



leeds city region
intelligence driving growth

The objective assessment of housing requirements

Establishing a common methodological approach

For the attention of:

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Executive Summary

- E1. LCR has sought to derive a 'common start point and methodology' for the objectively assessed housing requirement within each of its constituent authority's Local Plans.
- E2. LCR's methodology must be consistent with the Government's requirement for local authorities to plan positively for growth and to produce a robust approach to assessing housing requirements which is likely to withstand scrutiny at EIPs.
- E3. The methodology presented here has drawn together published planning guidance documentation, with evidence from demographic statistics for the LCR authorities. Using this information in combination with Edge Analytics' experience and expertise in the formulation of evidence to support Local Plan development, a methodological framework for the assessment of housing requirements is presented.
- E4. Whilst the emphasis on localism has provided individual local authorities with an opportunity to have greater control over the formulation of their own housing plans, a duty-to-cooperate is enshrined as a key principle of the plan-making process.
- E5. The process of cooperation between neighbouring authorities can be better facilitated if approaches and methods used for evidence generation and plan formulation are comparable and if data sources and assumptions that have been used are consistent.
- E6. It is recommended that LCR authorities give due consideration to the methodological framework that is presented here as they seek to achieve consensus through collective scrutiny and review of their respective Local Plans

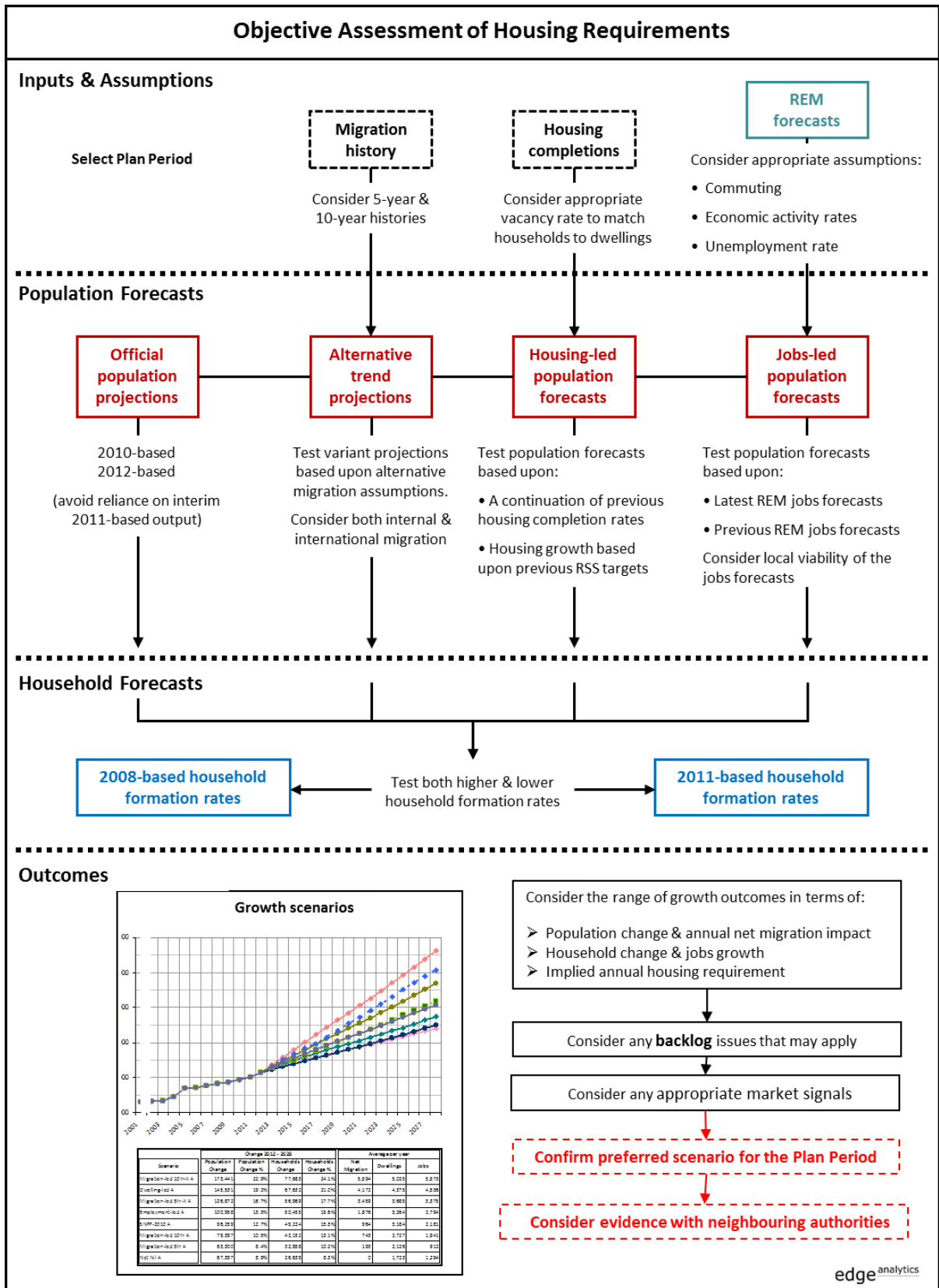


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1. Context & Requirements

Context

- 1.1 Long-term planning to satisfy future housing requirements is central to the Government's national growth agenda, responding to the sustained increase in the UK's population and acute affordability challenges in the housing market, whilst providing a stimulus to economic recovery.
- 1.2 The creation of a nationwide network of local enterprise partnerships (LEPs) has been a key component of the government's economic growth strategy. Financial resources under the strategic direction of the LEPs equates to approximately £15 billion in the years to 2021¹. These resources include the allocation of a proportion of the New Homes Bonus to the LEPs with distribution likely to be influenced by the relative scale of ambition associated with constituent LEP authorities.
- 1.3 The Leeds City Region (LCR) LEP is seeking to establish a common methodological approach for the objectively assessed need for housing as defined in the National Planning Policy Framework (NPPF)² and the draft National Planning Practice Guidance (NPPG)³.
- 1.4 The LCR's current position on housing is to maintain the overall approach agreed in the former Regional Spatial Strategy (RSS); accommodating appropriate development, recognising the roles of places and safeguarding key environmental assets. This collective intent is incorporated in the Interim Strategy Statement agreed by the LCR Leaders Board in 2011⁴.
- 1.5 Whilst acknowledging the LCR's position on housing, the Interim Strategy Statement recognises that the evidence which underpinned the RSS has changed significantly and is in need of refresh. For this reason, a detailed assessment of housing provision does not form part of the Interim Strategy Statement.
- 1.6 Additionally, the LCR partnership continues to evolve its investment planning priorities as it develops its new Strategic Economic Plan, the key document required by government to support

¹ HM Treasury and Infrastructure UK. June 2013. *Investing in Britain's future*.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/209279/PU1524_IUK_new_template.pdf.

² CLG. March 2012. *National Planning Policy Framework*.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf.

³ CLG. *National Planning Practice Guidance*. <http://planningguidance.planningportal.gov.uk/blog/guidance/>.

⁴ Leeds City Region. April 2011. *Interim Strategy Statement*. <http://www.leeds.gov.uk/docs/CD14-10%20LCR%20Interim%20Strategy%20Statement.pdf>.

bidding into the Local Growth Fund. The LCR-wide evidence on future housing development will provide important evidence to the Strategic Economic Plan and the updated Housing and Regeneration Plan which is being separately commissioned.

Requirements

- 1.7 Individual LCR authorities have refreshed or are refreshing their local housing evidence and a LCR overview of this activity is now deemed to be a priority. The recent experience of implementing the 'duty-to-co-operate' directive of the NPPF and the uncertainty that is evident in the 2011 Interim Household Projections, has led LCR to conclude that there is a need to establish a common start point and methodology for the work on objectively assessed housing that is required for each Local Plan.
- 1.8 The NPPF/NPPG provides detailed guidance on the objective assessment of housing need and the Planning Advisory Service (PAS) and Local Government Association (LGA) have published their own 'ten key principles' for achieving the same objective⁵.
- 1.9 In the development of its methodology for the objective assessment of housing need, LCR has identified a number of specific elements that it wishes to consider:
 - The variation that is evident in successive population projections published by the Office for National Statistics (ONS) for each LCR local authority and a look forward to the forthcoming 2012-based output. There is particular interest in the importance of migration as a component of population, both historically and in the future.
 - The strengths and weaknesses of the 2008-based and 2011-based household projections from the Department for Communities and Local Government (CLG) and guidance on how these issues might be addressed by local authorities in the development of local housing plans.
 - How to better understand the quantitative relationship between the ambition for local economic growth and rates of household formation; including how migration, commuting and economic activity rates influence this relationship.

⁵ PAS and LGA. April 2013. *Ten Principles for Owning Your Housing Number: Finding Your Objectively Assessed Needs*. http://www.pas.gov.uk/4-plan-making/-/journal_content/56/332612/4077684/ARTICLE#sthash.BXIPgyB7.dpuf.

- How to appropriately quantify the implications of outstanding unmet housing need and to ensure it is being addressed.

1.10 LCR is seeking to ensure that any methodology it adopts is consistent with the Government's requirement for local authorities to plan positively for growth and to produce a robust approach to assessing housing requirements which is likely to withstand scrutiny at Examinations in Public (EIPs).

Document Structure

1.11 Section 2 provides a brief summary of LCR's demographic context, the size and distribution of its population and the change evident over the last decade in both population and dwellings.

1.12 As context to the LCR methodological approach, Section 3 summarises key points from the NPPF/NPPG guidance and PAS/LGA notes on the objective assessment of housing need.

1.13 Section 4 presents evidence on local population estimates and projections, giving consideration to the important changes that have resulted from the 2011 Census, the appropriate use of population estimates and projections for planning purposes and the methods and approaches available for the derivation of alternative forecasts of demographic change to augment the evidence base.

