Cambridge Centre for Housing & Planning Research

# Making the most of the official projections

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UNIVERSITY OF CAMBRIDGE

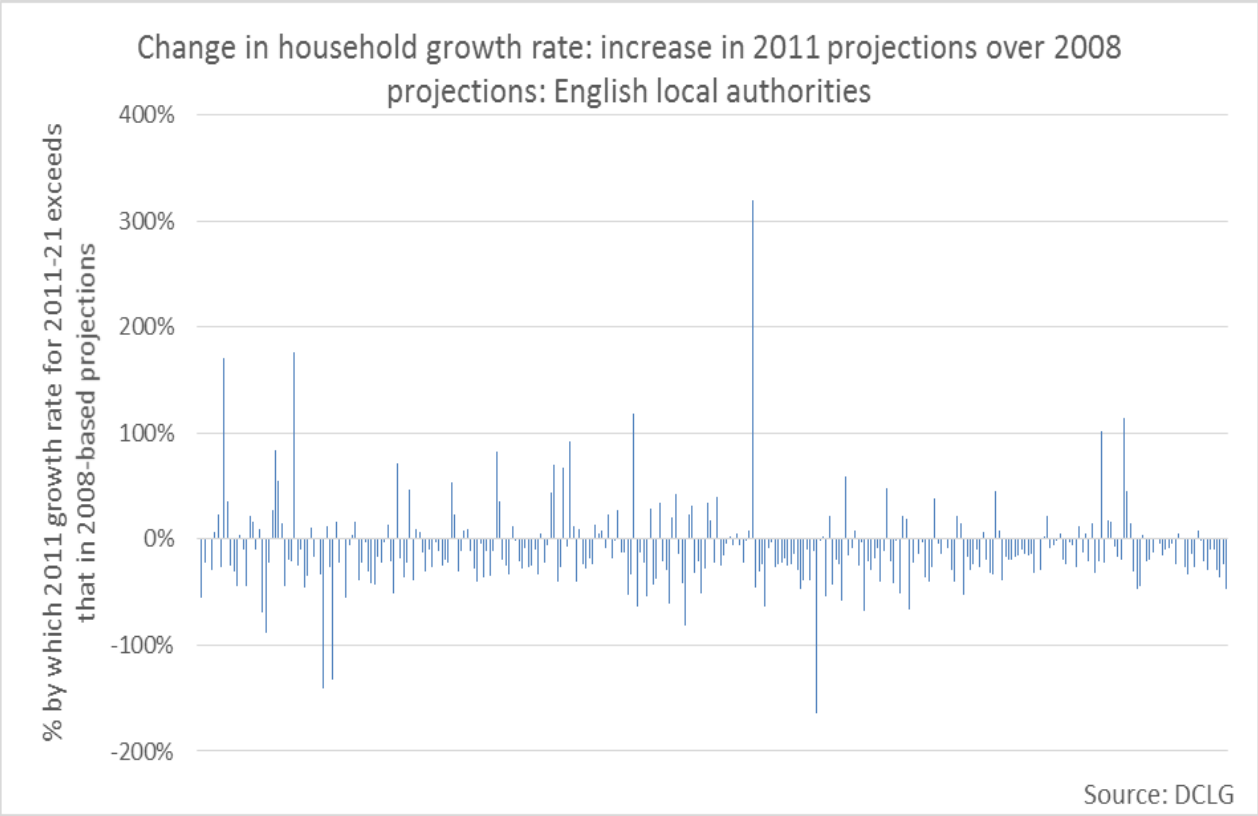
# Introduction

2011-based population and household projections:

- Real limitations
- Significant flaws
- Can be misleading
- Not “the answer” – e.g. 221,000 homes a year

…….but can be powerful tools for quantitative thinking about housing requirements

# Real change or noise: changes between 2008 and 2011-based DCLG projections?




- England household growth 10% slower in 2011 projections
- LA household growth ranges from 320% faster to 165% slower.
- Large variation in small areas e.g. Surrey: +48% to -29%
- **Why such large variations?**
- **Can we trust these apparently random results?**

# How housing requirements are estimated

**Project population**

**Project 'tendency to form households' – household formation rates**

**Household projections**

**Add allowances for unmet need and vacant homes**

**Housing requirement**

# Population projections

# What causes a population to change?

**Population in the future**

**=**

**Population now**

**+**

**Those who come**

**-**

**Those who go**

# What causes a population to change?

**Population in the future**

**=**

**Population now**

**+**

**Births + UK arrivals + International arrivals**

**-**

**Those who go**

# What causes a population to change?

**Population in the future**

**=**

**Population now**

**+**

**Births + UK arrivals + International arrivals**

**-**

**Deaths + UK flows out + International departures**

# Projecting Population Change

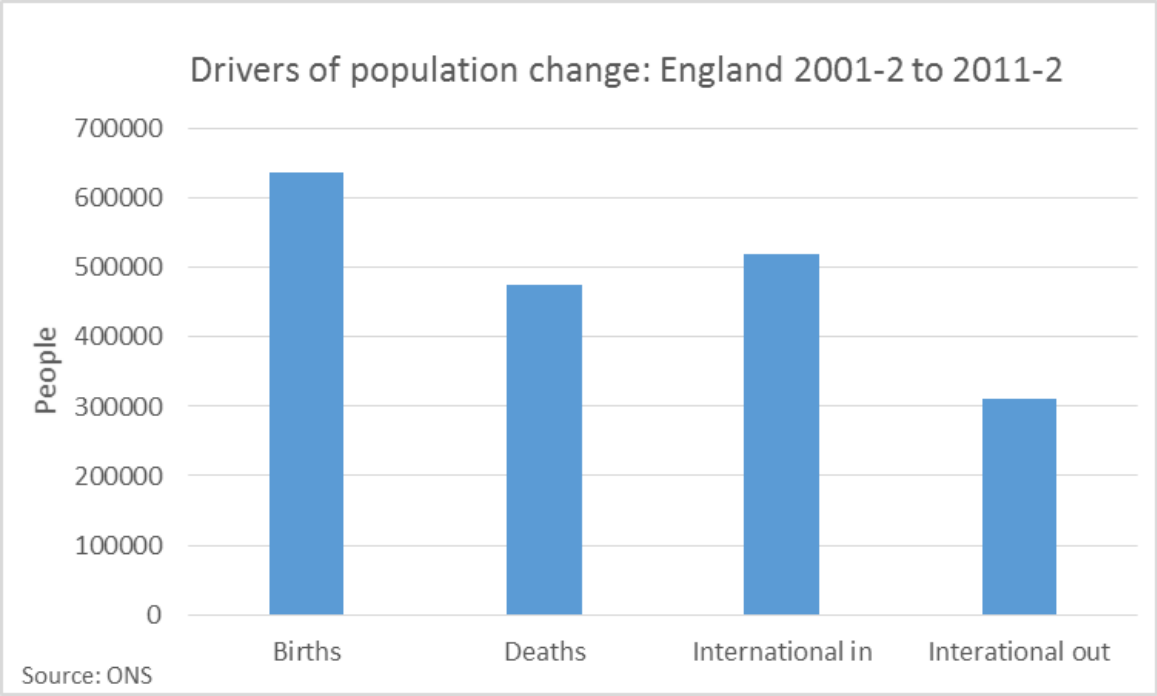
**National projections**

Births, deaths and international flows

**Local authority area projections**

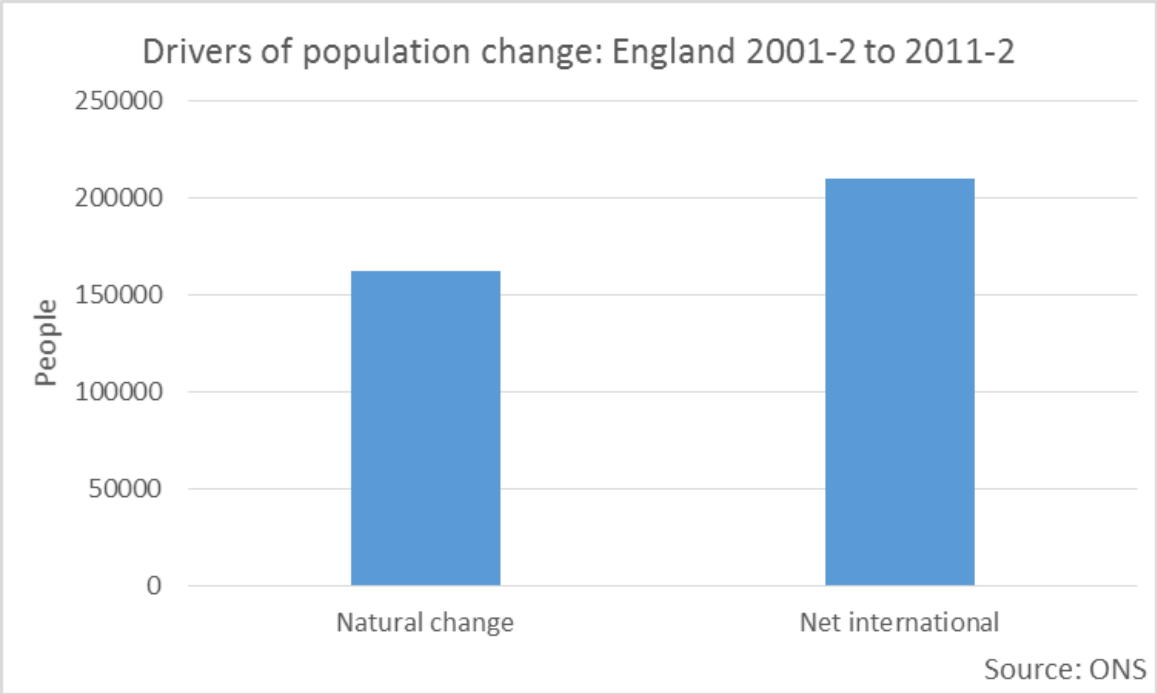
Big issues are sharing out international flows and projecting flows from one authority to another

# Drivers of population change




- Births are the biggest driver of population
- International in migration not far behind

