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Planning. Design. Economics.

Canterbury District

Housing Needs Review

Canterbury City Council

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12777/MS

Contents

1.0 # Introduction

1.1 This report has been prepared by Nathaniel Lichfield & Partners (NLP) on behalf of Canterbury City Council (CCC). NLP was appointed by CCC in January 2015 to provide a review of the evidence on objectively assessed housing needs within Canterbury as a District.

Scope of the Housing Needs Review

1.2 This review has been prepared to a defined scope set out by CCC. It is prepared in the context of the submission version of the Canterbury District Local Plan which sets out a proposed housing requirement of 780 dwellings per annum over the plan period 2011 to 2031. This figure was drawn by the Council using the evidence contained within the 'Canterbury Development Requirements Study' prepared by NLP for the Council in January 2012.

1.3 Whilst the Development Requirements Study (DRS) provided evidence assessing locally-led housing needs commensurate to practice at the point of its production, it is an evidence base document that precedes the adoption of the National Planning Policy Framework (NPPF) in March 2012 and before the publication of the Planning Practice Guidance (PPG) in March 2014. It also pre-dates the publication of data from the Census 2011 which enabled the Office for National Statistics (ONS) to re-base and revised many of its demographic and social data sets. For example, the 2012-based household projections were released in February 2015 and represent the first full set of household projections following the Census. Whilst the Development Requirements Study continues to present analysis relevant to the definition and setting of a housing requirement, it does not fully reflect the methodology and approach for assessing need now advocated within the NPPF and PPG and also does not reflect more recent statistical data releases.

1.4 This report has therefore been prepared to test and review some of the evidence on the housing needs of the District in a manner consistent with the NPPF and PPG. The purpose is to provide an updated evidence base on housing needs upon which Canterbury City Council can draw conclusions on the objectively assessed need and the extent to which the proposed housing requirement within the submission draft Local Plan meets it. It does this by presenting evidence on a number of scenarios using demographic and employment data sets, also reviewing market signals and other factors which influence housing needs and presenting them in a manner to allow the drawing of conclusions alongside the original findings of the Development Requirement Study.

1.5 In the above context, the parameters of this housing needs review are set out below.

Updating Evidence from the Development Requirements Study (Jan 2012) and the East Kent SHMA (2009)

1.6   CCC has utilised the evidence from the Development Requirements Study and the Strategic Housing Market Assessment for the East Kent Sub-region ("The East Kent SHMA") to inform the housing strategy within the submission Local Plan. The purpose of this Housing Needs Review report is to update the relevant parts of the above existing evidence base and frame it within the context of the NPPF and PPG. This review does not seek to wholly replace or replicate that earlier evidence, but simply to provide up-to-date and proportionate evidence for the Council on housing needs in light of the most recent data and guidance.

A District-wide Review

1.7   The scope of this housing needs review has been drawn by CCC to focus on Canterbury District and the needs associated with the District. Whilst this does take account of the housing market linkages Canterbury has with other parts of the country, for example through consideration of migratory and commuting relationships, the analysis undertaken narrowly focusses upon the District. CCC will need to consider how this District-wide evidence fits in with evidence of needs across any defined Housing Market Areas.

Testing the Position on Housing Needs

1.8   This housing needs review is intended to provide a proportionate evidence base to inform CCC's consideration of a full objective assessment of housing need. The housing needs review is not intended to be a full Strategic Housing Market Assessment (SHMA) and it does not cover a number of key components of a SHMA, such as considering the mix of housing, considering the needs of different groups in the community or considering the specific split of tenure needed. Notwithstanding, it remains a relevant exercise and the judgment in Gallagher Estates Ltd v Solihull MBC acknowledges that (para 94) *"in practice, full housing needs might be objectively assessed using data* (sic) *other than a SHMA"*. In this context, the focus is on testing the headline position on the overall housing need of the District.

