## The uncertain drivers of change in the new projections at the local authority level

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# Planning for housing: an exercise in managing uncertainty?

- <u>Uncertainties that need managing:</u>
  - How many people will we need to house?
  - How will those people live i.e. how will they group themselves into households?
- Are we asking the right question?
  - How many households will there be if recent trends continue?
  - How many households are there likely to be?
  - How many homes should we plan for?

# Planning for housing: an exercise in managing uncertainty?

### Are the numbers right?

 A brief survey of the uncertainties in the local level projections

### Are the numbers answering the right question?

- How many households will there be if recent trends continue?
- How many households are there likely to be?
- How many homes should we plan for?

### How housing requirements are estimated



### How different are the new projections: England?

Headline numbers little different:

- 2011-based: 221,000 p.a. extra households 2012-21
- 2012-based: 220,000 p.a. extra households 2012-21

### But:

- Lower population projections <u>reduce</u> household growth by 9%
- Revised household formation rates <u>increase</u> household growth by 9%

### How different are the new projections: local authorities?

### Very different story at local authority level

- 50 planning authorities for which household increase is more than 20% higher
- 66 authorities for which household increase in more than 20% lower
- 32 authorities for which the difference is more than 50% up or down!

### **Causes of the changes**



- Revised household formation rates largely increase projection
- Population changes mostly reduce projection
- Net change depends on interaction of two effects

Planning for housing: an exercise in managing uncertainty?

Are we planning for the right number of people?

Are we making the right assumptions about household formation patterns?

#### Planning for the right number of people: the total figure



New projections
 based on principal
 estimate – the only
 one for which ONS
 produce LA
 projections

Principal projection
 below any flow seen
 in last 10 years – but
 the trend is down....

# Planning for the right number of people: are the assumptions about where people will be right?



Internal migration flow rates estimated from 2007-12 are unhelpful

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### **Unattributable population change**



- At England level UPC is within confidence limits for census results and migration stats
- 91 LAs for which UPC is more than 50% of population change between censuses
- 85 LAs for which UPC is more than twice the 95% confidence interval for 2011 census totals
- Need for sensitivity analysis

### From population projection to household projection

- Input population projection by age and sex
- Split by relationship status: couple/married/previously married
- Subtract institution population to produce household population split by age/sex/relationship status
- Multiply by HRR to give households

### **Example of changes between 2011 and 2021 projections**

- LA X: 47,943 hhlds in 2011
  - 2011-based projection for 2021: 51978
  - 2012-based projection for 2021: 52376
  - Hhlds in 2021 0.8% higher in 2012-based projection;
    change in hhlds increases by 9.2% key for housing reqt.
  - Impact of different components on hhld increase
    - Revised population projection: +8.4%
    - **Revised relationship splits: -12.9%**
    - Revised institutional population projection: 2.1%
    - Revised HRRs 13.3%
- Note key role of relationship splits

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### LA level HRR projections

Exeter: past and projected changes in HRRs: younger couples



- Significant discontinuities in 2011
- 30-34 HRRs projected to be lower than both 20-24 and 25-29?

# LA level HRR projections: how many LAs have 'cross overs'?

Number of LAs for which couple HRR in age group is lower than next lower age group by more than 0.05



- Chart shows 'cross overs' by more than 0.05
- Many fewer in 2011 than in 2037 projection
- Hardly any in 2001

Are the numbers answering the right question?

How many households will there be if recent trends continue?

How many households are there likely to be?

How many homes should we plan for?

### What is likely to happen to household formation rates?

- Projections envisage 2.2 million extra households between 2011 and 2021, implying need for ~2.27 million extra homes
- Only 423,000 homes built 2011-14, implying need for 1.847 million extra homes 2014-21 i.e. 264,000 a year.
- Compare with 141,000 a year delivered 2011-14
- Highly likely that number of homes needed to allow extra households to form wont be built
- Hence household formation rates are likely to be belwo projected rates in 2021

#### How many homes should we plan for?

Past and projected HRRs compared: couples



 Should we plan on the basis that HRRs do not continue to fall for at least
 some age groups and household
 types?

### **Conclusions/points to discuss?**

### Impact of population uncertainties due to

- assumptions made on international migration;
- internal migration
- UPC
- Role of relationship status projections 2008-based?
- Institutional population assumptions are they realistic?
- Strange behaviour of HRRs: large number of 'cross overs'
- Are we answering the right question?