# Drivers of population change

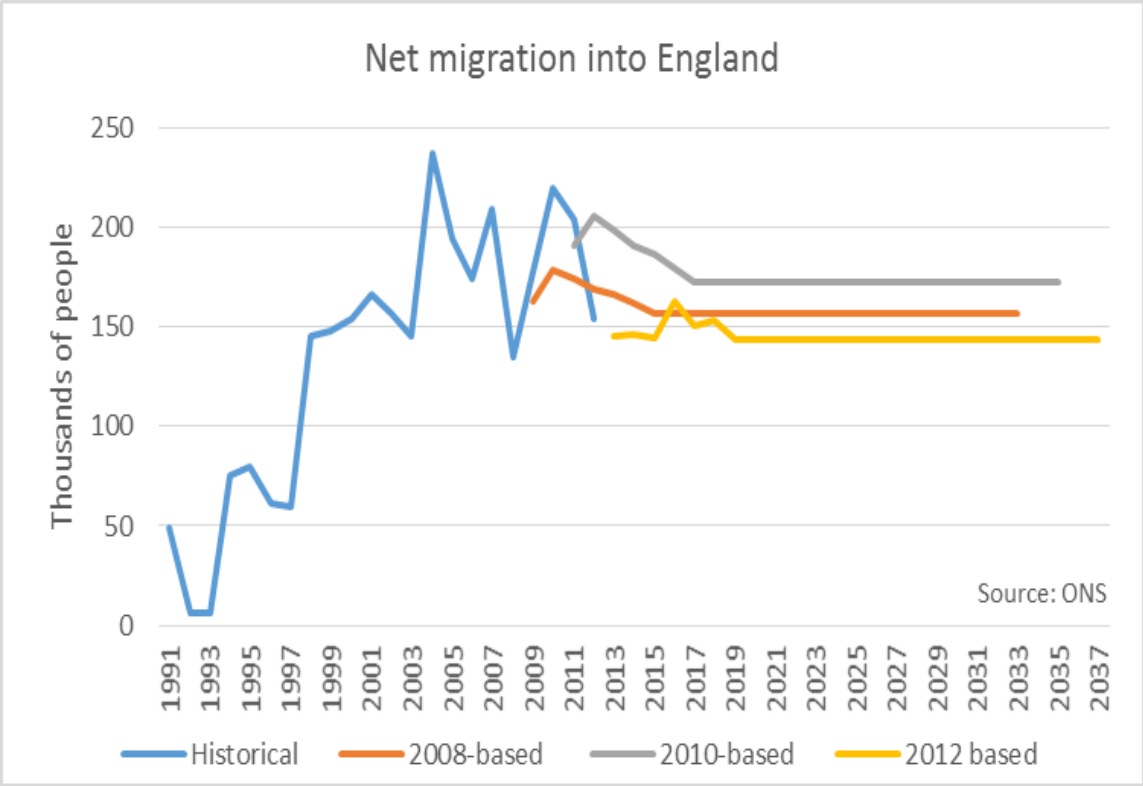



- Natural change = births less deaths
- Net migration a bigger factor over last ten years
- Projections suggest migration will be smaller than natural change in the future

# Births

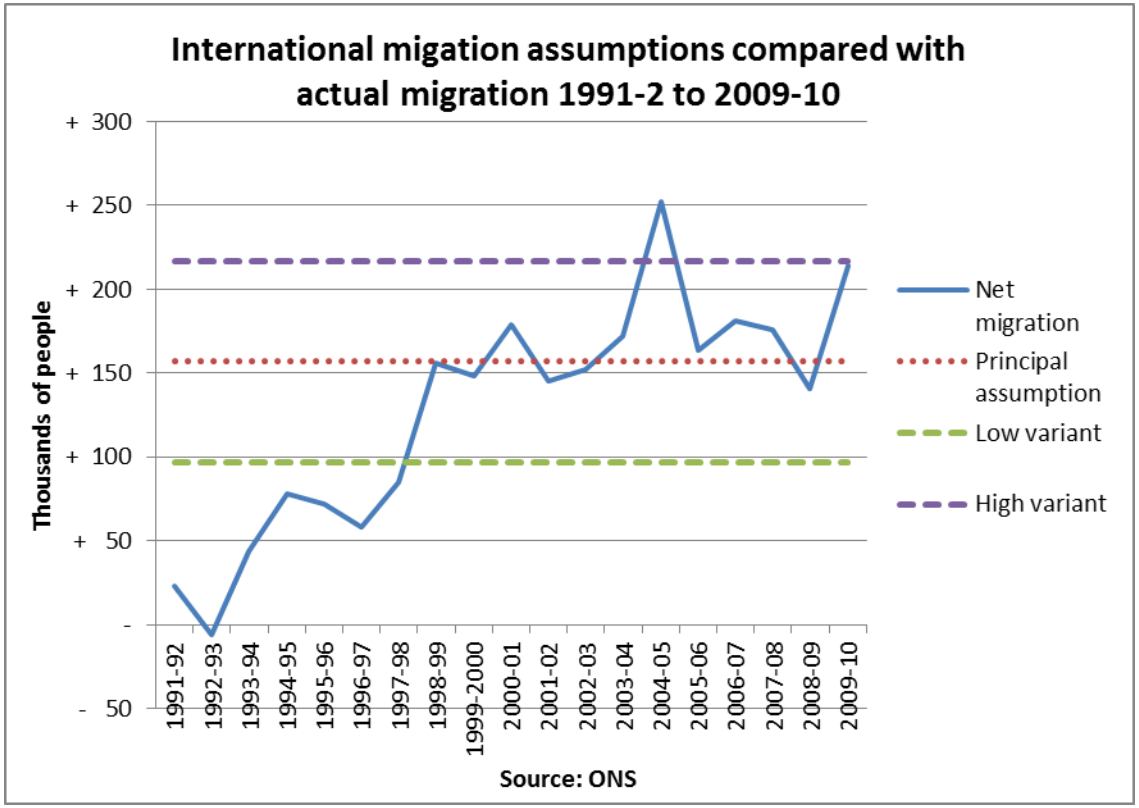
- 2011-based population projections produced quickly following 2011
- Used birth rates from 2010-based projections
- Significant differences between actual and projected number of women of child bearing age
- Fertility rates over-estimated – births over-estimated
- **Not a big factor in planning for housing**

# International migration : England




- Births and deaths relatively stable but migration has fluctuated
- Last three full ONS projections:
  - 2008: 157,000
  - 2010: 173,000
  - 2012: 144,000

# Impact of international migration

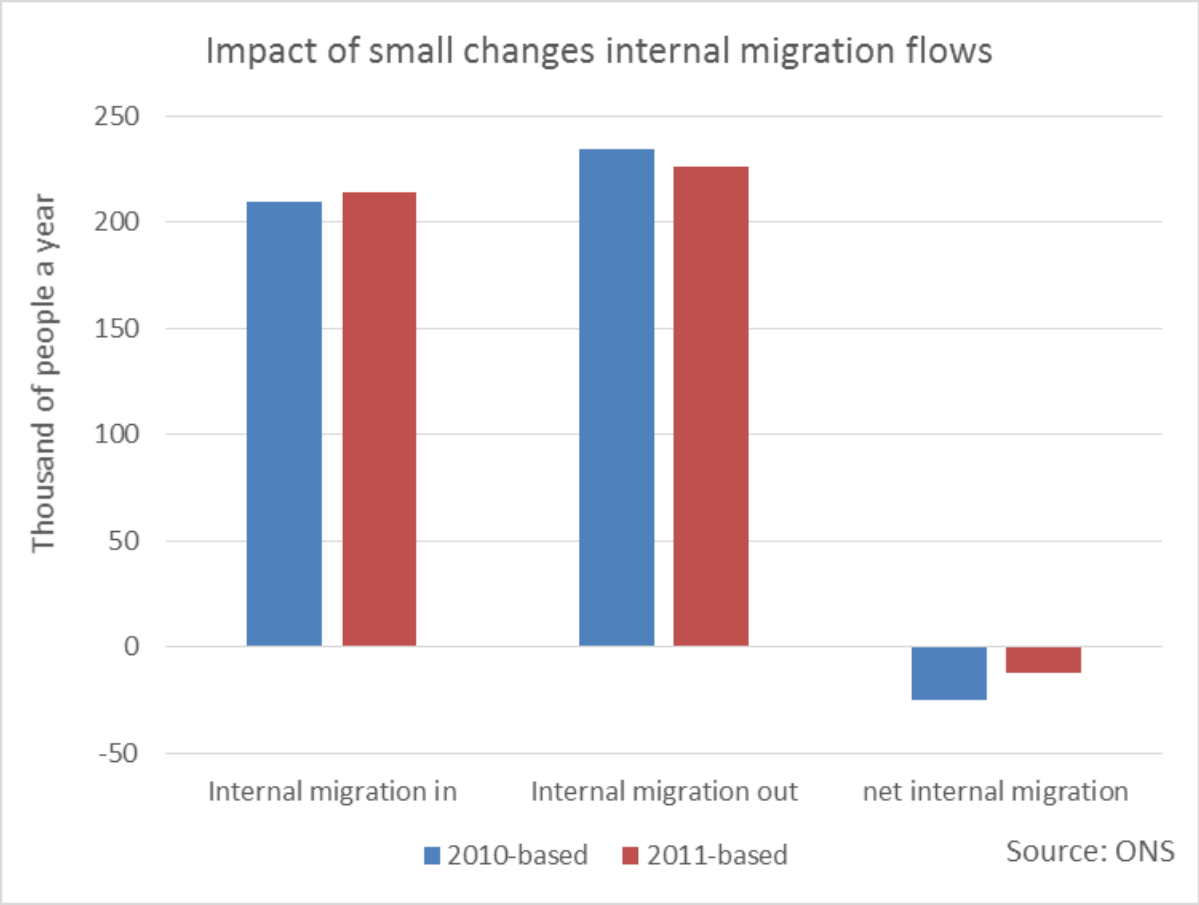



- DCLG tested variants of +/- 60,000 net migrants a year in 2008-based projections i.e. +/-38%
- Impact only +14%/-13% of number of households
- 13% reduction to latest DCLG projection would only reduce annual housing requirement by 30,000 – to ~ 200,000
- Bigger impact on some LAs

# Internal migration

- Flows between UK local authorities
- By definition sums to zero
- Often biggest factor in driving the population of a local authority
- Important for deciding where homes are needed
- Net internal migration often small difference between much larger gross flows