Approach

1.9   The NPPF outlines a two-step approach to setting housing requirements in Local Plans. Firstly, to define the full objectively assessed need for development and then secondly, to set this against any adverse impacts or constraints which would mean that need might not be met. This is enshrined in the approach set out in paragraph 14 of the NPPF which sets out the presumption in favour of sustainable development:

"For plan-making this means that:

- *local planning authorities should positively seek opportunities to meet the development needs of their area;*

- *Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change, unless:*
  - *any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or*
  - *specific policies in this Framework indicate development should be restricted."*

1.10 The NPPF goes on to set out (paragraph 47) that in order that in order to 'boost significantly' the supply of housing that 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 the framework…"

1.11 The first step is therefore to identify full objectively assessed needs and the NPPF sets out the approach to defining such evidence which is required to underpin a local housing requirement. It sets out (paragraph 159) that in evidencing housing needs:

 "Local planning authorities should have a clear understanding of housing needs in their area. They should:

- *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 in the community (such as, but not limited to, families with children, older people, people with disabilities, service families and people wishing to build their own homes); and*
  - *caters for housing demand and the scale of housing supply necessary to meet this demand…"*

1.12 Furthermore, the core planning principles set out in the NPPF indicate that a planned level of housing to meet objectively assessed needs must respond positively to wider opportunities for growth and should take account of market signals, including housing affordability (paragraph 17).

1.13 The Planning Practice Guidance (PPG) contains a section providing guidance on housing and economic development needs assessments. The PPG indicates that there is no one methodological approach or use of a particular dataset(s) that will provide a definitive assessment of development need (ID 2a-005), but goes on to outline an overarching methodology for preparing need

assessments in a transparent manner. The PPG identifies that an objective assessment of need should fulfil the following criteria:

a   be proportionate and not consider purely hypothetical future scenarios, only future scenarios that could be reasonably expected to occur (ID 2a-003);

b   be based on facts and unbiased evidence. Constraints should not be applied to the overall assessment of need (ID 2a-004);

c   utilise household projections published by the Department for Communities and Local Government as the starting point estimate of overall housing need (ID 2a-015);

d   consider sensitivity testing, specific to local circumstances, based on alternative assumptions in relation to the underlying demographic projections and household formation rates (ID 2a-017); and

e   take account of employment trends (ID 2a-018), appropriate market signals including market indicators of the balance between the demand for and supply of dwellings (ID 2a-019) and affordable housing needs (ID 2a-029).

1.14   In light of the relevant policy and guidance in objectively assessing housing needs, this report considers a suitable demographic-led starting point, moving on to examine economic factors, market signals and affordable housing needs to assess whether these justify an uplift in arriving at a full objectively assessed need for Canterbury District. This approach is summarised in Figure 1.1.

Figure 1.1   NPPF and PPG Approach to Objectively Assessing Housing Needs
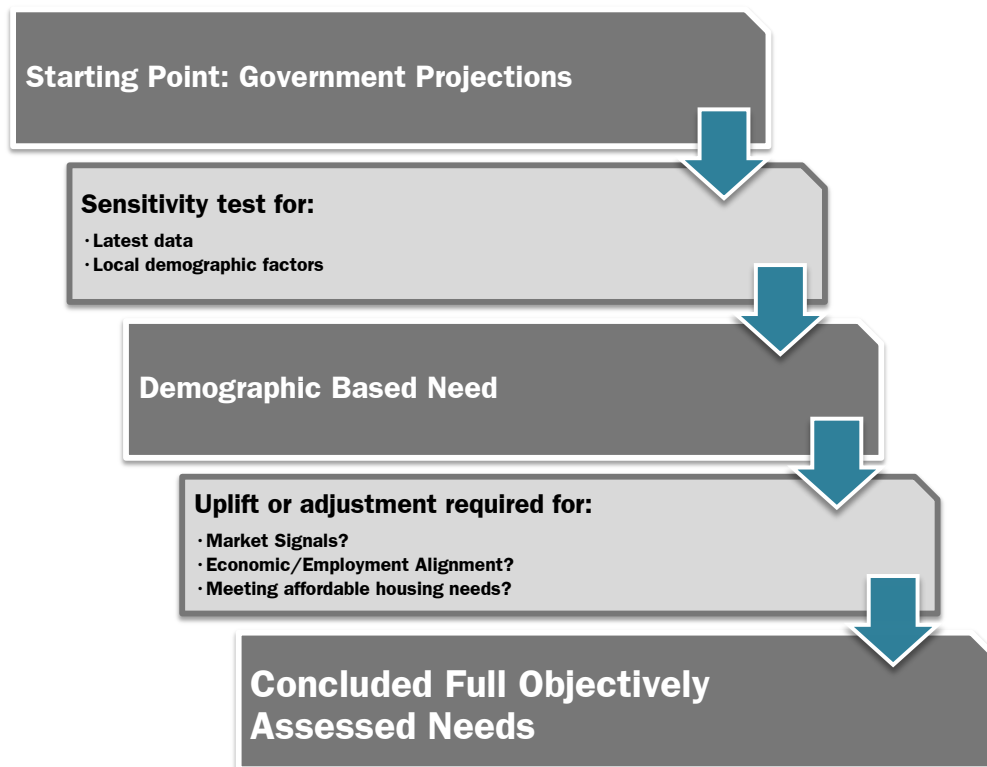
Source: NLP based on NPPF/PPG