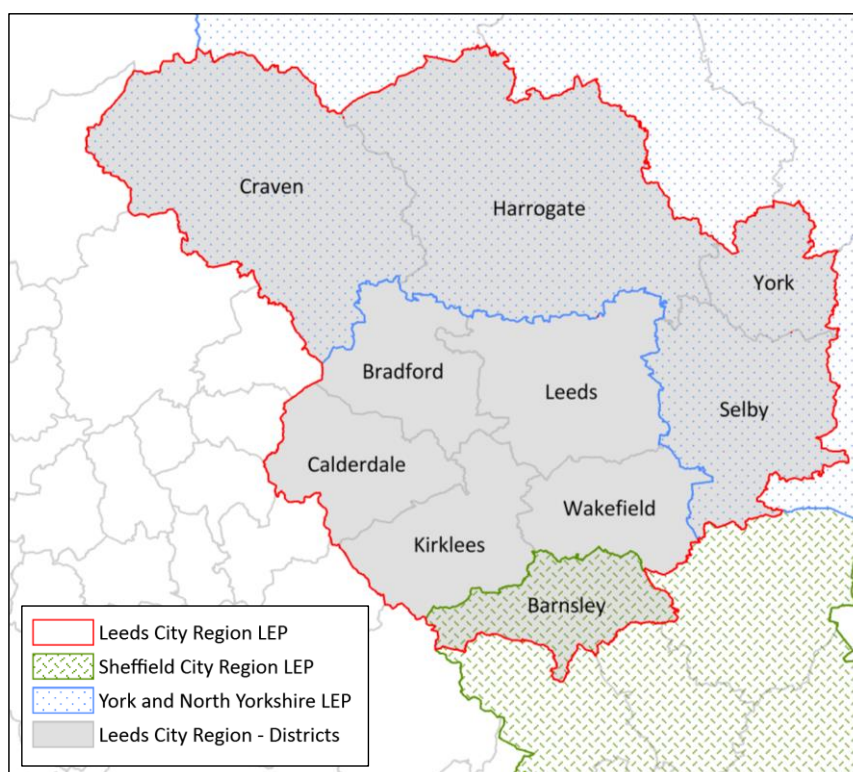
1.14 Section 5 provides an overview of the data, assumptions and methods which underpin household projections, specifically the differences between the 2008-based and 2011-based alternatives from CLG and how these might be used most appropriately to forecast housing requirements based upon rates of future household formation.

1.15 Section 6 summarises the range of growth scenarios that LCR authorities might consider in the formulation of evidence to support housing plan development, aligning to the NPPF's guidance on the use of a range of demographic and economic statistics to underpin the process. The key components of scenario 'sensitivity' are identified, providing guidance on the factors that LCR authorities should consider individually and collectively.

1.16 Section 7 concludes with a summary of the methodological approach that is recommended to LCR as it seeks to standardise the development of housing plans between its member authorities.

2. LCR - demographic context

- 2.1 The LCR consists of a partnership of ten local authority districts, overlapped to the north and east by the York & North Yorkshire LEP and to the south by the Sheffield City LEP (Figure 1).



Contains Ordnance Survey data © Crown copyright and database right 2012

Figure 1: Leeds City Region definition

- 2.2 The 2011 Census recorded a resident population of almost 3 million within the LCR, a 7% increase over the 2001-2011 decade. Household and dwelling growth was slightly higher at 8.2%, suggesting a reduction in average household size over the period (Table 1).

Table 1: Demographic change 2001-2011

Leeds City Region				
	2001	2011	Change	%
Population	2,759,196	2,952,057	192,861	7.0%
Households	1,139,794	1,233,049	93,255	8.2%
Dwellings	1,186,126	1,283,886	97,760	8.2%

- 2.3 The LCR boundary encompasses a diverse mix of urban, suburban, rural and mixed localities. Approximately 26% of its population is concentrated within Leeds, 75% within the West Yorkshire conurbation and just 17% in the York and North Yorkshire authorities (Figure 2).

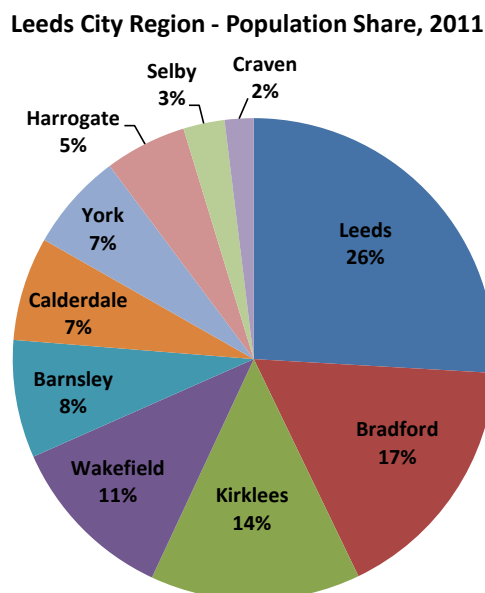


Figure 2: Local authority share of the LCR population in 2011

- 2.4 Since 2001, rates of growth have varied between the ten LCR authority areas. Bradford's 11.8% increase in population contrasts to a 3.4% change in Craven and Wakefield (Table 2).

Table 2: LCR population change 2001-2011

Area Name	Population 2001	Population 2011	Change	%
Barnsley	218,101	231,221	13,120	6.0%
Bradford	467,305	522,452	55,147	11.8%
Calderdale	192,114	203,826	11,712	6.1%
Craven	53,578	55,409	1,831	3.4%
Harrogate	151,375	157,869	6,494	4.3%
Kirklees	388,720	422,458	33,738	8.7%
Leeds	715,160	751,485	36,325	5.1%
Selby	76,486	83,449	6,963	9.1%
Wakefield	315,192	325,837	10,645	3.4%
York	181,165	198,051	16,886	9.3%
Leeds City Region	2,759,196	2,952,057	192,861	7.0%

- 2.5 The largest absolute change occurred in Bradford, with a population increase of over 55,000 between Census years. Leeds and Kirklees achieved growth of approximately 36,000 and 33,000 respectively.
- 2.6 Within each local authority, population change has been driven by a mixture of natural change (the difference between births and deaths) and net migration (the overall balance of growth resulting from in-migration, out-migration, immigration and emigration). Natural change has been a more significant driver of growth in the larger urban authorities. In Craven, its impact upon population change has been negative over the decade (Figure 3).

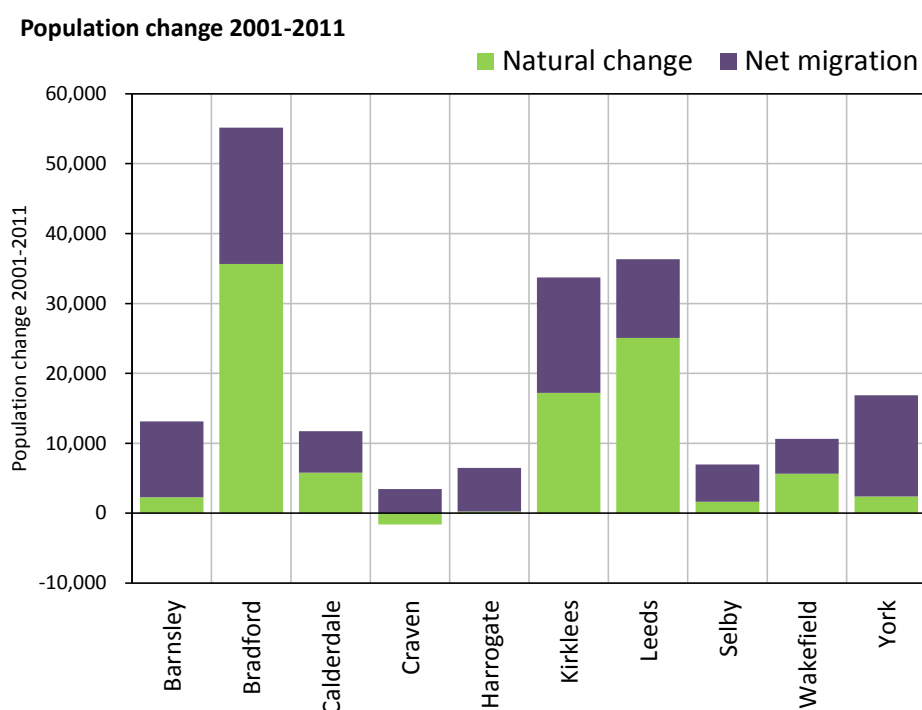


Figure 3: Components of population change, 2001-2011

- 2.7 The 8.2% growth in the number of dwellings across the LCR also hides considerable variation between authorities. Dwelling growth in Harrogate over the 2001-2011 decade was below 7%, whereas in Selby, the number of dwellings increased by 13.5% (Figure 4). Craven's 11% increase in dwelling numbers contrasts to its relatively low population change of approximately 3.4% over the decade.

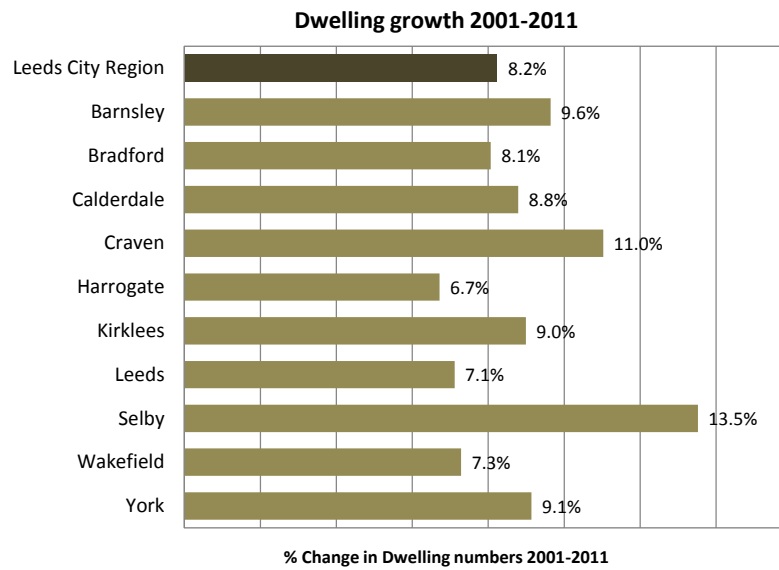


Figure 4: LCR dwelling growth 2001-2011

2.8 The 2011 Census has provided a timely and definitive update on demographic statistics for the LCR. This update has enabled a recalibration of previous mid-year population estimates, a new basis for estimating future rates of household formation and the historical evidence on which new trend projections may be formulated. All of this new evidence has important implications for the evaluation of future housing requirements for each of the LCR local authorities.