# Internal migration: sample London borough



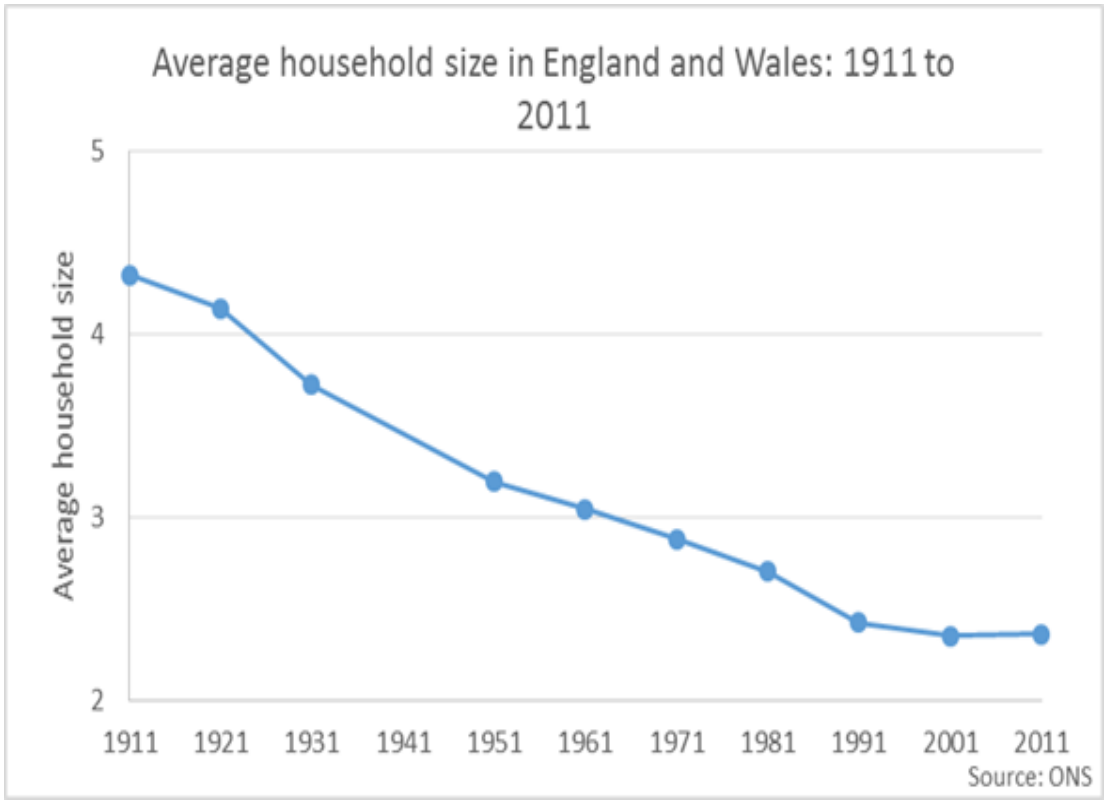

- Flow in up: 2%
- Flow out down: 3%
- Net (outward) flow down 51%
- 2-3% changes in gross flows could be due to use of 2010-based migration rates

# Internal migration: the issues

- 2011-based projections: similar issues to births from use of flow rates from 2010-based projections: distorts population growth figures
- Projections based on past out-migration flow rates and historic destination splits: no account taken of capacity in recipient LAs
- Flows to some LAs can be distorted by high or low past house building
- Impact of economic growth?

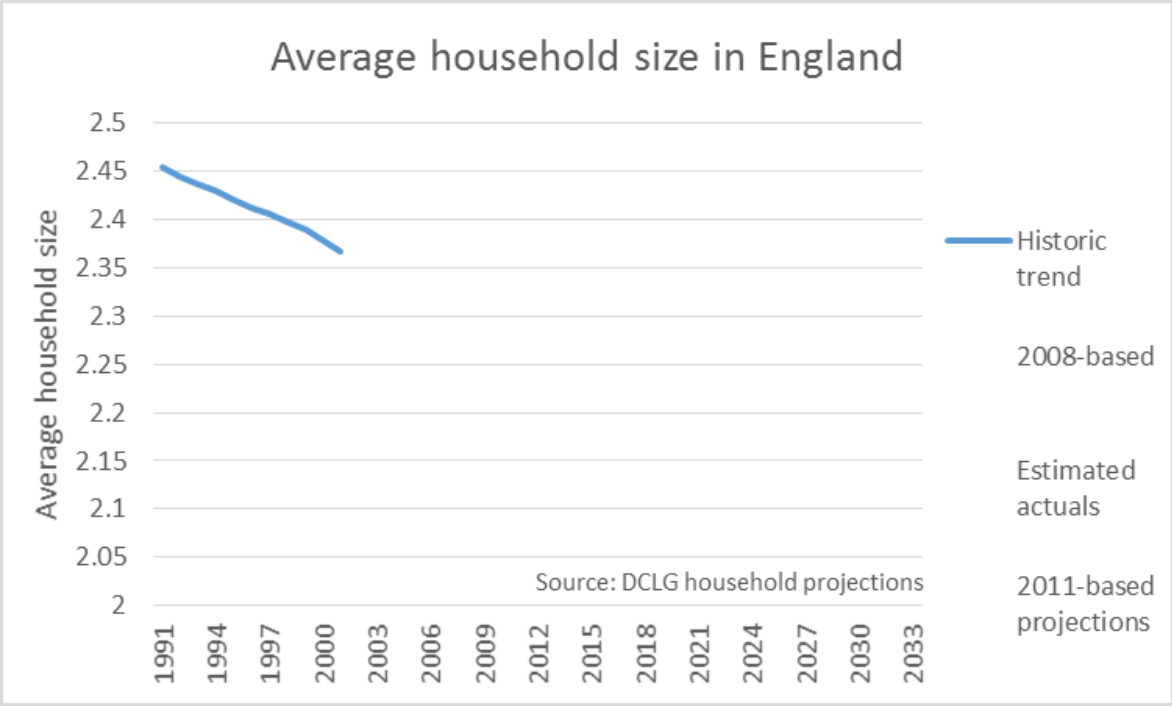
# Household projections

# Why average household size matters



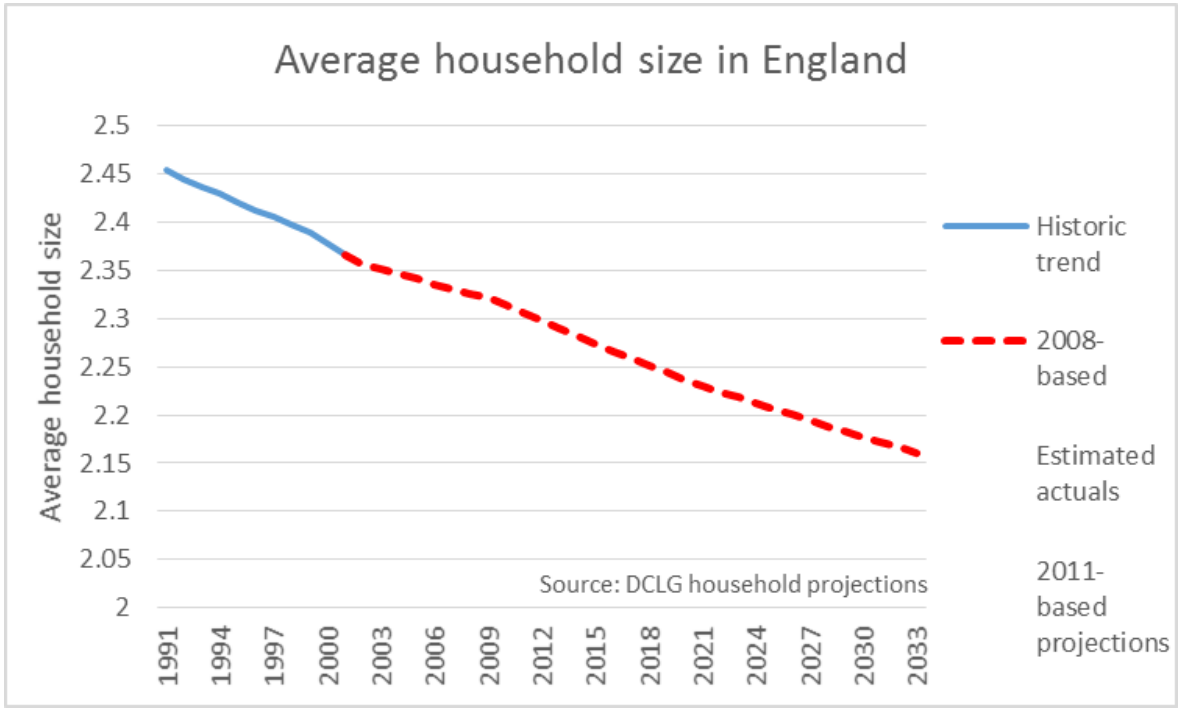

- Average household size has fallen at each census for a century or more – until the last one
- Average household size:
  - 1961: 3.06
  - 2011 2.36
- A return to the 1961 average household size would cut the number of homes needed by over 4½ million (out of 23 million)