Structure of the Report

1.15   This report is set out under the following headings;

- **Section 2.0 – Demographic Based Needs** – this section establishes an appropriate starting point, based on population and household projections, for assessing housing needs in line with the relevant policy and guidance;

- **Section 3.0 – Economic Factors** – this section considers the role of economic factors in relation to objectively assessed need, as well as providing updates to scenarios presented as part of the DRS study in light of new, up-to-date population data;

- **Section 4.0 – Market Signals** – this section examines the role of market signals as well as providing examples of interpretations on how market signals should be taken into account, before providing analysis of the appropriate market signals within Canterbury District;

- **Section 5.0 – Affordable Housing Needs** – this section provides evidence on affordable housing needs within Canterbury District, and considers how this might impact upon full objectively assessed needs in line with policy and guidance; and,

- **Section 6.0 – Conclusions** – this section brings together the evidence presented for the factors which will need to be taken into account when considering the full objectively assessed housing need within Canterbury District.

2.0 **Demographic Based Needs**

Background

2.1 Before considering wider factors such as economic growth and market signals, it is necessary to identify the baseline demographic need for housing within a population. This considers trends and projections in births, deaths, migration and household formation to arrive at a dwelling need to accommodate population growth. In regard to establishing a demographic-led housing need, the PPG (ID: 2a-015 and ID 2a-016) states;

"Household projections published by the Department for Communities and Local Government should provide the starting point estimate of overall housing need...."

"The Government's official population and household projections are generally updated every two years to take account of the latest demographic trends. Wherever possible, local needs assessments should be informed by the latest available information…."

2.2 Further to these government projections and in arriving at a demographic-led need, the PPG also states that (Para ID 2a-016 and 2a-017);

"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…

"…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. Account should also be taken of the most recent demographic evidence including the latest Office of National Statistics population estimates….Any local changes would need to be clearly explained and justified on the basis of established sources of robust evidence."

Evidence on Demographic Based Needs

The 'Starting Point'

2.3 In line with the PPG, the latest government projections form the starting point for assessing housing needs. In respect of *population*, the latest government projections are the 2012 Sub-National Population Projections[1] (SNPP). In respect of *households*, in February 2015 the government released the 2012-based Sub-National Household Projections (SNHP); these are the first full set of household projections (covering a 25 year period) released since the 2008-based Sub-National Households Projections[2] and are based on the 2012 SNPP. These 2012 household projections vary from the previous projections in two key aspects;

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[1] Released May 2014
[2] Released November 2010

1   A lower rate of assumed household formation in the young adult age groups. For example, in 2033, the 2008-based projections projected that 36% of males age 20-24 in Canterbury would form a head of household, however in the 2012-based projections this had been reduced to 28%; and,

2   A higher 'not in household' population. The 2008-based household projections projected a 'not in household' population age 15-74 of 5,700 in Canterbury, increasing to around 7,000 by 2033. By contrast, the 2012-based projections project the 'not in household' population of this age group to be 7,300 over the whole 25 year period.

2.4   The headship rates which underpin these projections are used in the scenarios assessed in this report in order to convert the projected population into households. These headship rates represent the percentage of people in a given age group who will form a head of household.

2.5   Over the period 2012-31, the 2012 SNHP project average annual *household* growth of 597 in Canterbury. However, this figure does not represent the starting point for *housing* need, given that more dwellings are necessary than the total number of households to account for a second home/vacancy rate, which allows for movement within the housing market. Taking into account average second home/vacancy rates in Canterbury in recent years[3], this indicates that the housing need associated with this level of household growth is 620 dwellings per annum (Scenario A).