3. National Planning Policy

- 3.1 With the revocation of the Regional Spatial Strategy (RSS), the development of housing requirements for Local Plans is now very much the responsibility of individual local authorities. To support this process, the NPPF provides guidance on the preparation of local evidence, combining demographic, economic and location-specific considerations in the derivation of an appropriate long-term requirement for new homes.
- 3.2 The term ‘housing requirement’ is often used interchangeably with ‘housing need’. In previous SHMA guidance (Strategic Housing Market Assessments - Practice Guidance, 2007), ‘need’ generally refers to affordable housing, whereas the focus of the methodological framework presented here is the wider ‘housing requirements’ planning process, which will incorporate an element of affordable need. References to housing ‘need’ in this document refer to the wider housing requirements evidence derived largely from demographic analysis.
- 3.3 At the core of the NPPF is a “*presumption in favour of sustainable development*”. Key principles include the requirement that planning should:

“Proactively drive and support sustainable economic development to deliver the homes, business and industrial units, infrastructure and thriving local places that the country needs. Every effort should be made objectively to identify and then meet the housing, business and other development needs of an area, and respond positively to wider opportunities for growth. Plans should take account of market signals, such as land prices and housing affordability, and set out a clear strategy for allocating sufficient land which is suitable for development in their area, taking account of the needs of the residential and business communities.” (CLG, 2012, para 17)

- 3.4 With regard to housing, the NPPF states that in order to boost the supply of housing, local planning authorities should:

“Use their evidence base to ensure that their Local Plan meets the full, objectively assessed needs for market and affordable housing in the housing market area, as far as is consistent with the policies set out in this Framework.” (CLG, 2012, para 47)

- 3.5 The NPPF provides further guidance on the use of a ‘*proportionate evidence base*’:

“Each local planning authority should ensure that the Local Plan is based on adequate, up-to-date and relevant evidence about the economic, social and environmental characteristics and prospects of the area. Local planning authorities should ensure that their assessment of and strategies for housing, employment and other uses are integrated, and that they take full account of relevant market and economic signals.” (CLG, 2012, para 158)

3.6 Additional guidance is provided on the key data and drivers which should be considered in the formulation of an ‘objectively assessed need’, with local authorities expected to:

- *“Prepare a Strategic Housing Market Assessment to assess their full housing needs, working with neighbouring authorities where housing market areas cross administrative boundaries. The Strategic Housing Market Assessment should identify the scale and mix of housing and the range of tenures that the local population is likely to need over the plan period which:*
 - *Meets household and population projections, taking account of migration and demographic change;*
 - *Addresses the need for all types of housing, including affordable housing and the needs of different groups...; and*
 - *Caters for housing demand and the scale of housing supply necessary to meet this demand.” (CLG, 2012, para 159)*

3.7 In response to the Taylor Review,⁶ the new NPPG has been published in draft form. Of particular relevance to the calculation of the objectively assessed housing needs of an area is the publication of the guidance note entitled ‘Assessment of Housing and Economic Development Needs’, which is ultimately intended to replace the current SHMA Guidance ‘Strategic Housing Market Assessments - Practice Guidance’ from 2007.

3.8 With regard to the calculation of housing need the NPPG states:

“The use of this standard methodology is strongly recommended because it will ensure that the assessment findings are transparently prepared. Local planning

⁶ CLG. December 2012. *External Review of Government Planning Practice Guidance*.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/39821/taylor_review.pdf.

authorities may consider departing from the methodology, but they should explain why their particular local circumstances have led them to adopt a different approach where this is the case. The assessment should be thorough but proportionate, building where possible on existing information sources outlined within the guidance.” (CLG, 2013, D 2a-005-130729⁷)

- 3.9 The NPPG identifies that the CLG household projections should provide the starting point for the estimate of overall housing need, but notes that the current (2011-based) interim dataset has a time horizon of 2021. Importantly the NPPG states:

“However, plan-makers may consider sensitivity testing, specific to their local circumstances, based on alternative assumptions in relation to the underlying demographic projections and household formation rates.”

- 3.10 In this context the NPPG stresses the importance of taking employment trends into account when considering future needs for housing:

“Plan-makers should make an assessment of the likely growth in job numbers based on past trends and/or economic forecasts as appropriate and also having regard to the growth of the working age population in the housing market area... Where the supply of working age population (labour force supply) is less than the projected job growth, this will result in unsustainable commuting patterns and could reduce the resilience of local businesses. In such circumstances, plan makers will need to consider increasing their housing numbers to address these problems.”

- 3.11 In addition to economic factors, the NPPG also recognises the importance of taking into account market signals:

“The housing need number suggested by household projections (the starting point) should be adjusted to reflect appropriate market signals, as well as other market indicators of the balance between the demand for and supply of dwellings.”

- 3.12 The PAS/LGA has also published a guide to assist local authorities in assessing their objectively

⁷ CLG. August 2013. *Assessment of housing and economic development needs.*
<http://planningguidance.planningportal.gov.uk/blog/guidance/assessment-of-housing-and-economic-development-needs/what-methodological-approach-should-be-used/>

assessed needs and translating these into policy⁸. This reinforces a number of important principles in terms of the interpretation of the NPPF, as follows:

“Corroboration, consistency and integration will ensure a joined up strategy and be more likely to deliver a good and sound plan. For example consideration of the long term demographic and economic led projections may reveal that they are producing a similar level of housing requirement. If this will ensure you meet your objective of achieving x jobs over the plan period as well as addressing the high level of affordable need that exists, then there is a consistent set of evidence which integrates your strategy together and can be justified.

Conversely it is inappropriate and perverse for a strategy which seeks to increase jobs across the district to be accompanied by a low level of housing based on demographic projections with low migration trends. This is because the ambition for new jobs is only likely to be achieved by the in-migration of economically active people. Likewise a corporate strategy which seeks to address the high affordable housing need is unlikely to be delivered by a very low level of housing provision.” (pg. 10, 2013)

3.13 This summary of the latest policy guidance provides an important context against which to assess the compliance of any evidence prepared to inform a statutory Local Plan under the new planning policy framework. It also provides the framework around which a methodological approach is presented here for the LCR local authorities to consider.

⁸ PAS and LGA. April 2013. *Ten Principles for Owning Your Housing Number: Finding Your Objectively Assessed Needs*. http://www.pas.gov.uk/4-plan-making/-/journal_content/56/332612/4077684/ARTICLE#sthash.BXIPgyB7.dpuf.

4. Population estimates & projections

Official statistics

- 4.1 Robust and timely population statistics are the most important component of the evidence required to support the assessment of housing requirements. They provide both an historical perspective on demographic growth and the basis for long-term projections of change. The current and evolving age structure of local populations drives the estimation of the likely levels of household formation and the changing size and shape of the resident labour force.
- 4.2 The UK does not have a population register and so relies on the ten-yearly Census for its definitive statistics on local populations (Figure 5). Between Censuses, mid-year population ‘estimates’ are published by the Office for National Statistics (ONS), taking account of the impact of births, deaths, internal migration and international migration upon each local authority’s population. International migration is the most volatile component of demographic change and the most difficult to estimate accurately. Its sub-national estimation methodology has been subject to significant revision resulting in the re-calibration of mid-year population estimates over the course of the 2001-2011 decade.

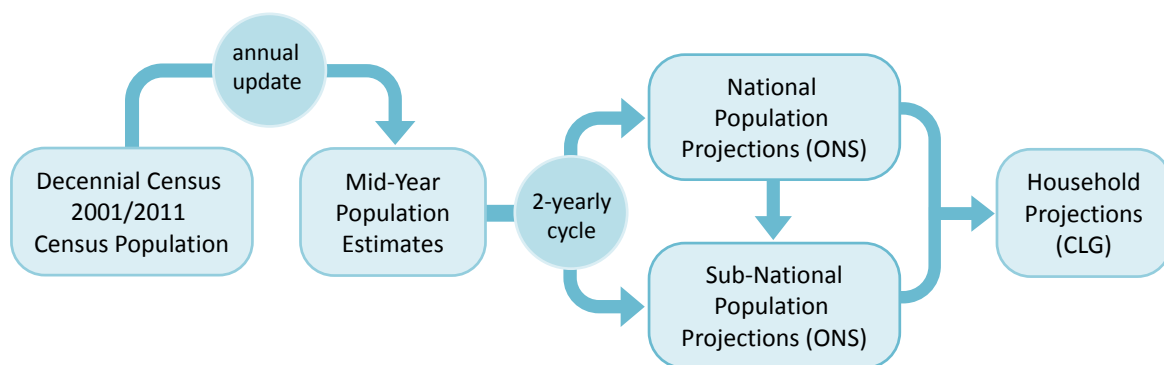


Figure 5: Official statistics on population and household estimates and projections

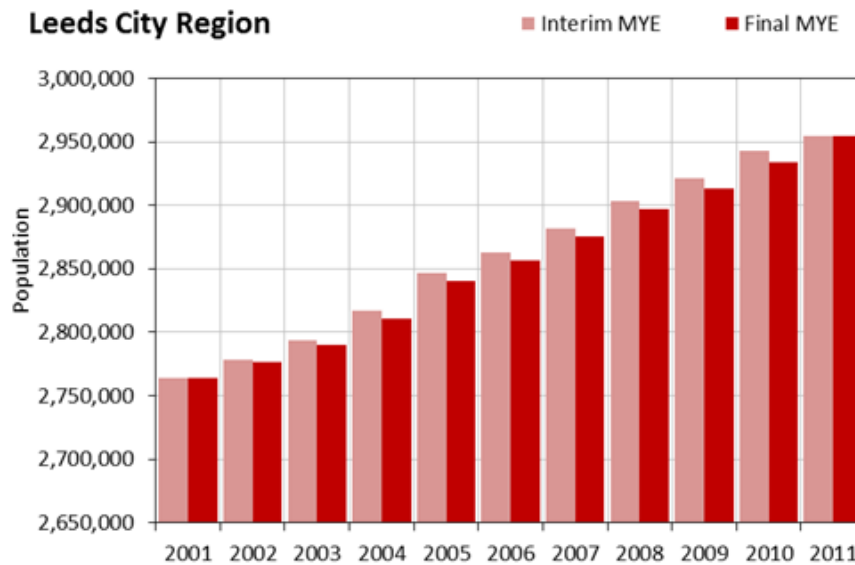
- 4.3 Every two years, ONS publishes a ‘national’ population projection for the UK and its constituent countries, including a ‘principal’ projection of growth and a series of ‘variant’ projections which test the sensitivity of fertility, mortality and migration assumptions upon growth outcomes. A national projection which has a starting year of 2010 is referred to as the ‘2010-based’ national population projection, typically using historical statistics from a prior 5-year period to calibrate its

migration assumptions.

- 4.4 The national projection is followed by the publication of 'sub-national' population projections, providing an indication of likely growth in each local authority area over a 25-year projection horizon. No 'variant' alternatives are provided at a sub-national level but migration assumptions are again typically based upon a prior 5-year period, with the '2010-based' naming convention consistent with the national projections.
- 4.5 With a continuous cycle of new statistical releases, the release of 2011 Census data, plus a number of fundamental changes to estimation and projection methods over the last decade, the selection of demographic evidence on which to base the development of long-term housing plans has been a challenging proposition for local planners. The timing at which evidence is formulated can have an important bearing on growth outcomes.