# How average household size has changed and may change



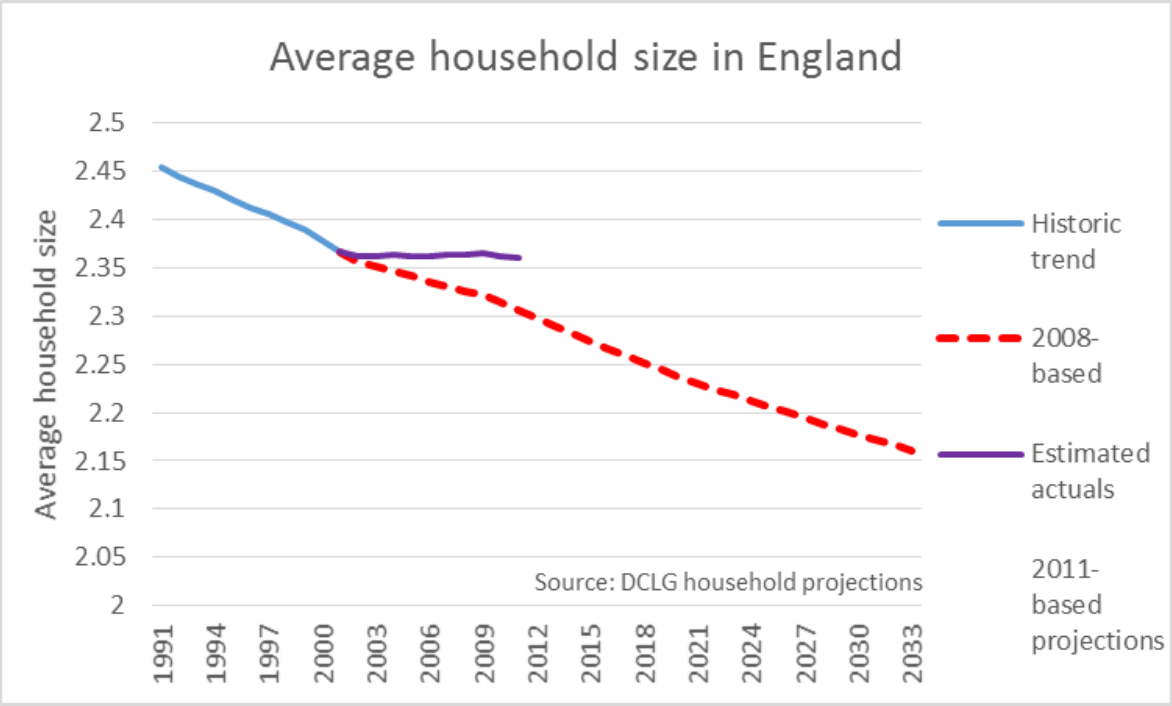

- Average household size fell from 2.45 in 1991 to 2.37 in 2001

# How average household size has changed and may change



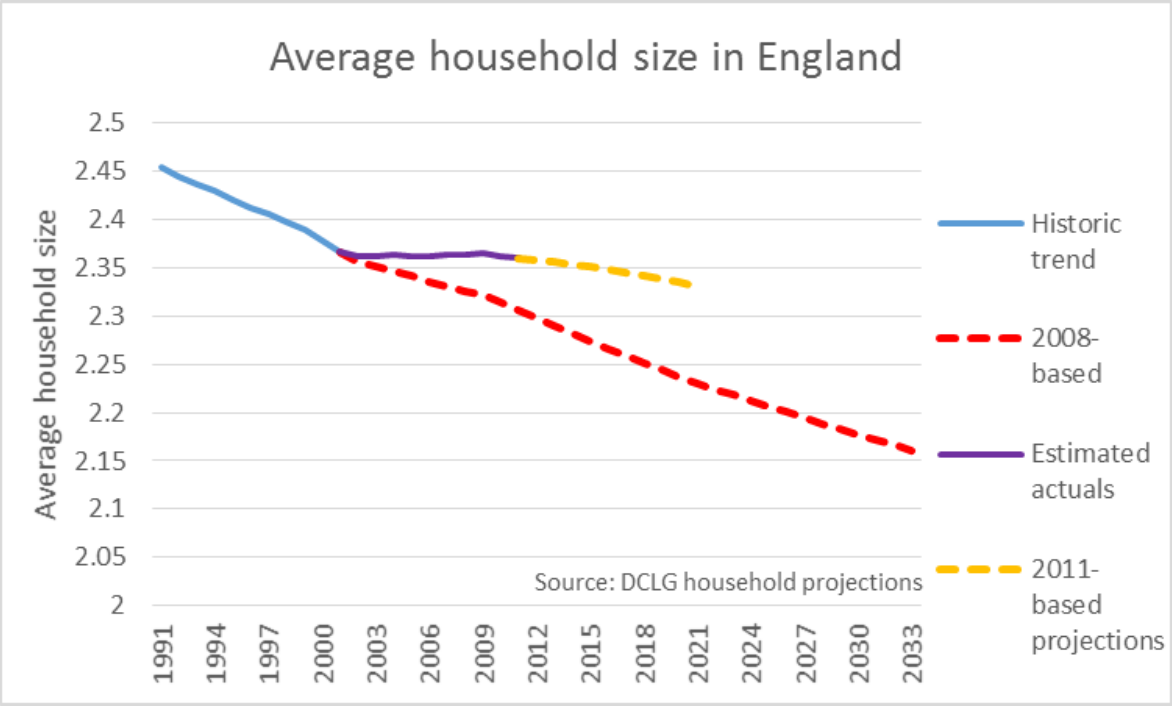

- The fall in average household size was projected to continue in DCLG's 2008-based household projections – regarded as previous long-term trend

# How average household size has changed and may change



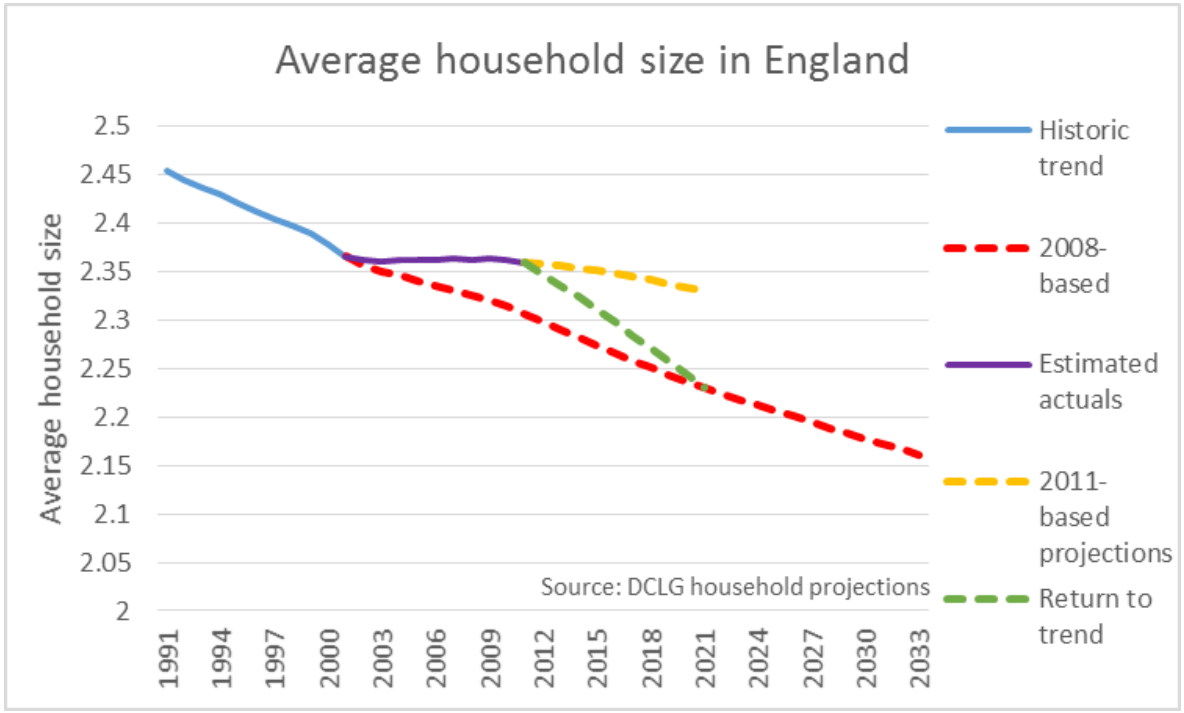

- What actually happened was that the average household size hardly changed
- Significant departure from the previous trend

# How average household size has changed and may change




- DCLG's latest (2011-based) household projections assume that the trend suggested by the 2011 census will continue
- Result is only a small fall in average household size

# How average household size has changed and may change

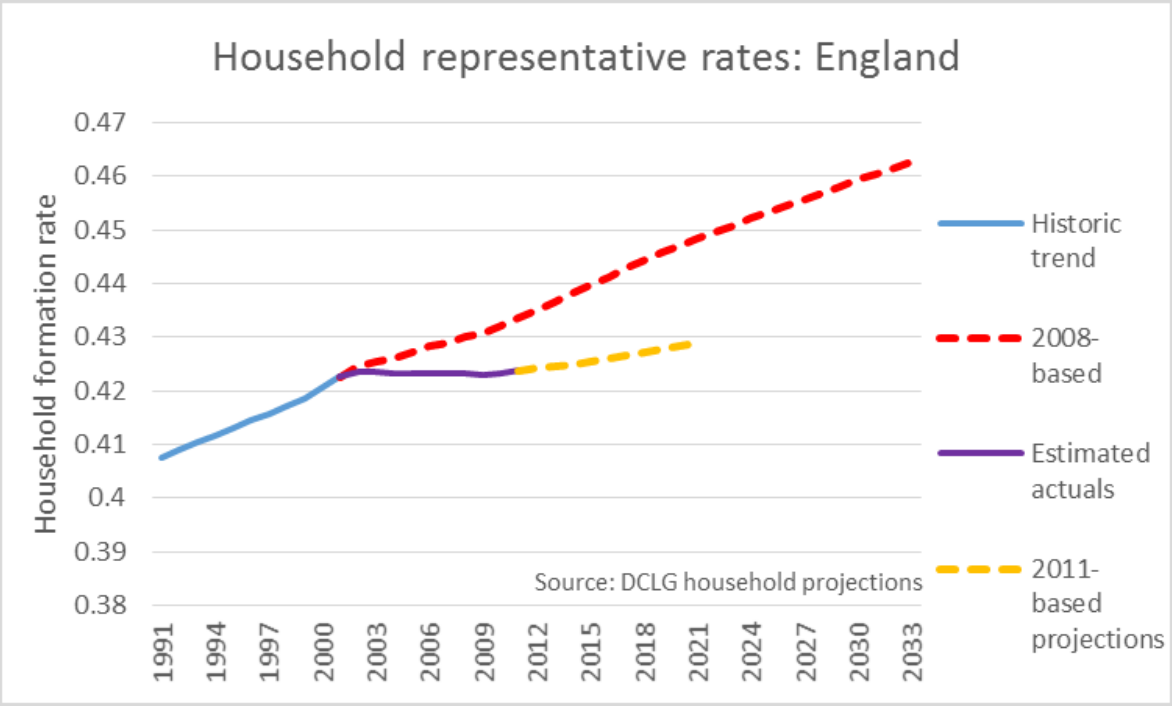



- But is a return to the previous trend more likely?
- Difference between average household size of 2.23 and 2.33 in 2021 – equating to over 1 million households
- Difference between 230,000 homes a year and 340,000

# Household representative rates (HRRs)

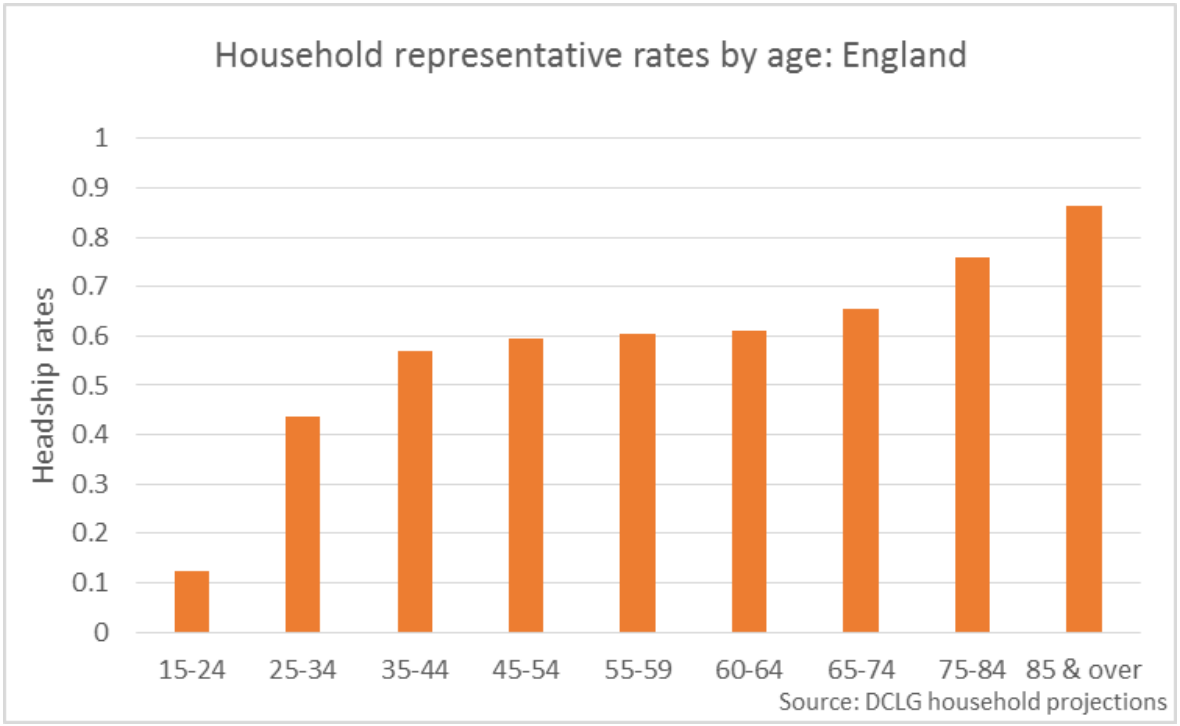
- Average households sizes measure 'persons per household'
- Household representative rates measure 'households per person' (or 'heads of household/house representative persons per person')
- One is reciprocal of the other (e.g. average household size of 2.0 equates to HRR of 0.5)
- HRRs can be applied to sub-groups e.g. women aged 45-54