2.6   This is reasonably similar to the outputs of the Kent County Council modelling produced in October 2014 and similarly based on applying headship rates to the 2012-based SNPP. This showed a household projection of 592 households per annum (2013-33) with an associated dwelling need of 614 dwellings per annum over the same period.

Local Demographic Factors

2.7   The PPG states that, in addition to government projections, local demographic factors can be considered, but notes that in these cases, sources of evidence should be "robust". The ONS Mid-Year Estimate (MYEs) series of past migration trends can help inform alternative demographic based housing need scenarios; however their suitability when assessing University centres such as Canterbury should be considered given issues within the ONS methodology.

Interpreting Migration Trends

2.8   In order to estimate internal and international migration, ONS uses a range of sources, but largely relies on GP records[4]. This is dependent on the re-registering of people within the UK, in order to record a 'move' from one Local Authority area to another. This is problematic for areas which see high levels of in-migration of young adults (particularly in University towns) for two reasons.

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[3] Taken from CLG Council Tax Base Data 2010-2013

Firstly, those arriving in Canterbury (i.e. recorded as an in-migrant) who then leave the UK altogether do not become re-registered elsewhere and therefore (unless this move is also captured in the International Passenger Survey) are assumed to remain in Canterbury. Since no 'out' move from Canterbury is captured, it is assumed in the dataset that there are more people in Canterbury than in reality. This can occur as international students return to their country of origin or UK students move abroad for work/travel after completion of studies.

2.9　　Secondly, young adults who leave Canterbury and move to another Local Authority in the UK are likely to delay re-registering with a GP (this is particularly an issue in males), and hence the 'out-move' to another District is delayed.

2.10　　The combined result from these effects is an apparent net gain in migration due to the lack of consistency of people being recorded as they move both into and out of Canterbury at the correct time. This was a factor highlighted as a perceived issue within the DRS (e.g. see para 3.5).

2.11　　Therefore, when producing MYEs, ONS include (along with the other components of population change, i.e. births, deaths and migration) a component of 'unattributable population change'. This is the change which was not captured by any one of the methods used to calculate births, deaths and migration within the District, such as for the reasons described.

2.12　　In light of the 2011 Census, ONS updated the MYEs taking into account that the population in each of the Local Authorities in England was known. These revised MYE (for migration/unattributable change, released April 2013) are shown for Canterbury in Figure 2.1 (Data can be found in Appendix 3). Whilst net migration is recorded as being consistently positive, unattributable change is consistently negative. This negative component (averaging c.-400 p.a.) means that in 2011, there were c. 4,000 *fewer* people in Canterbury compared to the population as recorded through the methods used by ONS to estimate migration since 2001, i.e. highlighting the issues with migration estimates in Canterbury.

Figure 2.1   Migration and Unattributable Population Change in Canterbury between the Census 2001 and Census 2011
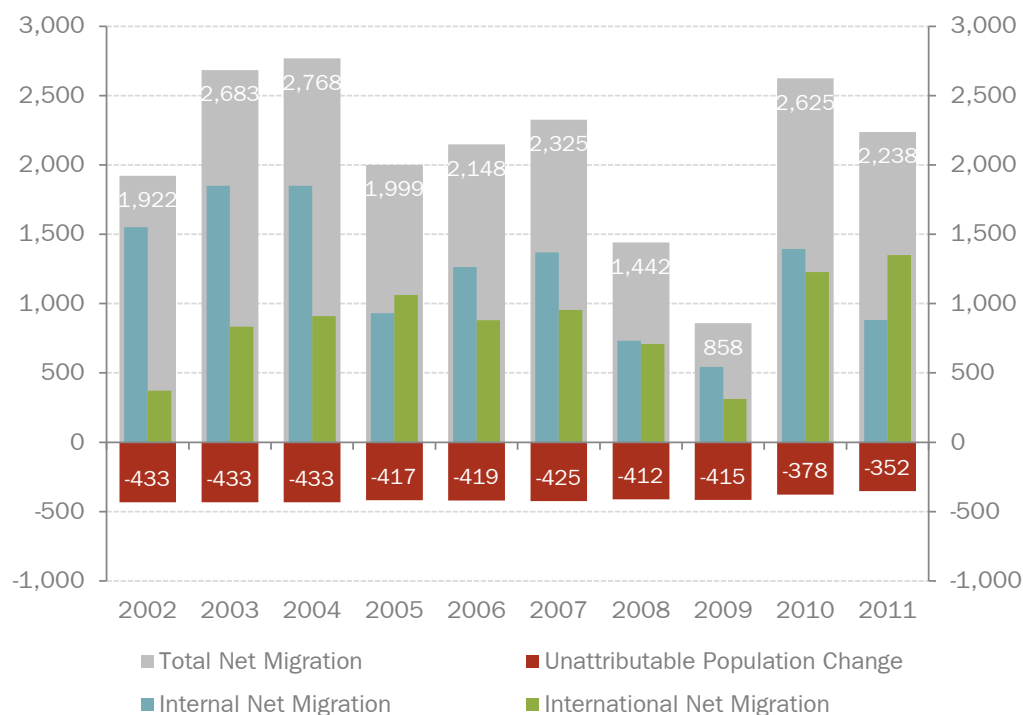
Source: ONS Revised Mid-Year Estimate Series - [Components of Population Change for England and Wales; estimates resident population; revised in light of the 2011 Census - Released 30 April 2013]

