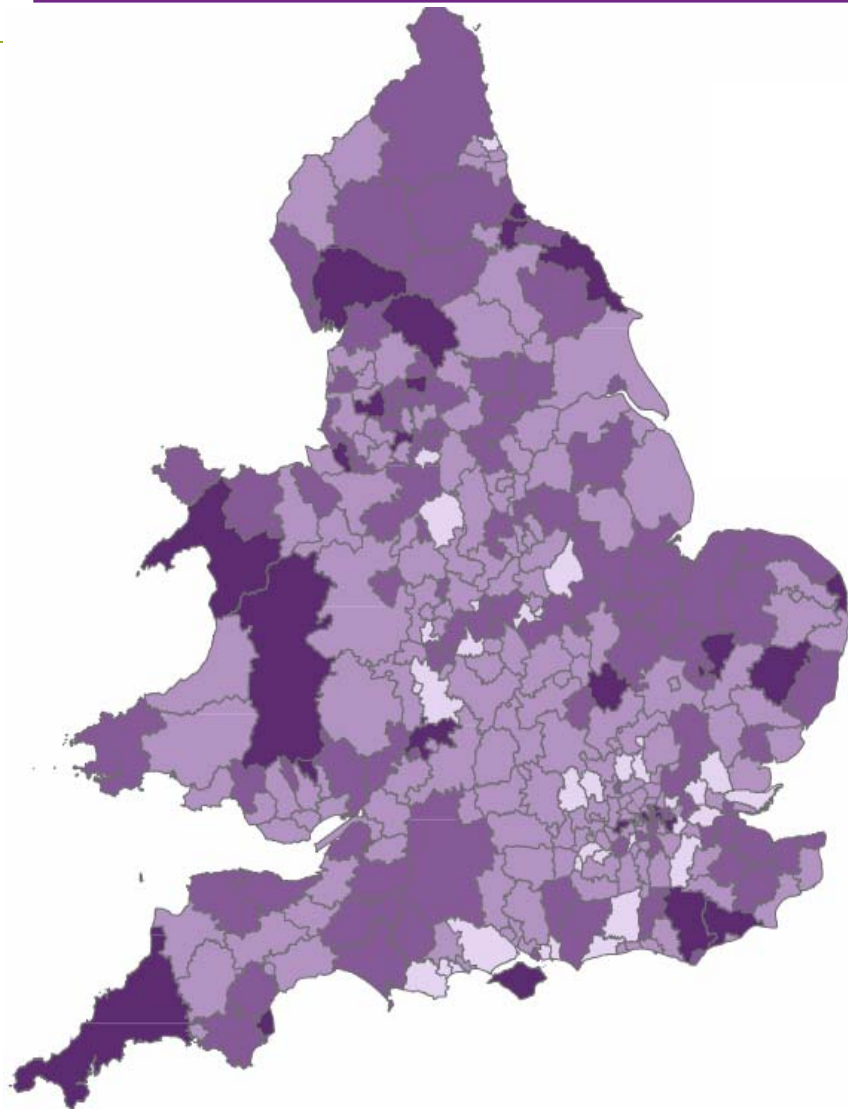
- Procedures to identify missing addresses:
  - Field procedures (identified 70% of the new households)
  - Requests to census contact centre (30%)
  - And the Census Coverage Survey will find and estimate number of missing households
- 60,000 new households added (0.2% of AR)

# Undelivered as Addressed

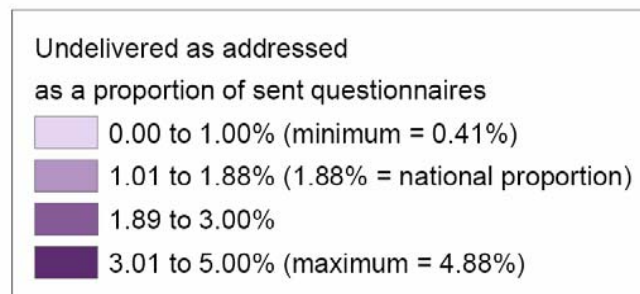
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- 477,000 of addresses were undelivered as addressed (UAA) or returned to sender having been successfully delivered.
  - 1.9% of all addresses in England
  - 1.8% of all addresses in Wales
- Vast majority were visited by field staff, to
  - Deactivate the address or
  - Issue a replacement questionnaire

# Regional distribution of UAAs



Undelivered as addressed (UAA) questionnaires as a proportion of questionnaires originally sent in each local authority in England & Wales



# Addresses incorrectly included

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REMEMBER – we ‘erred on side of caution’

- Procedures to identify invalid addresses:
  - Address was visited if no questionnaire was returned
  - Field process then identified and deactivated invalid addresses



# Addresses incorrectly included

- Common types:
  - Misclassification e.g. commercial properties (check for flats above shops)
  - Address doesn't exist (often historic addresses from conversions/mergers or buildings under construction)
  - Multiple questionnaires to same address



# Multiple questionnaires to same address

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- Common scenarios:
- Inclusion of shell addresses  
‘20 Bois Lane’ (shell) & ‘Flat 1, The Mews, 20 Bois Lane’ (correct)
- Addresses now merged  
‘Ground Floor, 49 Goldhurst Terrace’ (historic) & ‘49 Goldhurst Terrace’ (correct)
- ‘Alias’ Flat naming  
Basement Flat, 44 Barclay Rd’ & ‘44A Barclay Rd’
- House known with name and number  
‘1 Newland Road’ & ‘Newholme, Newland Road’



# Summary of AR quality (so far)

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- About 3.5% incorrectly included, consisting of:
  - 1.5% demolished/derelict/does not exist
  - 1% duplication
  - 1% non-residential addresses
- 60,000 households missing from address register (0.2% of original AR)
- ALL identified error resolved in field
- **CAVEAT** - raw data for households only. Further analysis is likely to change these results

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# What are we doing now?

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- Analysing data to understand quality:
  - to inform the alternative household count and
  - to feed into Quality Assurance

# Information shared before Census day

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- ‘New’ addresses found in address check provided to LAs – where no contact made
- Count of all ‘New’ addresses found in address check by Output Area provided to LAs – including where no contact made

# Future information sharing

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- To be shared with Local Authorities:
  - Evaluation of results from field operation to assess quality of Address Register.
  - Evaluation of results from CCS to assess coverage of Address Register.
- Actively feeding into National Address Gazetteer development (CLG and Ordnance Survey)
  - Note: Information gained directly from the Census field operation will not be shared