# How household representative rates have changed and may change



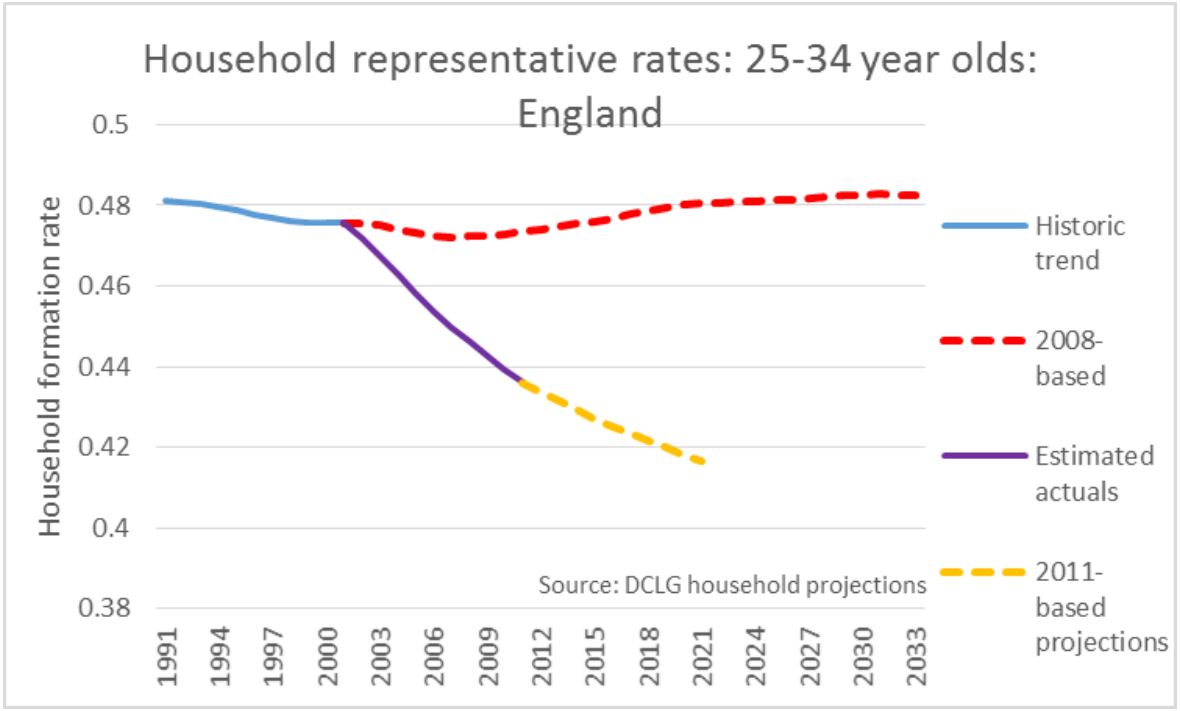

- Same information as an earlier chart using HRRs
- Falling average household size implies rising household representative rates i.e. higher tendency to form separate households

# How household representative rates vary with age




- HRRs increase with age.
- Percentage heads of households:
  - 12% of 15-24s
  - 43% of 25-34s
  - 86% of 85+
- A population with an older age profile will have higher overall HHR if HRRs of individual age groups are the same

# Impact of changes on 25-34 age group

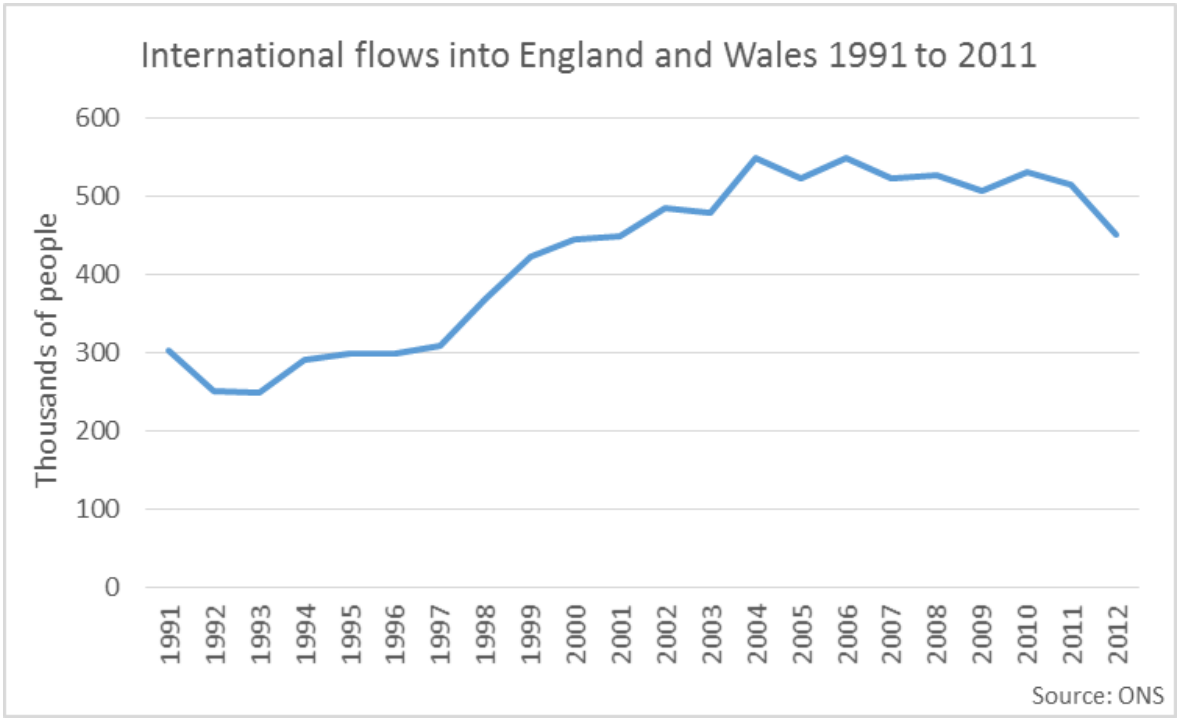



- Age group most affected by changes.
- Percentage heads of households:
  - 48.1% in 1991
  - 43.6% in 2011
  - 41.6% in 2021?
- **<u>Projections assume deteriorating chances of young adults setting up home</u>**
- Is it a new trend or a big blip?

# Why has there been a departure from the previous HRR trend?

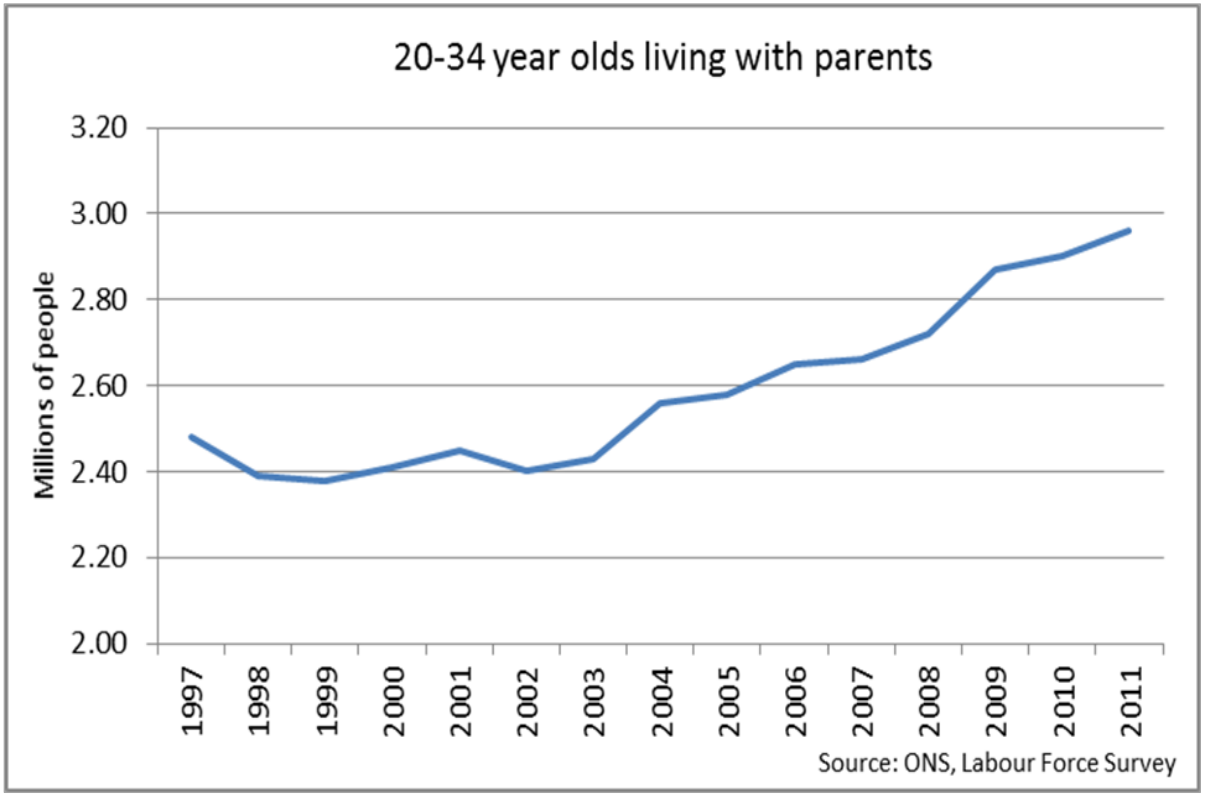
- Increased international migration
- Changes to how we are living – different household formation patterns