Population estimates

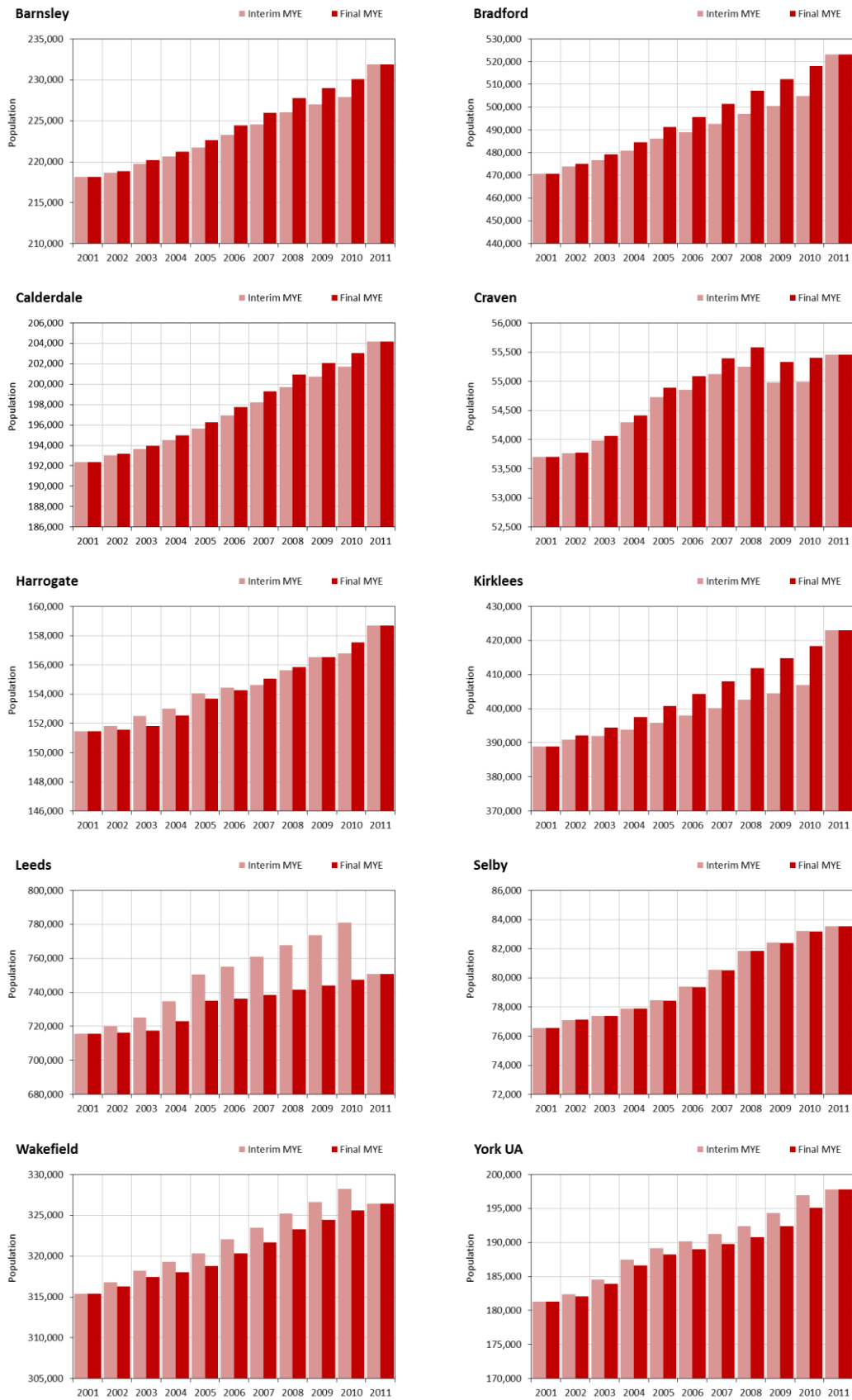
- 4.6 The 2011 Census has provided a timely and definitive update on local population statistics. But it has also resulted in the 'recalibration' of previous mid-year population estimates. This has important implications for both the interpretation of historical evidence on demographic change in local authority areas and on the derivation of projections of future growth based upon this evidence.
- 4.7 For the LCR as a collection of ten local authorities, the 2011 Census has suggested that previous mid-year populations over-estimated the scale of growth evident since the previous Census in 2001 (Figure 6). Given that births and deaths are robustly recorded through vital statistics registers and that internal migration is adequately measured through the process of GP registration, it is most likely that the 'error' in the mid-year population totals is due to the difficulty associated with the estimation of immigration and emigration impacts at a local level. (It may be that there are residual issues associated with the accuracy of the 2001 and 2011 Census counts but this is more difficult to prove, so the assumption is made that both Censuses provide a robust enumeration of local authority populations).



Source: ONS

Figure 6: Population counts - LCR 2001-2011

- 4.8 Whilst the effect of the mid-year population recalibration does not appear too significant for the LCR in total, there are important variations in the impact at local authority level that need to be considered (Figure 7). For example, the population of Leeds has been subject to the most significant change with an approximate 50,000 reduction in its growth estimate for the 2001-2011 decade. Wakefield and York have also seen their respective population estimates revised downwards as a result of the 2011 Census.
- 4.9 In contrast, an upward revision to population estimates has resulted for Kirklees, Bradford, Barnsley, Calderdale and Craven. In these authorities the 2011 Census has suggested that previous mid-year estimates had under-counted the true extent of population growth over the 2001-2011 decade. For two authorities, Selby and Harrogate, the recalibration of the population appears to be less significant, suggesting a more accurate estimation of change over the decade.



Source: ONS

Figure 7: Population counts - LCR local authorities 2001-2011

Population projections

- 4.10 The significance of the changes to the historical estimates of population growth is that they form a key component of the derivation of migration assumptions in the official trend projections (Figure 8). A downward adjustment in the population estimate for 2001-2011 will typically mean a lower growth trajectory in subsequent projections. Conversely, an upward adjustment will typically mean a higher growth trajectory in subsequent projections.

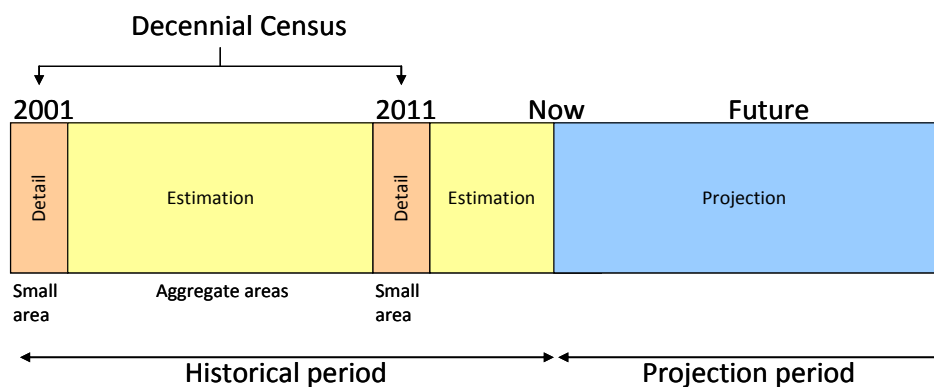


Figure 8: Census statistics, mid-year estimates and population projections

- 4.11 Any change to population projections will have an effect upon household projections, which ultimately provide the basis for the assessment of housing need. It is therefore essential that due consideration is given to the full range of statistical evidence that has resulted from the definitive population counts derived from the 2011 Census.
- 4.12 The importance of historical evidence in shaping population projections is best illustrated with a comparison of the official sub-national population projections released by ONS with a 2004, 2006, 2008, 2010 and 2011 base period. An aggregate picture for the LCR authorities is again provided to illustrate the issues involved (Figure 9).
- 4.13 The 2004-based projection suggests the flattest growth, with higher international migration effects yet to feature in the historical statistics on which migration assumptions are based. The 2006-based and 2008-based projections estimate a more substantial population change over the 25-year projection period, driven by higher growth assumptions for international migration.
- 4.14 The 2010-based projections dampened the LCR's growth trajectory, largely due to ONS revisions to its methodology for estimating international migrants, revisions that had a particular impact upon the Yorkshire & the Humber region.

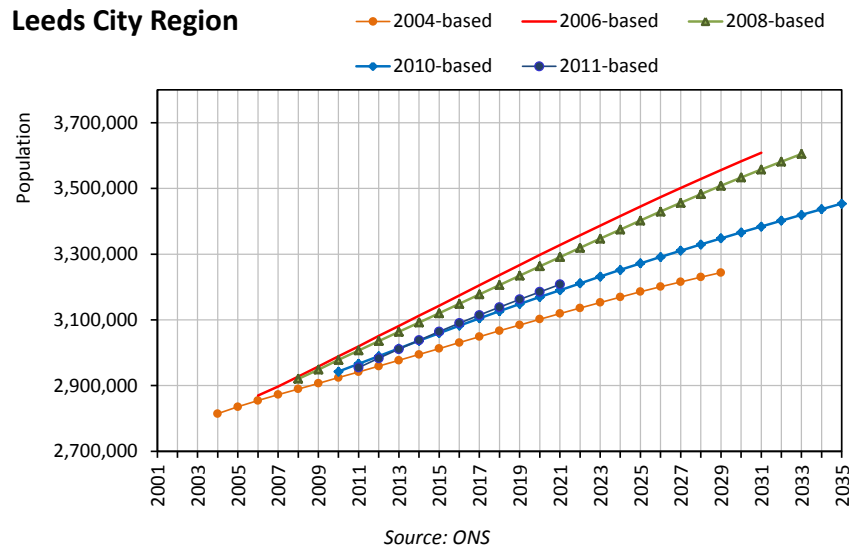
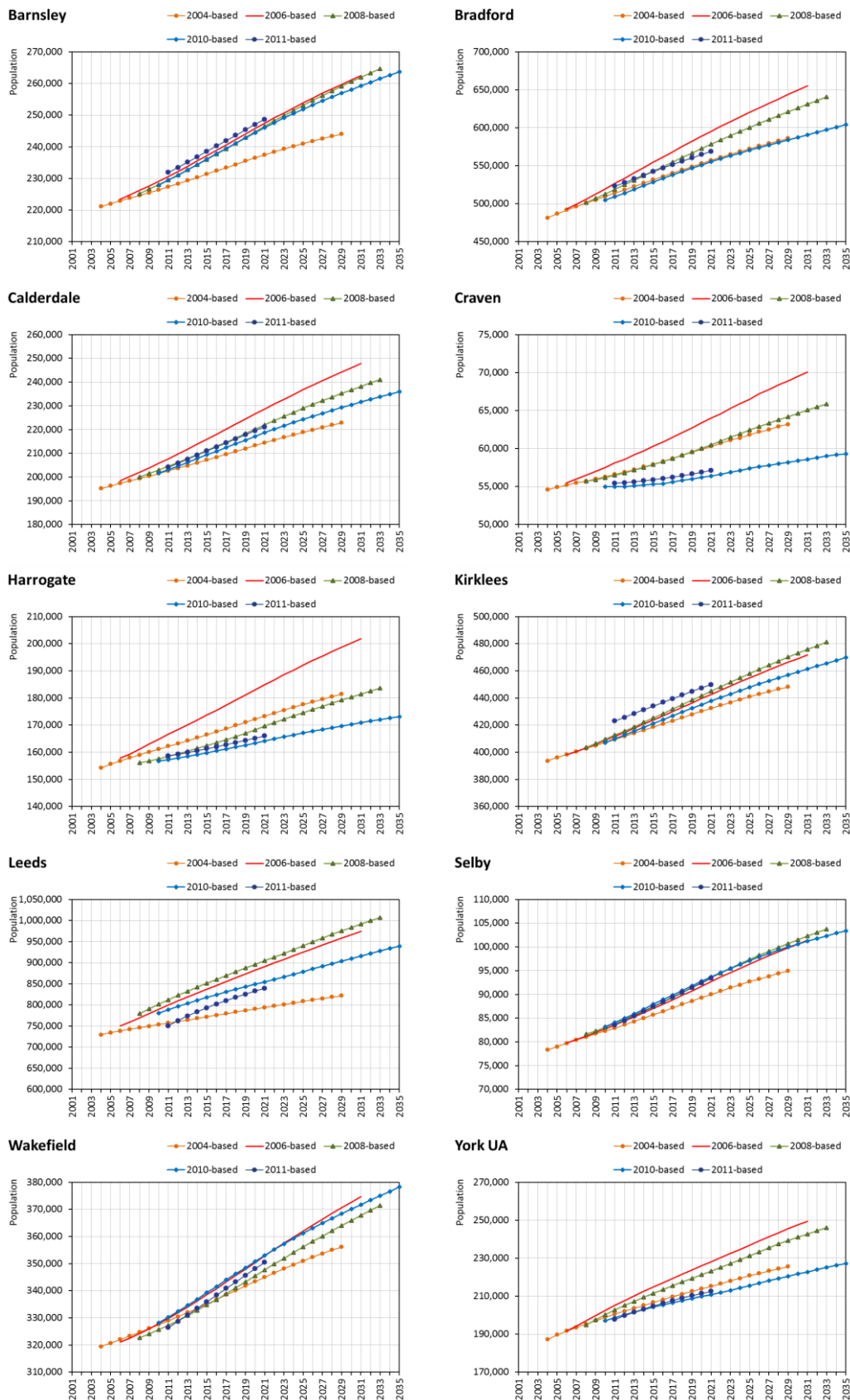