2.13   Given the five and ten year averages significantly over-estimate migration in Canterbury, trending these forward over a 19 year period to inform a demographic-led housing scenario would result in a population and housing need which is artificially inflated. The age profile of migration in particular (i.e. young adults) means that those who are (incorrectly) recorded as remaining in Canterbury would be modelled as forming households and therefore generating housing need, when this is in fact not the case. By contrast, the 2012 SNPP projects total net migration over the plan period to be 973 per annum on average.

2.14   For these reasons, five and ten year migration scenarios have not been considered by NLP as it is deemed that in the case of Canterbury – with its particular circumstances - the migration estimates (which would underpin such scenarios) do not represent a robust basis on which to model future population change and housing needs. The 2012-based SNPP is considered the most reasonable starting point for demographic change as it appears to exclude the implications of such effects.

Headship Rate Sensitivity

2.15   The 2012-based SNHP show lower rates of household formation than their 2008-based predecessors, particularly in the youngest age groups. Since the projections take into account recent trends, this is likely to be a result of the reduced rates of household formation seen throughout the recent recession as

a result of factors such as constrained supply of housing, affordability issues and lack of mortgage availability. To simply trend this forward might result in the true housing need of the population being supressed further, by not providing sufficient housing for the demands of the population.

2.16 Therefore, in addition to modelling the 2012 Headship Rates (Scenario A), NLP has also modelled a 'Partial Catch-up' Headship Rate scenario (Scenario B). This is still based on the 2012 SNPP, hence the demographic and economic outputs are the same as the previous scenario. However, it assumes that by 2033, half of the difference between the 2008-based and 2012-based headship rates for those ages 15-34 is made up (with this change taking effect from 2018 onwards, to allow for the economy to return to true, pre-recession trends). This is because the 2008-based projections were produced before the recession, and therefore represent household formation rates more in line with longer term trends. By modelling a 'Partial Catch-up' scenario, it is assumed that any pent-up demand within the population will be released resulting in higher rates of household formation than projected by the 2012 SNHP, with household formation returning to a trend more in line with (but not the same as) the higher rates in the 2008-based projections.

2.17 Applying these rates of household formation to the 2012 SNPP for Canterbury, there is annual household growth of 632 per annum and a need for 657 dwellings per annum over the period 2012-31 (to take account of second home/vacancy rates). This is a 6% increase on the housing need under the 2012 household projections, and highlights the impact that assumed household formation rates have on assessing housing need, even based on the same model of population growth in the District.

Summary of Demographic-led Needs

2.18 In line with the PPG requirement to use the most recent government projections as the starting point for assessing housing needs, it is considered the 2012 SNPP/SNHP form the demographic-led starting point for an objective assessment of need in Canterbury. It is necessary however to apply a dwelling vacancy rate in order to derive a housing need from this household growth figure, hence the housing need is slightly higher than the household growth.