# Increased international migration




- New migrants younger than rest of population and tend to live in larger households than those of similar ages i.e. lower HRRs
- HRR projections based on 1990s and earlier when proportion of new migrants was smaller
- Projections therefore overestimate HRRs

# Changes to how we are living

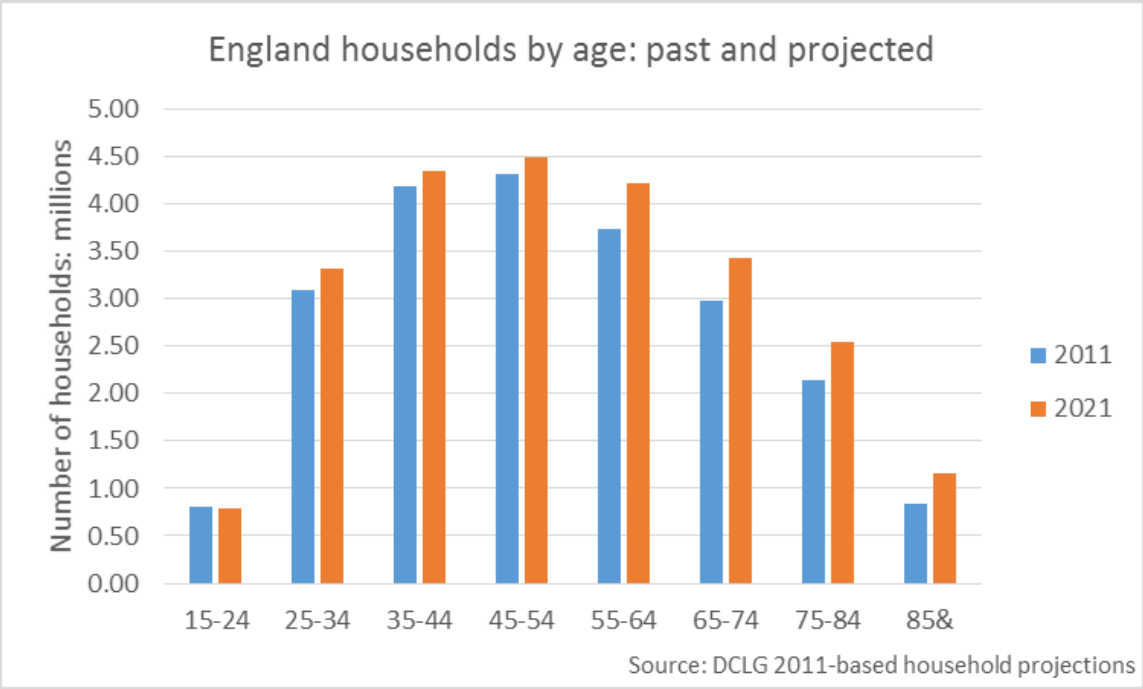



- Increase of ½ million in number of 20-34s living with parents
- Note change started before credit crunch and economic downturn in 2008
- Also evidence of more use of shared accommodation and fewer living as single person households

# What is likely to happen in the future?

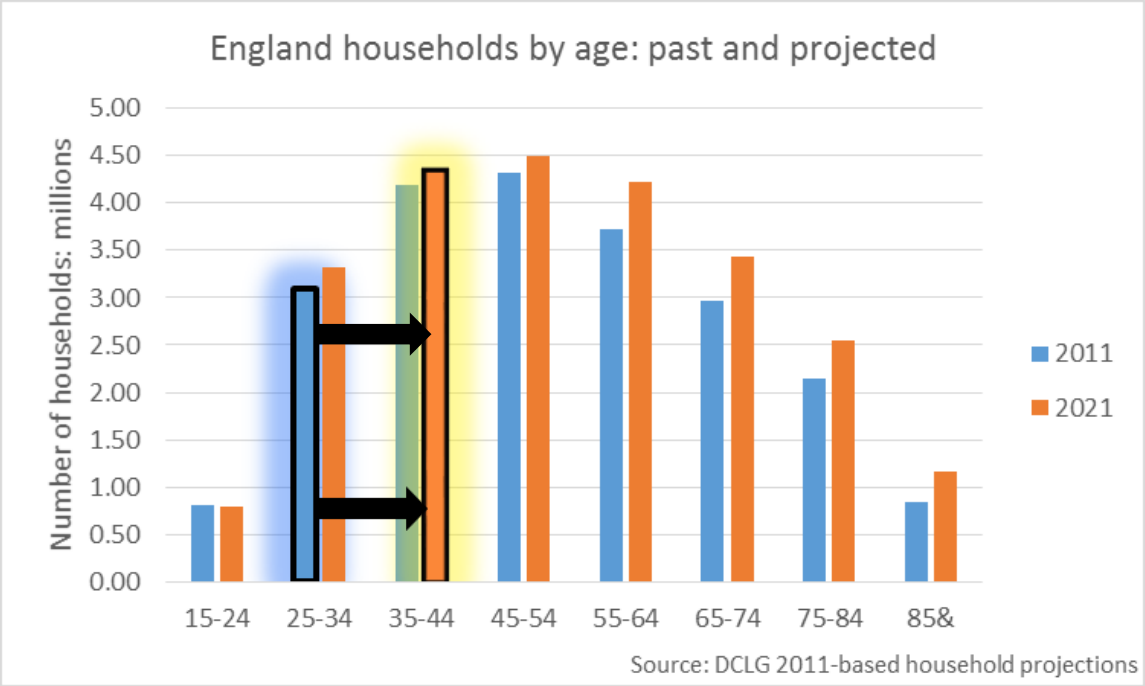
- Unlikely to be further increase in inflow of international migrants so that factor unlikely to operate
- Changes to living patterns unlikely to be changes of choice – hence likely to unwind to some extent if and when conditions improve
- More than just recovery from economic downturn: housing supply and affordability likely to be factors
- Could be some structural changes – so full return unlikely in near future

# Who are the extra homes for?



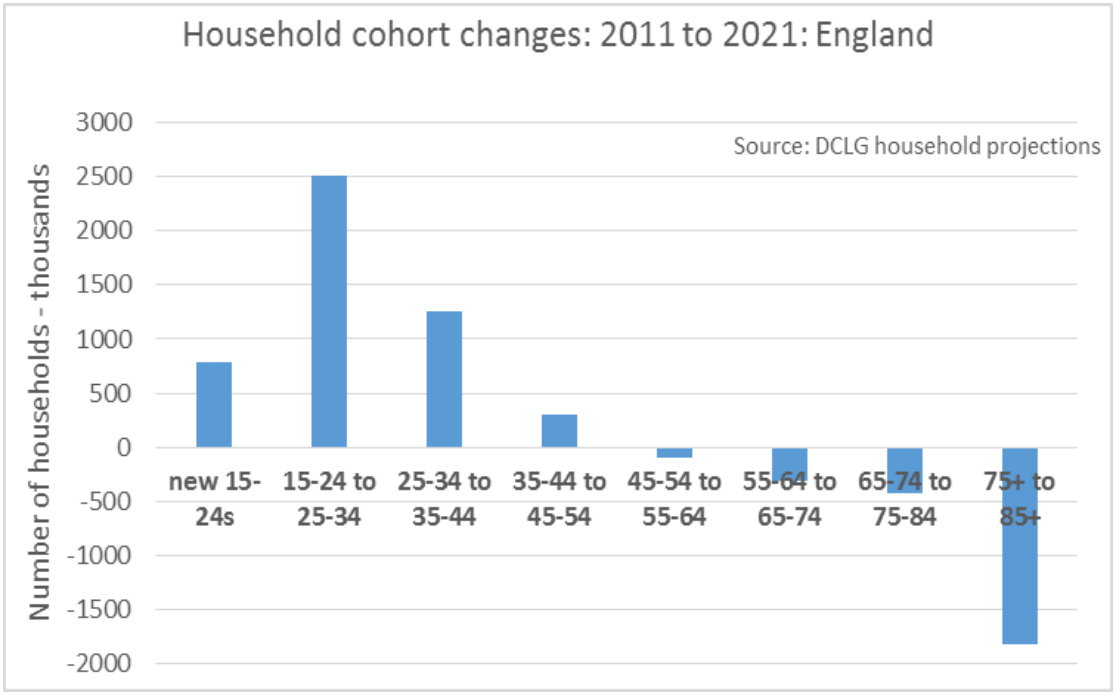

- Largest increases in the oldest age groups
- Households headed by someone over 65 account for 54% of projected household increases

# What happens to individual age groups?




- Can trace cohorts – approximately
- E.g. 25-34 age group in 2011 becomes 35-44 age group in 2021 – and is projected to see a substantial increase in households in the process

# What happens to individual age groups?

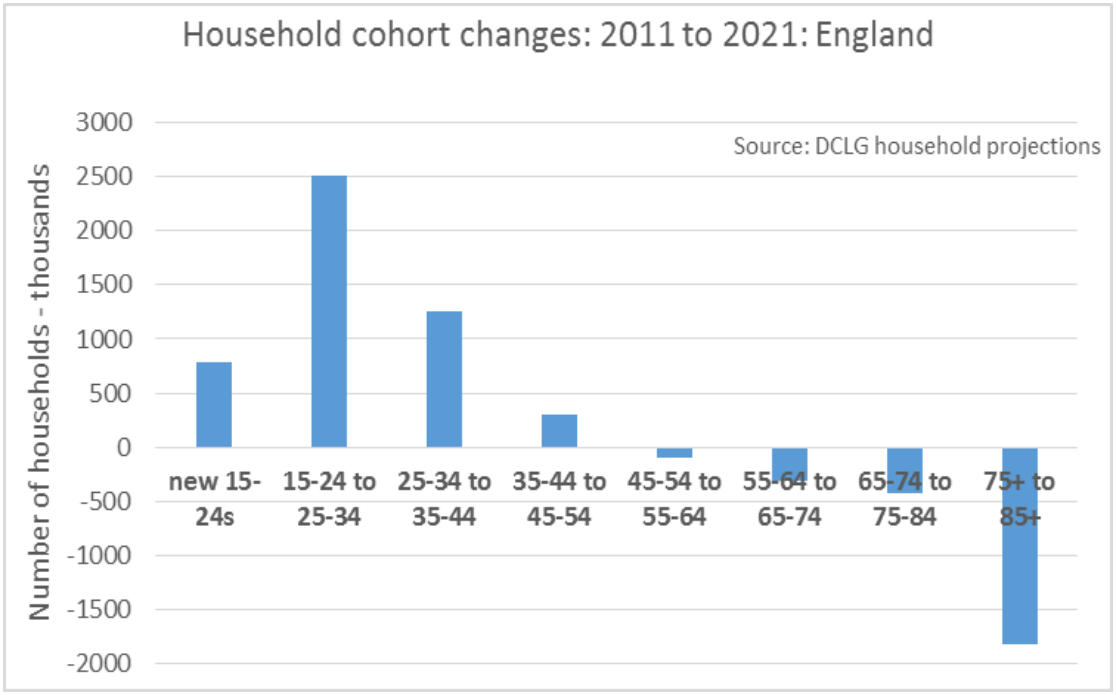



- Chart shows net number of households formed or dissolved in each cohort
- Net household formed by younger age groups **less** net households dissolved by older age groups **equals** net households formed
- People living longer and baby boomer cohorts moving into older cohorts affect number of homes released