Figure 9: Population projections - LCR 2004-2035

4.15 With the publication of the 2011 Census, ONS released an ‘interim’ 2011-based population projection. Unfortunately this projection has failed to follow ONS’ normally robust rules on the calculation of long-term assumptions. Instead it has simply applied the migration (and fertility and mortality) assumptions from the 2010-based model to a 2011 Census base population. This is inappropriate for two key reasons: firstly the revisions to the historical mid-year populations and the subsequent change in the historical impact of migration have not been taken into account; secondly, the 2011 Census population has a different age structure to the previous 2010-based population data. Both of these issues result in a 2011-based projection that is not sufficiently robust to underpin any analysis of long-term housing requirements.

4.16 The different growth projections that have resulted from successive ONS sub-national projections are illustrated for each of the LCR local authorities (Figure 10). The vertical axis in each chart is scaled to the local data, so the charts are not directly comparable with each other. However, it is clearly evident that the choice of projection can have a very significant impact upon the scale of population growth (Leeds, Harrogate and Craven are particular examples) and therefore the estimation of future housing requirements.

4.17 Looking forward to the 2012-based projections which are due for publication during spring 2014, revisions to the historical estimates suggest the following changes to the previous 2010-based projections: Leeds, Wakefield and York will most likely have a lower population growth trajectory compared to the 2010 outcomes; Kirklees, Bradford, Barnsley, Calderdale and Craven will have a higher growth projection; Harrogate and Selby’s growth will be more similar to the 2010 statistics.



Source: ONS

Figure 10: Population projections - LCR local authorities 2004-2035

5. Household projections

Methodology

5.1 Sub-national population projections provide the basis for the formulation of sub-national household projections. During the 2001-2011 decade the household projection methodology has been subject to substantial review, with a new approach adopted between the 2006-based and 2008-based outputs.

5.2 A household is defined as:

“One person living alone, or a group of people (not necessarily related) living at the same address with common housekeeping - that is, sharing a living room or sitting room or at least one meal a day.”⁹

5.3 In a household projection model, rates of household growth are determined by two factors: first, the profile and change in household ‘headship rates’ (also referred to as household representative rates in CLG documentation) by household type, age and sex; and second, the underlying rate of population growth.

5.4 An estimate of the ‘communal establishment’ population is subtracted from the total population to derive the ‘private household’ population. These population figures, split by age, sex and marital status group, are multiplied by the projected household headship rates that represent the proportion of the population in that category who are head of household (or household ‘representatives’).

5.5 The projected household headship rates used in the 2011-based household model have been derived using 2001 and 2011 Census data in combination with statistics from the Labour Force Survey (LFS).

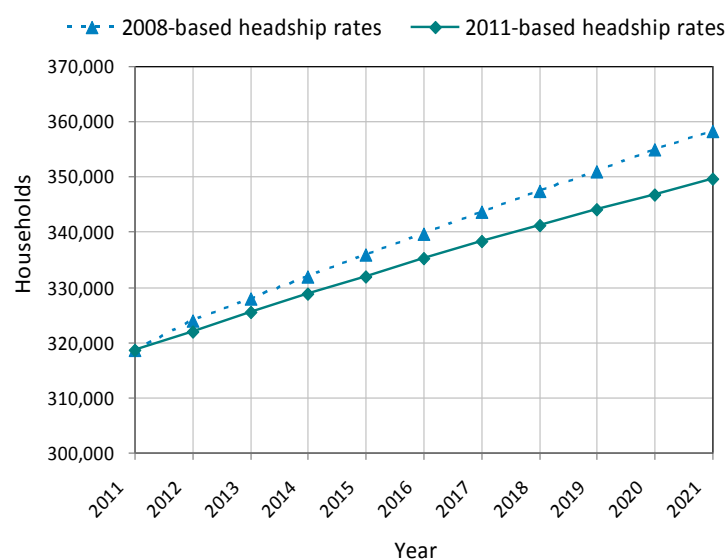
5.6 The 2011-based household model projections are underpinned by the interim 2011-based population projection from ONS. This projection uses 2011 Census statistics for its base period population, but uses assumptions from the 2010-based population projection to define its fertility, mortality and migration components of change. For the reasons outlined in the previous

⁹ CLG. *Household Projections: Notes and Definitions for Data Analysts*. <https://www.gov.uk/household-projections-notes-and-definitions-for-data-analysts>

section, the 2011-based population projections do not provide a suitably robust ‘trend’ projection of population change on which to base household projections for local authority areas.

Latest evidence

- 5.7 The 2011-based household projections replace the previous, 2008-based household projections. They provide an update on likely household growth trajectories, taking account of the unprecedented economic conditions that have affected local communities since 2008. The general trend in the 2011-based projections suggests a reduction in the rate of household growth from 2011 to 2021, compared to previous projections.
- 5.8 Evidence for Leeds is presented here to illustrate the ‘sensitivity’ of the new household headship rates upon future household growth. The patterns and trends evident for Leeds are largely replicated in each of the LCR’s ten local authority areas.
- 5.9 In preference to the interim 2011-based population projection, the ONS 2010-based sub-national population projection has been used in conjunction with 2008-based and 2011-based household headship rates (the population projection has been scaled to match 2011 Census totals, following the 2010-based growth trend thereafter).
- 5.10 The impact of the 2011 headship rates is to reduce the scale of household growth over the 2011–2021 period (Figure 11).



Source: CLG; Edge Analytics (using ONS 2010-based projection)

Figure 11: Impact of the 2011 headship rates on the scale of household growth (2011-2021)

5.11 Using the 2010-based sub-national population projection, scaled to the 2011 Census total, household numbers in Leeds are projected to increase by 9.7% using the 2011-based headship rates, compared to 12.5% with the 2008-based headship rates (Table 3).

Table 3: Change in household numbers 2011-2021 using 2008-based and 2011-based headship rates

Source: CLG; Edge Analytics (using ONS 2010-based projection)

	Households			Change 2011-2021	
	2011	2016	2021	Total	%
2008-based headship rates	318,588	339,680	358,262	39,674	12.5%
2011-based headship rates	318,588	335,276	349,625	31,037	9.7%

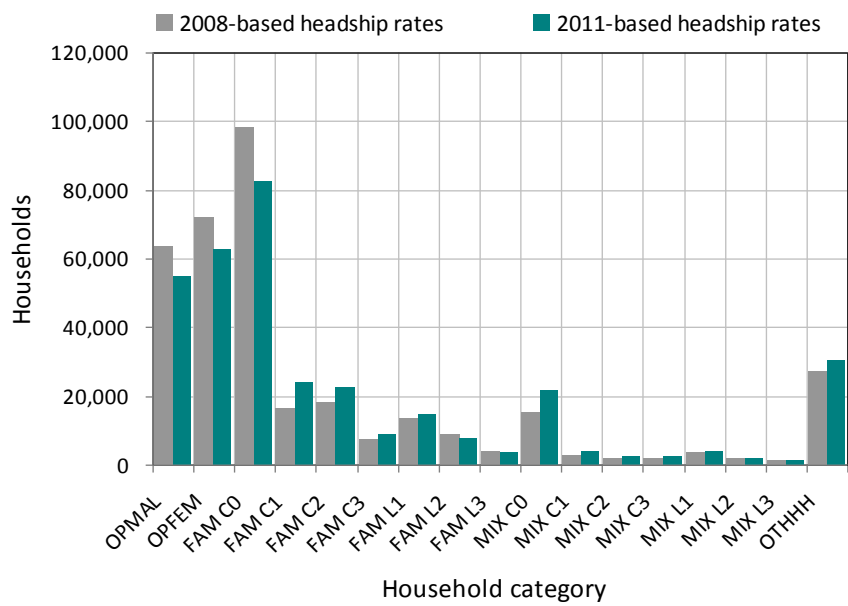
5.12 With a reduction in the projected rate of household formation, a higher average household size is maintained when applying the 2011-based headship rates; by 2021, the average household size in Leeds using the 2008-based headship rates is 2.21, compared to an average household size of 2.26 when using the 2011-based headship rates (Table 4).

Table 4: Change in household size 2011-2021 using 2008-based and 2011-based headship rates

Source: CLG; Edge Analytics (using ONS 2010-based projection)

	Population / Household		
	2011	2016	2021
2008-based headship rates	2.29	2.25	2.21
2011-based headship rates	2.29	2.28	2.26

5.13 The revised 2011-based headship rates have had the most significant impact upon single-person households (OPMAL, OPFEM) and family households with no children (FAMC0). This has been slightly offset by increases in formation rates for households comprising a couple with one and two dependent children (FAM C1, FAM C2), a couple and one or more other adults with no dependent children (MIXC0) and the miscellaneous 'Other' (OTHHH) classification (Figure 12).



Source: CLG; Edge Analytics (using ONS 2010-based projection)

Figure 12: Households by household type in 2021

6. Developing alternative growth forecasts

Scenario development

- 6.1 The NPPF/NPPG provides guidance on the production of an evidence base to support the development of local housing plans. The guidance makes it clear that data inputs, assumptions and methodology should be robust and should consider future growth potential from a number of perspectives.
- 6.2 For any local authority area, there is no single, definitive view on the likely level of future growth, with a mix of economic, demographic and national/local policy issues ultimately determining the speed and scale of change. For local planning purposes, it is necessary to evaluate a range of growth alternatives to establish the most 'appropriate' basis for determining future housing provision.
- 6.3 The development of Local Plans is made considerably more challenging by the dynamic nature of key data inputs. Economic and demographic factors, coupled with the continuous release of new statistics, often undermine the robustness of underpinning evidence. This has been a particular issue during 2013, with the release of new 2011 Census statistics, updated household projections and revisions to historical population estimates.
- 6.4 Evidence presented in Local Plans is often challenged on the basis of the 'appropriateness' of the methodology that has been employed to develop growth forecasts. The use of a recognised forecasting product (e.g. POPGROUP), which incorporates industry-standard methodologies (i.e. a cohort component model for population forecasting and a headship rate model for household forecasting) removes this obstacle and enables a focus on assumptions and output, rather than methods.
- 6.5 Transparency is an important component of any forecasting analysis. It is necessary to ensure that all data inputs and assumptions are clearly documented and justified and that outcomes are benchmarked against the latest 'official' forecasts, wherever possible.