2.19 Whilst past migration trends might, in other cases, form additional evidence from which to consider demographic-led needs, in the case of Canterbury these sources do not represent a robust estimate given Canterbury's position as a University town. Because of the issues relating to the recording of students and young adults in migration estimates, and in light of the unattributable component of population change in Canterbury, it is likely that trending forward past migration trends would likely significantly over-estimate the migration and ultimately the demographic-led housing need in the District.

2.20 Therefore, taking into account dwelling vacancy rates, the starting point for the objective assessment of housing need is 620 dwellings per annum over the period 2012-2031 (Scenario A), as based on the 2012 SNPP/SNHP. This takes

into account household growth and dwelling vacancy rates over the period to 2031.

3.0 Economic Factors

Background

3.1 Ensuring a sufficient supply of homes within easy access of employment represents a central facet of an efficiently functioning economy and can help minimise housing market pressures and unsustainable commuting. The NPPF highlights the importance of promoting sustainable methods of transport (paragraphs 29-31) whilst the PPG states that (ID:2a-018);

"Plan makers should make an assessment of the likely change in job numbers based on past trends and/or economic forecast 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 that is economically active (labour force supply) is less than the projected job growth, this could result in unsustainable commuting patterns…and could reduce the resilience of local businesses. In such circumstances, plan makes will need to consider how the location of new housing…could help address these problems."

3.2 Whilst economic scenarios can provide an indication of the level of housing needed to achieve levels of job growth under specified assumptions, because the Experian forecasts (used in this report) give limited weight to the demographic profile and labour force size, particularly at the local level, it is reasonable to consider them in the context of demographic growth in the District, as opposed to relying upon them as a single determinant of housing need. This approach has been found to be reasonable (where economic-led scenarios are outliers in the context of other scenarios) by the Inspector at the Lichfield Local Plan: Strategy Examination;

"…while the Housing Needs Study identified a broad range of housing requirements (a range of between 76 and 630 dpa) which included these two scenarios - it also, quite legitimately sought to refine that range. In so doing it excluded 'outliers' such as Housing Growth Scenarios F [forecast job growth] and G [past trends job growth]…" Paragraph 67 of Annex attached to the Inspector's letter to Lichfield District Council: Initial Findings, 03 September 2013.

Economic-led Housing Needs

Evidence from the DRS and Canterbury Futures Study

3.3 This section of the report seeks to update the economic-led scenarios from the NLP DRS and Canterbury Futures Study. However, this report does not seek to update the economic forecasts themselves; rather it uses annualised figures taken from those forecasts in updated scenarios with up-to-date population, economic and housing data.

3.4 Since the DRS, the following datasets/inputs have been updated;

- The 2011 Census provides **economic activity rates** by age and sex, which are specific to Canterbury. This provides an up-to-date and accurate representation of the economic activity of the population in Canterbury, and therefore these form the basis of the updated scenarios in this report. These vary significantly from the rates used in the DRS, which were supplied by Kent County Council and were based on the 2001 Census; most notably economic activity in the youngest and oldest age groups in 2011 was recorded in the Census to be substantially lower than the rates projected by KCC;

- The Annual Population Survey now provides **unemployment** data for the years up to 2014 and hence these rates are now incorporated into the modelling. As with the DRS, the modelling still assumes a reduction in unemployment to the pre-recession average;

- The 2011 Census also provided an updated picture on the **commuting** balance in Canterbury. This indicated that Canterbury was a District of net in-commuting, with more jobs than employed workers. This is different to the DRS, which used a commuting rate based on the 2001 Census which shows Canterbury was a District of net out-commuting. In both the DRS and this report, the commuting balance is assumed to remain constant over the projection period.

3.5   In addition to these updates, the population on which the economic scenarios are now based have been updated. The differences in the size and age profile of the population will have an impact on the housing need given this will dictate the size of the labour force. In addition, the household projections used to derive a housing need based on the population have been updated, as described.

Scenarios for Economic Growth

The detailed assumptions which underpin these scenarios can be found in Appendix 1. The economic-led scenarios from the DRS which have been updated for this report are;

- Economic Forecast (Scenario C) – 208 jobs per annum. This forecast represented unconstrained projections of employment growth based on recent trends in sectorial growth combined with projections of GVA at a regional level, and how such sectors in Canterbury District have fared relative to the region's growth in the past. This forecast was trend based and did not consider demographic or policy factors; and,

- Economic Futures 'Preferred' Scenario (Scenario D) – 328 jobs per annum. This is described by Experian as *"…constructed by selecting the forecast for each industry that was deemed to be most desirable under the preferred scenario…"*[5].