# Projections and reality

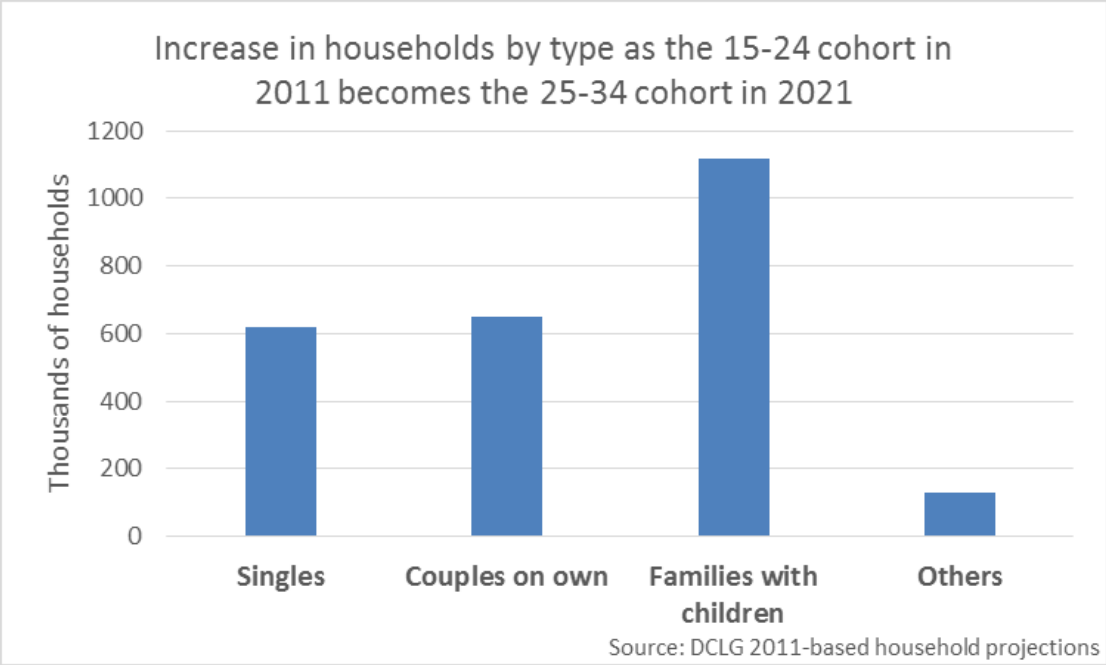
- Projections are not forecasts: they tell you what may happen if recent trends continue – which they may not
- Projections are not like weather forecasts
- Household require homes in which to form
  - 1.61 million homes added to stock between 2001 and 2011
  - 1.58 million extra households between 2001 and 2011
- What happens if 230,000 extra homes are not built?
  - Average of 160,000 extra homes a year 2001-11
  - Highest annual increase: 207,000 homes in 2007-08

# Who loses out if too few homes are built?



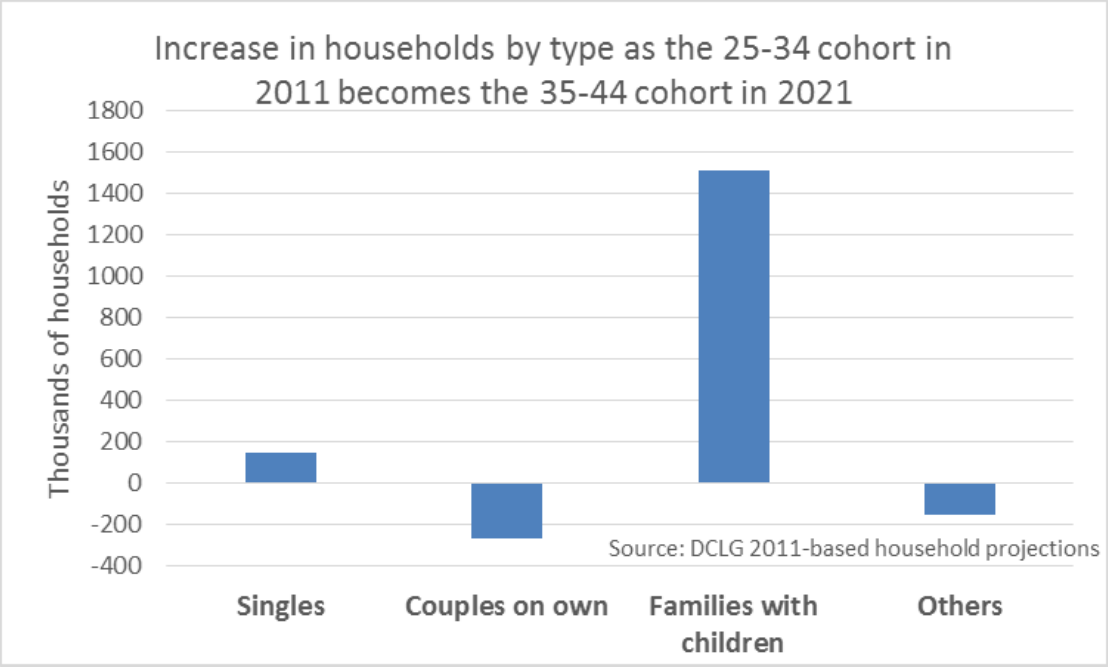

- Market will sort out who gets the available homes (apart from affordable housing)
- Older age groups less affected: they have homes and are releasing homes
- Impact largely on younger households: those entering the market and trading up.

# What type of households are at risk?



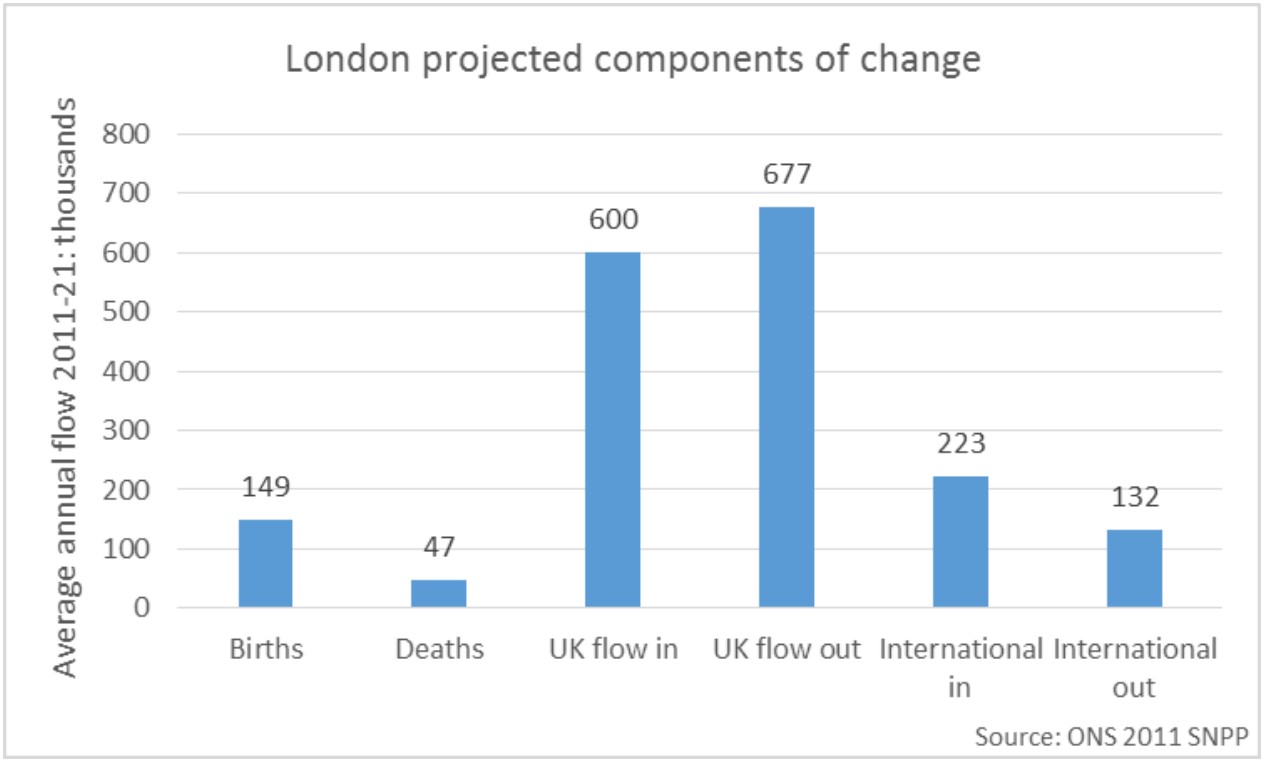

- Chart shows what happens as 15-24 cohort becomes 25-34 cohort
- Projected increase in households split by broad household type
- Fewer single person households might not matter that much
- Delayed couple and family formation more significant?