Scenario options

- 6.6 For the objective assessment of housing needs, best practice suggests that a number of

alternative growth scenarios should be tested, using a recognised forecasting methodology where possible. These scenarios should use the latest available statistics from both ONS and CLG; they should evaluate trend, policy and economic considerations; they should be accompanied by a transparent definition of key assumptions; and should be presented in a consistent format that contrasts the impact of scenario assumptions upon changes to population, households, dwellings, labour force and jobs.

Official projections

- 6.7 In all scenario analysis it is important to ‘benchmark’ any growth alternatives against the latest ‘official’ population projection. These projections are typically developed using historical evidence from a prior five-year period (i.e. the 2010-based projections will consider historical change for the 2006-2010 period) and incorporate long-term assumptions on fertility, mortality and international migration that were defined in the accompanying ‘national’ projection for England.
- 6.8 Section 4 has provided a summary illustration of the variation that is apparent between successive sub-national projections for LCR authorities and has indicated the inappropriateness of the interim 2011-based projections as a basis for long-term planning.
- 6.9 Until the 2012-based projections are released in spring 2014, the 2010-based sub-national projection from ONS remains the most robustly formulated ‘official’ population projection for local authority areas. However, it does not encapsulate the important process of population ‘recalibration’ that resulted from the publication of the 2011 Census statistics.
- 6.10 LCR local authorities have the option of waiting for the release of the 2012-based ONS projections before considering the impact of the most recent changes to population change statistics; or they might consider the formulation of alternative trend projections themselves, in anticipation of new data being released (the recent ‘Leeds Demographic Update’ report provides an example of this type of analysis).

Alternative trend projections

- 6.11 During 2012/13, ONS has released detailed statistics from the 2011 Census and followed this with a release of the revised mid-year population estimates for 2002–2010. These new data provide the basis for the derivation of a number of alternative ‘trend’ scenarios to complement the most recent official projection.

6.12 In determining the migration assumptions for a new trend projection, historical data on the components of demographic change during the 2001–2012 time-period is a key consideration. A five-year historical period is a typical time-frame from which migration ‘trend’ assumptions are derived (this is consistent with the ONS official methodology). However, given the unprecedented economic changes that have occurred since 2008, it is important to give due consideration to an extended historical time period for assumption derivation.

6.13 Alternative trend scenarios (referred to here as ‘Migration-led’ scenarios) that might be considered include:

- *Migration-led 5Yr*: internal and international migration projection assumptions are based on five years of historical evidence.
- *Migration-led 10Yr*: internal and international migration projection assumptions are based on ten years of historical evidence.

6.14 It is also useful to consider scenarios which evaluate growth trajectories that could result if there was an absence of migration. This provides a useful benchmark for housing growth statistics, presenting a ‘minimum’ housing requirement in the absence of a net migration impact. This scenario can take two forms:

- *Net Nil Migration*: in-migration, out-migration, immigration and emigration projection assumptions are maintained, but the net migration balance is set to zero.
- *Natural Change*: in-migration, out-migration, immigration and emigration projection assumptions are each set to zero, with only births and deaths determining growth.

6.15 In the ONS recalibration of mid-year population estimates for 2002-2010, it is international migration that is primarily associated with the previous undercount or overcount. However, ONS does not explicitly assign the ‘error’ to international migration, classifying it as ‘other unattributable’ when detailing the components of demographic change over the 2001-2011 period. It is useful to assess the impact of this ‘other unattributable’ component with the development of two final trend scenario alternatives:

- *Migration-led 5Yr-X*: internal and international migration assumptions are based on five years of historical evidence, ignoring the ‘other unattributable’ element of the ONS mid-year estimate re-calibration;

- *Migration-led 10Yr-X*: internal and international migration assumptions are based on ten years of historical evidence, ignoring the ‘other unattributable’ element of the ONS mid-year estimate re-calibration.

6.16 It is not essential that all trend scenarios are evaluated, but the range of options suggested here does provide a broad range of sensitivities to compare against official projections and other policy-led forecasts.

Housing-led forecasts

6.17 To complement the official projections and any additional trend scenarios, it is useful to evaluate the demographic implications of particular trajectories of housing growth. For example, this might evaluate the extent of growth required to support former RSS targets or alternatively, the demographic change that would result from a continuation of past housing completion rates (Table 5).

Table 5: Housing growth statistics – former RSS targets and historical completions

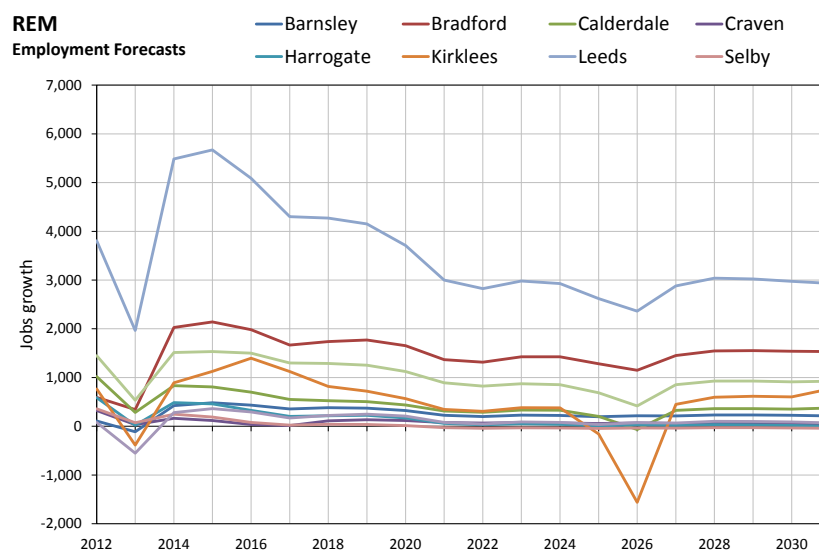
Local authority	RSS annual net dwelling additions	Average housing completions
	2008-26	2004/5 - 2011/12
Barnsley	1,015	981
Bradford	2,700	1,287
Calderdale	670	802
Craven	250	187
Harrogate	390	324
Kirklees	1,700	1,289
Leeds	4,300	2,850
Selby	440	430
Wakefield	1,600	1,003
York	850	634
Leeds City Region	13,915	9,787

6.18 Forecasting models are able to evaluate the impact of a particular housing growth trajectory by measuring the relationship between the number of homes in an area, the number of households and the size of the resident population. If there is an ‘imbalance’ between the ‘target’ number of new homes and the resident population, then migration is used to redress the imbalance. A higher level of net in-migration will occur if there is insufficient population to meet dwelling targets. A higher level of net out-migration will occur if the population is too high relative to

dwelling targets.

Employment-led forecasts

- 6.19 The impact of an anticipated growth in employment can also be evaluated using an 'employment-led' population forecast. This uses in- and out-migration to balance the relationship between the size of the labour force and the number of new jobs anticipated.
- 6.20 The Regional Economic Model (REM) provides the most appropriate source of statistics on future economic change anticipated within each LCR local authority. This provides a trajectory of jobs growth that can be linked directly to likely demographic change (Figure 13).



Source: REM 2013

Figure 13: LCR employment forecasts, REM 2013

- 6.21 Forecasting models are able to evaluate the impact of a particular jobs growth trajectory upon demographic change by measuring the relationship between the number of jobs in an area, the size of its labour force and the size of the resident population. In modelling the potential impact of jobs growth, three key parameters are used: economic activity rates by age and sex; an unemployment rate for the district; and a commuting ratio for the district.
- 6.22 Economic activity rates control the relationship between the size of the population and the size of the labour force. The unemployment rate and the commuting ratio determine the relationship

between the size of the labour force and the number of jobs available.

- 6.23 If there is an ‘imbalance’ between the ‘target’ number of new jobs and the resident population, then migration is used to redress the imbalance. A higher level of net in-migration will occur if there is insufficient population to meet job targets. A higher level of net out-migration will occur if the population is too high relative to job targets.

Key assumptions & sensitivity

Fertility and mortality

- 6.24 Official projections from ONS take account of the differences in the rates of fertility (births) and mortality (deaths) that exist between local authorities. In addition, these projections incorporate long-term assumptions on age-specific fertility and mortality that are consistent with the (latest) ONS ‘national’ population projection.
- 6.25 In considering alternative trend projections and in the formulation of ‘policy’ based housing-led and/or employment-led forecasts, it is important to ensure that local fertility and mortality ‘differentials’ are considered and that the long-term assumptions of change are consistent with those which form part of the ONS projections.

Migration

- 6.26 An analysis of the relative importance of migration as a driver of historical population change is an important preliminary step in the consideration of alternative growth forecasts. Trend projections typically consider a five-year history to set future migration assumptions but, within the official sub-national projections, the ‘national’ assumption on international migration can have an important influence on local growth outcomes.
- 6.27 The scenario definitions detailed above has provided an indication of how both internal and international migration assumptions might be evaluated from both a five-year and/or ten-year historical perspective. For internal migration, the ten-year perspective is probably more appropriate given the influence of economic conditions upon patterns of migration since 2008/9. For international migration, the five-year perspective is probably more suitable, given the 2004-06 threshold, beyond which European Union expansion has transformed immigration dynamics.
- 6.28 Whilst international migration will remain a key component of local demographic change, it is

also important to consider the longer-term impact that government policy will have upon overall net-immigration levels. The current government has a net immigration target of 100,000 per year. This contrasts to current levels which fluctuate around 155,000 – 170,000 per year and the highest levels of over 250,000 experienced in 2010 and 2011. Whilst uncertainty remains with regard to the likely impact of greater freedom of movement for Bulgarian and Romanian migrants, it is appropriate to consider variant projections which dampen the long-term impact of international migration.

Vacancy

- 6.29 In modelling the relationship between households and dwellings, a vacancy rate is used to measure the difference between the two. For each local authority, a vacancy rate which takes account of vacant properties and second homes can be derived from 2011 Census tables. A comparison with Council Tax records may provide additional intelligence on which this Census value could be modified.

Household formation rates

- 6.30 There is a 17-fold classification of household types that underpins both the 2008-based and 2011-based household forecasts (Table 6). This classification and the projected 'headship rates' which align to it, drives the calculation of total household numbers in a growth forecast.