# What type of households are at risk?



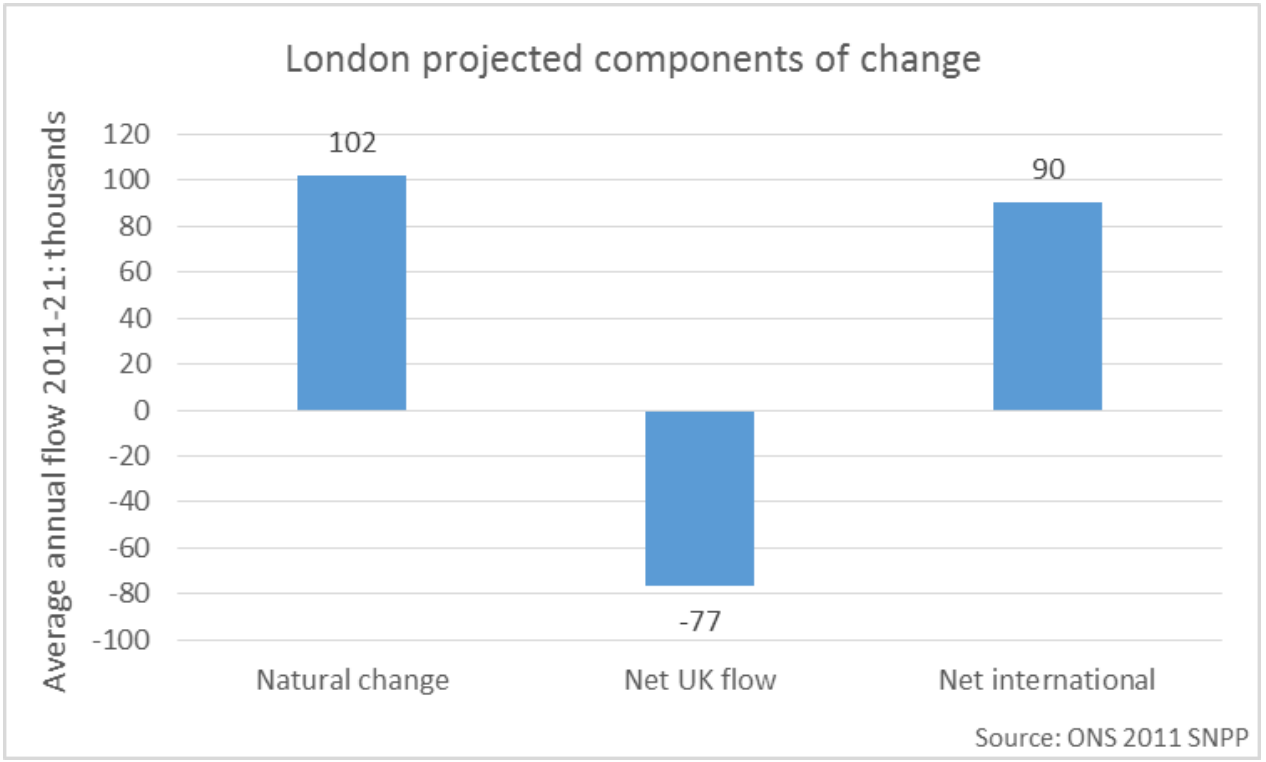

- As 25-34 cohort becomes 35-44 cohort the importance of family formation is much greater
- 1.5 million families projected in 10 year period
- “Lives put on hold”

# Summary for London



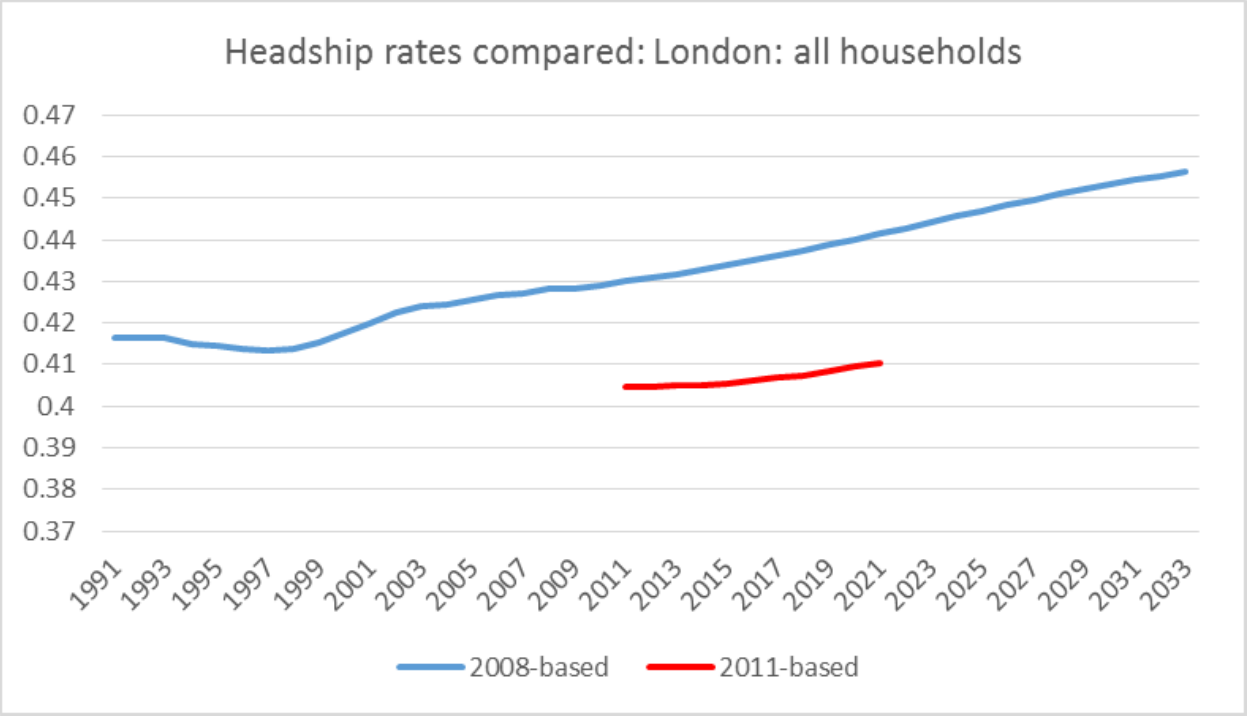

- UK gross flows dwarf other flows
- Births may be over-estimated

# Summary for London



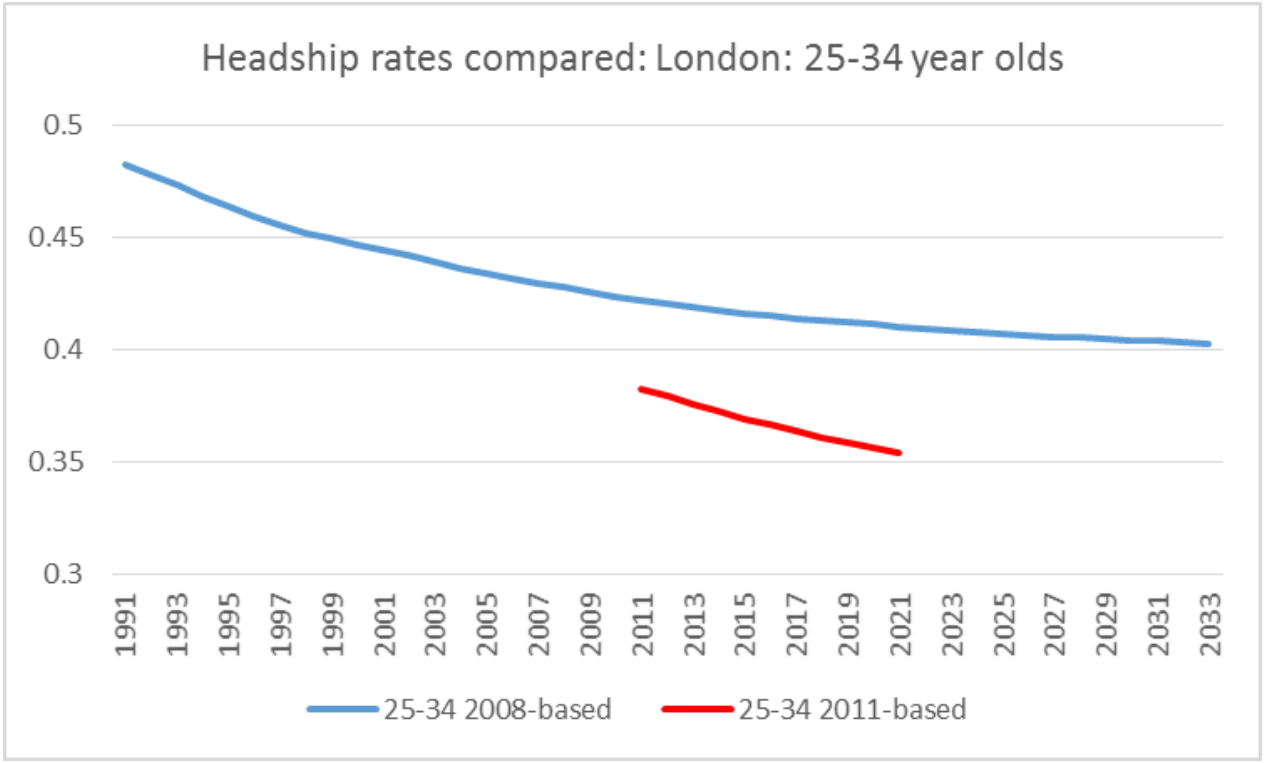

- Different picture from net flows
- Net international migration is a big driver
- Projection of 77,000 net UK outflow also critical….
- ….but many home counties LAs not planning homes needed for this

# Summary for London




- Headship rates significantly lower than expected in 2008-based projections
- Imply household growth of 52,600 a year over 2011-21 – c.f. Mayor's 42,000

# Summary for London




- 2008-based projections assume even faster decline in headship rates for 25-34 year olds
- If headship rates were held constant at 2011 levels for 15-24s, 25-34s and 35-44s household growth would be 58,600 a year

# Summary for London

- Mayor's 42,000 homes a year is over 10,000 too few if:
  - Net UK outflow is as large as projected (unlikely)
  - Headship rates for young adults falls even faster in future than in the past, with impacts on young families (undesirable)
- Making allowances for likely levels of UK outflow and no deterioration in housing prospects for young adults the shortfall could be over 20,000 homes a year
- Need for a 'wider South East' solution

# Conclusions

- Projections are not forecasts:
  - Trends may not continue and could be physically impossible
  - Continuing trends could be undesirable
- Projections not like weather forecast: the outcome can be influenced
  - What happens depends *inter alia* on how many homes are built: If 230,000 homes a year are not built, likely to be a tighter squeeze on young adults
- Flaws and limitations
  - Births overestimated in 2011-based projections
  - Internal migration suspect in 2011-based projections and in 2012 SNPP will be based entirely on outflows
  - 'Policy off' and impact of economic growth
- But used intelligently can provide valuable insights

**Neil McDonald** is a Visiting Fellow at the Cambridge Centre for Housing and Planning Research. He was Chief Executive of the National Housing and Planning Advice Unit up to its closure in July 2010. He also held various Director-level posts at the DCLG in the housing and planning fields. Since leaving the civil service in 2011 he has developed an expertise in the application of research and analysis to assist planning practitioners plan for housing. He has advised local authorities and others on planning for housing and is the author of "What Households Where?" an analytical tool produced for the Local Housing Requirement Assessment Working Group and available through their website, http://www.howmanyhomes.org/.

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