Table 6: Household type classification

Type	Description
1	One person households: Male
2	One person households: Female
3	One family and no others: Couple: No dependent children
4	One family and no others: Couple: 1 dependent child
5	One family and no others: Couple: 2 dependent children
6	One family and no others: Couple: 3+ dependent children
7	One family and no others: Lone parent: 1 dependent child
8	One family and no others: Lone parent: 2 dependent children
9	One family and no others: Lone parent: 3+ dependent children
10	A couple and one or more other adults: No dependent children
11	A couple and one or more other adults: 1 dependent child
12	A couple and one or more other adults: 2 dependent children
13	A couple and one or more other adults: 3+ dependent children
14	A lone parent and one or more other adults: 1 dependent child
15	A lone parent and one or more other adults: 2 dependent children
16	A lone parent and one or more other adults: 3+ dependent children
17	Other households

- 6.31 Section 5 has summarised the sensitivity of household growth outcomes resulting from the use of both the 2008-based and 2011-based headship-rate assumptions. For each population growth scenario that is developed for a local authority, it is appropriate to evaluate the household growth that results from each of the 2008-based and 2011-based assumptions.
- 6.32 Whilst the 2011-based headship rate assumptions have only been published for the 2011-2021 period, it is appropriate to continue the trend in the rates to provide a complete set of statistics for a plan period. In addition, whilst the 2008-based rates 'over-estimate' household numbers in the census year, it is appropriate to scale headship rates to reproduce Census household totals and to continue the 2008-based household formation rate trend thereafter.
- 6.33 Identifying the 'most likely' speed and scale of future household formation presents a challenge to planners. It is important that a headship rate trajectory is not chosen simply because it gives a lower or higher growth figure. The latest 2011-based household model has dampened forecasts of household growth compared to the previous 2008-based model, which was calibrated during a period of relatively high housing growth. Economic conditions and real household incomes may not make a sufficiently rapid recovery to enable the housing market to return to its pre-2008 position before the end of the decade. So, household formation rates that 'average' the 2008 and 2011-based extremes would seem to be a prudent approach for planners to consider.

Commuting ratios

- 6.34 When considering future economic growth and its relationship to demographic change, it is important to consider the balance of commuting flows into and out of a local authority area. Updated travel-to-work statistics from the 2011 Census are not due for publication until 2014. Whilst the Annual Population Survey (APS) does provide a sample perspective on commuting, the 2001 Census still provides the most definitive data on travel-to-work dynamics (Table 7).
- 6.35 Economic forecasts (such as those routinely produced by the REM) will typically use commuting flows as a key variable in determining the speed, scale and distribution of economic growth (or decline). It is therefore critical that any demographic assessment of REM-driven jobs growth forecasts, gives due consideration to the commuting dynamics which underpin the economic model. This is especially important when 'duty-to-cooperate' imperatives require consideration of demographic and economic impacts within a wider geography, such as the LCR.

Table 7: LCR commuting flows

Source: Census 2001

Area	Commuting flows			
	Contained	Commuting inflow	Commuting outflow	Commuting balance
Barnsley	59,632	15,408	29,943	-14,535
Bradford	149,960	45,926	42,348	3,578
Calderdale	64,062	19,904	25,471	-5,567
Craven	16,897	7,041	8,778	-1,737
Harrogate	57,593	12,992	19,376	-6,384
Kirklees	123,936	30,858	52,315	-21,457
Leeds	270,754	108,736	53,187	55,549
Selby	19,868	11,512	19,039	-7,527
Wakefield	97,019	36,061	42,003	-5,942
York	70,205	23,311	17,960	5,351
<i>Other Areas</i>		77,288	78,617	-1,329

6.36 For demographic modelling, commuting statistics (together with economic activity rates) provide a key link between the number of jobs in a local authority and the size of the resident labour force. The commuting balance is typically referenced as a commuting 'ratio' (Table 8).

Table 8: LCR commuting ratios

Source: Census 2001

Area	Commuting ratio		
	Jobs	Workers	Commuting ratio
Barnsley	75,040	89,575	1.19
Bradford	195,886	192,308	0.98
Calderdale	83,966	89,533	1.07
Craven	23,938	25,675	1.07
Harrogate	70,585	76,969	1.09
Kirklees	154,794	176,251	1.14
Leeds	379,490	323,941	0.85
Selby	31,380	38,907	1.24
Wakefield	133,080	139,022	1.04
York	93,516	88,165	0.94

Economic activity & unemployment rates

- 6.37 When considering demographic change linked to jobs growth, economic activity rates (and the associated unemployment rate) operate in combination with the commuting assumption to control the relationship between the size of the population and the size of the resident labour force.
- 6.38 The most important factor to consider in the estimation of economic activity rates is how they might be influenced in the future by higher rates of labour force participation in the older age-groups. The most prudent assumptions apply a relatively modest uplift to older-age economic activity rates, to account for changes to state pension age entitlement.
- 6.39 When evaluating a jobs-growth scenario, a more significant uplift in the economic participation of the 60+ age-group typically reduces the need for net in-migration to sustain the size of the labour force and thus reduces the requirement for new homes. Once again it is important not to use rates of economic activity which simply achieve a desired higher or lower growth outcome but to consider an appropriate 'range' of values which reflect the uncertainty associated with the combined impact of population ageing, pension entitlement and retirement age upon the size and shape of a local labour force.

Backlog

- 6.40 In the development and scrutiny of local housing plans there has been considerable debate surrounding the issue of 'backlog'. Whilst the term does not appear explicitly in NPPF/NPPG guidance, the NPPG makes reference to the potential need to adjust future housing requirements to account for historical constraints:

“The household projection-based estimate of housing need may require adjustment to reflect factors affecting local demography and household formation rates which are not captured in past trends. For example, formation rates may have been suppressed historically by under-supply and worsening affordability of housing. The assessment will therefore need to reflect the consequences of past under delivery of housing. As household projections do not reflect unmet housing need, local planning authorities should take a view based on available evidence of the extent to which household formation rates are or have been constrained by supply”.

6.41 The PAS/LGA guidance documentation defines backlog more specifically as:

“Under-provision that has accrued against a previous development plan target”

6.42 A number of terms are in general use/misuse in the backlog deliberations. ‘Pent-up’ demand and ‘latent’ demand are often used interchangeably with backlog, whilst ‘unmet’ need, which typically refers to housing requirements that have not been met by neighbouring authorities, has also been used in the same context.

6.43 PAS/LGA attempts to provide further guidance on the backlog issue and in doing so uses the mixture of terminology that has become part of the vocabulary. Two alternative perspectives are presented:

1. *“That household projections take into account unmet need, and therefore there is no need to try and ‘make up’ any past shortfall in housing provision, as the shortfall is reflected in future household projections; and*
2. *Because there has been a lack of suitable accommodation provided, households have not formed which means that the trends on which the projections are based do not reflect the real need. This creates a ‘pent-up demand’ for housing, which should be measured or estimated, and added onto household projections”.*

6.44 The most obvious way to quantify backlog is to compare past housing completions with previous housing targets. The most recent targets are those defined in the RSS, which has subsequently been revoked; so it might be argued that no backlog provision is required as new plans will provide a forward-looking perspective from a revised base period.

6.45 However, it is useful to consider the RSS target comparison as these statistics are typically being used in local authority analysis and other representations to illustrate potential backlog issues. For each of the LCR local authorities, former RSS targets for the 2004/5 - 2025/26 plan period are summarised, together with housing completion statistics to 2011/12 (Table 9 and Table 10).

Table 9: Former LCR RSS dwelling targets for the 2004/5 - 2025/26 plan period

Area	RSS annual net dwelling targets	
	2004-08	2008-26
Barnsley	840	1,015
Bradford	1,560	2,700
Calderdale	500	670
Craven	250	250
Harrogate	390	390
Kirklees	1,060	1,700
Leeds	2,260	4,300
Selby	390	440
Wakefield	1,170	1,600
York	640	850
Leeds City Region	9,060	13,915

Table 10: LCR dwelling completion statistics for 2004/5 - 2011/12

Area	Housing completions							
	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
Barnsley	1,331	934	944	1,154	862	546	995	826
Bradford	1,361	1,369	1,578	2,156	1,440	999	696	733
Calderdale	807	1,121	1,306	1,247	537	662	456	509
Craven	203	154	188	140	283	82	129	267
Harrogate	390	409	317	361	261	335	203	152
Kirklees	1,379	1,074	2,267	2,281	1,098	692	974	873
Leeds	2,633	3,436	3,327	3,576	3,828	2,238	1,686	1,931
Selby	451	620	843	568	204	270	366	338
Wakefield	989	1,036	1,024	1,520	1,204	510	1,061	852
York	1,160	906	798	523	451	507	514	321
Leeds City Region	10,704	11,059	12,592	13,526	10,168	6,841	7,080	6,802

6.46 Completion rates are compared to the RSS targets for three time-periods, the initial 2004/5-2007/8 years of the RSS, the later 2008/9-2011/12 period, plus the full 2004/5-2011/12 time-span (Table 11). In the earlier years of the RSS plan period, provision was generally in advance of the initial-years RSS targets. In the most recent years, there has been a significant shortfall of completions against the higher RSS targets.

Table 11: LCR RSS dwelling targets vs. dwelling completion statistics

Area	RSS targets vs. completions		
	2004-05 to 2007-08	2008-09 to 2011-12	2004-05 to 2011-12
Barnsley	1,003	-831	172
Bradford	224	-6,932	-6,708
Calderdale	2,481	-516	1,965
Craven	-315	-239	-554
Harrogate	-83	-609	-692
Kirklees	2,761	-3,163	-402
Leeds	3,932	-7,517	-3,585
Selby	922	-582	340
Wakefield	-111	-2,773	-2,884
York	827	-1,607	-780
Leeds City Region	11,641	-24,769	-13,128

- 6.47 In considering this interpretation of housing backlog, it is important to reflect on the appropriateness of the original RSS targets that were assigned to individual local authorities. The underpinning household projection evidence from which the targets were defined was drawn from the (revised) 2004-based population and household projections. These projections have been superseded by later household projections which have not only used different data inputs but which also incorporate a very different household projection methodology.
- 6.48 Interpreting the differences between successive household projection methodologies is challenging and is made more so by the significant changes that have occurred in the underpinning *population* projections (2004-based, 2006-based, 2008-based, 2010-based and 2011-based) and the ‘recalibration’ of population estimates resulting from the 2011 Census count.
- 6.49 The ‘recalibration’ impact has been shown to be especially significant in a number of the LCR local authorities, particularly Leeds. This brings into question the appropriateness of any backlog calculation which uses RSS targets that were based on very different demographic statistics to those that have resulted from the 2011 Census. It might be argued that a ‘new’ plan with an updated base period, which considers all the very latest evidence and which gives due recognition of the uncertain impact of ‘higher’ and ‘lower’ rates of household formation is a preferred approach.

- 6.50 The use of both 2008-based and 2011-based household formation (headship) rates in any scenario analysis is an important consideration. Exclusive use of the 2011-based assumptions might be criticised for being too dependent upon a period where household formation rates have been suppressed; whereas a similar use of the 2008-based rates might be criticised as being too influenced by rates of household formation associated with an over-heated housing market. Furthermore, attempts to identify a point at which 2011-based formation rates will 'return' to their original 2008-based schedule is too subjective and inadvisable.
- 6.51 A more considered approach and one which also accounts for an element of 'backlog' in the forecasts that are used to determine 'new' housing plans, is to use a combination of both 2008-based and 2011-based household formation rates. Evaluating each population growth scenario using both types of household formation rate provides a range of household growth outcomes. Taking an 'average' of the 2008-based and 2011-based household growth outcomes would appear to be a reasonably prudent approach which ensures an element of backlog is incorporated from the base year of the new plan period.
- 6.52 If there is a particularly strong argument that an explicit historical backlog should be 'added' to housing requirement estimates that have been derived from alternative growth scenarios, then the choice of household formation rate should first be taken into consideration. In addition, the precise nature of the 'preferred' scenario should determine whether the allocation of an explicit backlog figure is appropriate or not. For a 'trend' scenario, which continues a previous growth trajectory, the addition of a backlog to account for previous under-provision might be appropriate. But for a preferred scenario that is based on a specific economic growth forecast, it is not. An economic-led scenario is making a definitive forecast of housing growth linked to jobs growth, so the backlog component is implied within the elements of this forecast.

7. Summary and recommendations

Requirements

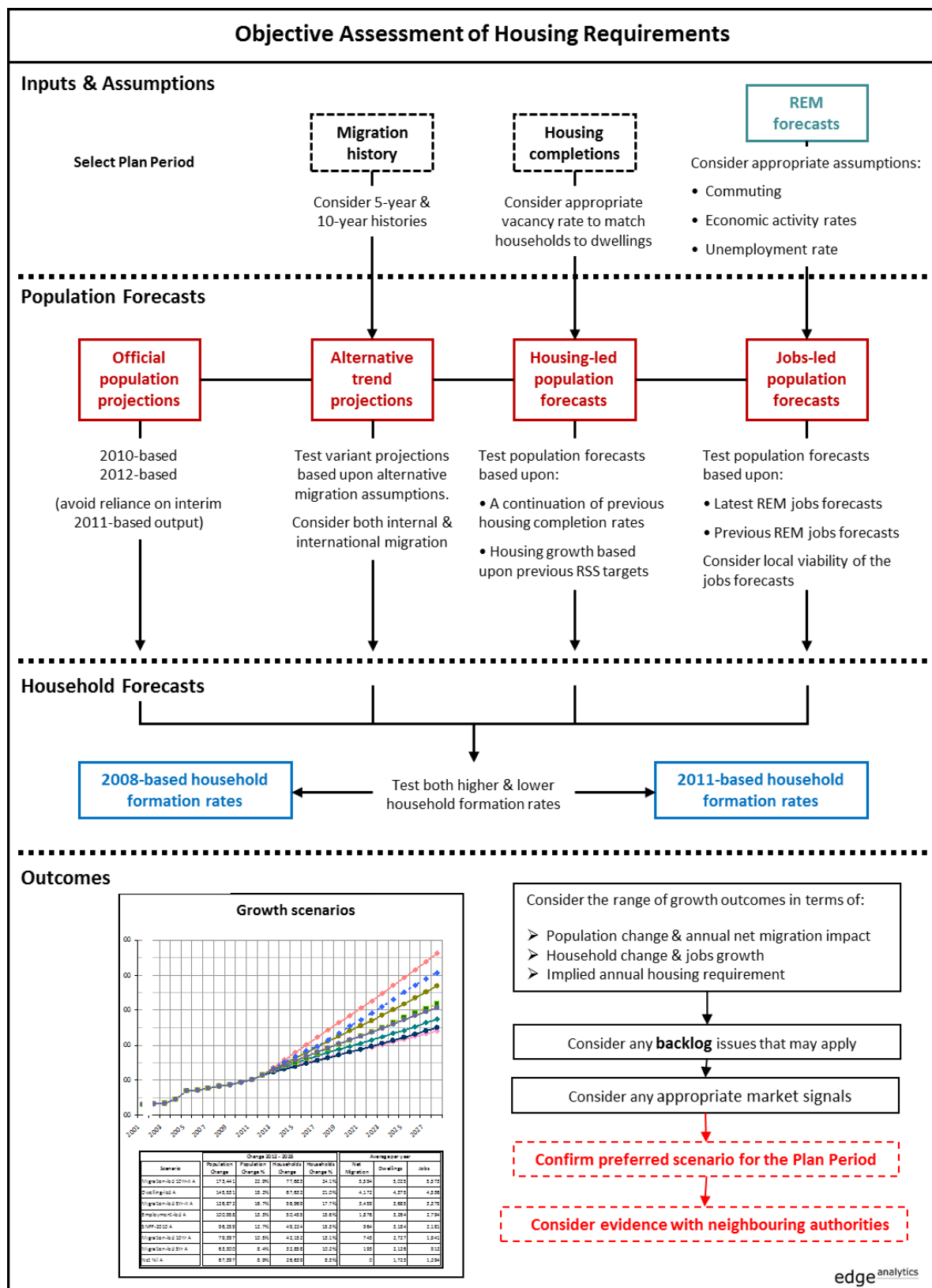
7.1 LCR has sought to derive a 'common start point and methodology' for the objectively assessed housing requirement within each of its constituent authority's Local Plans. In the development of this methodology, LCR identified a number of specific elements that it wished to consider:

- The variation that is evident in successive population projections published by the Office for National Statistics (ONS) for each LCR local authority and a look forward to the forthcoming 2012-based output.
- The strengths and weaknesses of the 2008-based and 2011-based household projections from the Department for Communities and Local Government (CLG) and guidance on how these issues might be addressed by local authorities in the development of local housing plans.
- How to better understand the quantitative relationship between the ambition for local economic growth and rates of household formation; including how migration, commuting and economic activity rates influence this relationship.
- How to appropriately quantify the implications of outstanding unmet housing need and to ensure it is being addressed.

7.2 LCR's methodology must be consistent with the Government's requirement for local authorities to plan positively for growth and to produce a robust approach to assessing housing requirements which is likely to withstand scrutiny at EIPs.

A suggested methodology

7.3 The methodology presented here has drawn together published planning guidance documentation, with evidence from demographic statistics for the LCR authorities. Using this information in combination with Edge Analytics' experience and expertise in the formulation of evidence to support Local Plan development, a methodological framework for the assessment of housing requirements is presented below:



Summary guidance

Inputs & Assumptions

- 7.4 The analysis of historical statistics is an important precursor to the consideration of alternative growth forecasts. Migration is the key driver of population change, so its influence upon historical growth should be scrutinised, examining 5-year and 10-year histories to understand how a continuation of these trends might influence future growth. This exercise is especially important given the population recalibration that has resulted from the 2011 Census counts.
- 7.5 The analysis of housing completions complements the migration analysis and provides the basis against which any 'backlog' issues might need to be considered.
- 7.6 Economic forecasts provide a key input to the development of alternative growth scenarios, so particular importance should be attached to the scrutiny of job-growth outcomes of the REM in terms of their local viability. Assumptions on commuting, economic activity and unemployment that are used by the REM should be analysed, to ensure consistency with any inputs that might be used in the development alternative demographic growth scenarios.

Population forecasts

- 7.7 Official projections provide a benchmark against which other growth scenarios should be compared. These projections will vary between releases, depending upon the timing and availability of their underpinning data and assumptions. Local authorities should avoid any reliance upon the interim 2011-based projections for any definitive evidence.
- 7.8 Historical evidence on population growth and the changes that have resulted from the recalibration of all mid-year population estimates, provides guidance on likely outcomes of the forthcoming 2012-based projections from ONS and their comparison to previous projections.
- 7.9 Alternative trend scenarios may be examined using the intelligence gathered on migration histories. Previous housing targets or historical build rates may be used to establish the comparable growth implications of housing-led scenarios. In addition, the housing impact of economic forecasts may be evaluated using a jobs-led scenario.

Household forecasts

- 7.10 The assumptions which underpin household projections have been subject to substantial revision

with the release of the 2011-based model. For each population growth scenario, it is appropriate to evaluate likely household change using both 2008-based and 2011-based household formation rates.

- 7.11 The comparison of outcomes from the 2008-based and 2011-based formation rates provides a more balanced perspective on future household growth that is not constrained by assumptions derived from a period during which household formation rates have been suppressed, or influenced by the use of rates derived during a housing boom period when formation rates may have been artificially high.

Scenario outcomes

- 7.12 A range of scenario outcomes provides a transparent and objective basis from which to consider and select a preferred housing growth trajectory for a local authority area.
- 7.13 The rate of growth should be considered both in terms of population change and the annual net impact that might result through migration, assessing how this compares to historical evidence.
- 7.14 Household change should be scrutinised with a particular emphasis on the effect that the changing age-structure of the population has upon household numbers.
- 7.15 Likewise, the effect of each scenario upon likely jobs growth should be scrutinised, giving particular recognition to the underpinning commuting and economic activity rates, both of which can have an important influence upon the implied housing requirement that might result.

Backlog

- 7.16 The comparison of previous RSS targets against historical completions can provide an indication of potential backlog of supply, although the validity of previous targets should be assured on the basis of more recent statistics and the degree to which underlying demographic has changed as a result of the 2011 Census.
- 7.17 The use of 2008-based and 2011-based household formation rates in any scenario analysis is an important consideration when accounting for any backlog as is the type of scenario selected as a 'preferred' outcome. Trend scenarios might consider a backlog element but housing-led or jobs-led scenarios would have any backlog total implied within their forecasts.
- 7.18 The material presented here has not explicitly considered 'market signals' but NPPF/NPPG

guidance considers this to be an important element in the objective derivation of a housing requirement, in particular adjusting preferred scenario to address local affordability and supply-demand imbalances.

Recommendations

- 7.19 Whilst the emphasis on localism has provided individual local authorities with an opportunity to have greater control over the formulation of their own housing plans, a duty-to-cooperate is enshrined as a key principle of the plan-making process.
- 7.20 The process of cooperation between neighbouring authorities can be better facilitated if approaches and methods used for evidence generation and plan formulation are comparable and if data sources and assumptions that have been used are consistent.
- 7.21 It is recommended that LCR authorities give due consideration to the methodological framework that is presented here as they seek to achieve consensus through collective scrutiny and review of their respective Local Plans

8. Glossary of terms

APS	Annual Population Survey
CLG	Department for Communities and Local Government
EIP	Examinations in Public
EU	European Union
LCR	Leeds City Region
LEP	Local enterprise partnership
LFS	Labour Force Survey
LGA	Local Government Association
NPPF	National Planning Policy Framework
NPPG	National Planning Practice Guidance
ONS	Office for National Statistics
PAS	Planning Advisory Service
PRDS	Patient Register Data Service
REM	Regional Economic Model
RSS	Regional Spatial Strategy
SHMA	Strategic Housing Market Assessment