3.6 Taking into account this new data, the modelling indicates that under Scenario C there is a need for 717 dwellings per annum over the period 2012-31 and under Scenario D a need for 803 dwellings per annum.

Summary

3.7 The housing outcomes under each of these economic scenarios indicate a need for between 717 and 803 dwellings per annum, based on the assumptions stated and the respective job growth figures. In line with policy guidance, CCC should consider how new housing could address issues around a labour shortage and/or unsustainable commuting patterns, having assessed future job growth based on these Experian forecasts, with regard to the growth in the working-age population.

4.0 # Market Signals

Background

4.1 The NPPF sets out the central land-use planning principles that should underpin both plan-making and decision-taking. It outlines twelve core principles of planning that should be taken account of, including the role of market signals in effectively informing planning decisions (NPPF Paragraph 17);

"Within the overarching roles that the planning system ought to plan, a set of core land-use planning principles should underpin both plan-making and decision-taking. …:

- *…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;…"*

4.2 The PPG (2014) indicates that, with regard to market signals, having established a starting point for an assessment of housing need using government projections (ID: 2a-019);

" …(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. Price or rents rising faster than the national/local average may well indicate particular market undersupply relative to demand. Relevant signals may include the following:

- *Land Prices;*

- *House Prices;*

- *Rents;*

- *Affordability- … the ratio of lower quartile house prices and the lower quartile income or earnings…;*

- *Rate of Development- … actual completions per year relative to the planned number…;*

- *Overcrowding – Indicators on overcrowding, concealed and sharing households, homelessness and the numbers in temporary accommodation…"*

4.3 It goes on to indicate that appropriate comparison of these should be completed with an upward adjustment made where such market signals indicate an imbalance in supply and demand and need to increase housing supply to meet demand and tackle affordability issues (ID 2a-020):

"This includes comparison with longer term trends (both in absolute levels and rates of change) in the housing market area; similar demographic and economic areas; and nationally. Divergence under any of these circumstances will require upwards adjustment to planned housing numbers compared to ones based solely on household projections...

In areas where an upward adjustment is required, plan makers should set this adjustment at a level that is reasonable. The more significant the affordability constraints (as reflected in rising prices and rents, and worsening affordability ratio) and the stronger other indicators of high demand (e.g. the differential between land prices), the larger the improvement in affordability needed and, therefore, the larger the additional supply response should be….plan makers should not attempt to estimate the precise impact of an increase in housing supply…"

4.4 The Inspector's Report into the Eastleigh Borough Local Plan and the Inspectors conclusions into the Uttlesford Local Plan provide interpretation of the PPG in terms of a reasonable uplift on demographic-led needs in light of market signals;

"The framework and guidance indicate that household projections should be adjusted to take into account market signals. The guidance refers to appropriate comparisons of indicators in both absolute levels and rates of change…[the SHMA] …identifies modest market pressures in Eastleigh…

Not all signals demonstrate that Eastleigh is worse than national or regional/sub-regional averages. But on some crucial indicators it is… Overall market signals do justify and upward adjustment above the housing need derived from demographic projections only…

It is very difficult to judge the appropriate scale of such an uplift…Exploration of an uplift of, say, 10% would be compatible with the "modest" pressure of market signals recognised…" Paragraphs 39, 40 and 41, Eastleigh Borough Local Plan Inspector's Report February 2015[6].

"…taking all the … factors in the round, I conclude that it would be reasonable and proportionate, in Uttlesford's circumstances, to make an upward adjustment to the OAN… In my view it would be appropriate to examine an overall increase of around 10%..." Paragraph 1.10, Examination of the Uttlesford Local Plan, Inspector's Conclusion, 22 December 2014.

Evidence on Market Signals

Land Prices

4.5 Whilst Land Price premiums can be an indicator of land shortage for given uses, detailed and up-to-date data on bulk residential land prices is not available for Canterbury District and thus this market signals is excluded from analysis.

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[6] http://www.eastleigh.gov.uk/pdf/ppi_Inspectorsreport12Feb15.pdf

House Prices

4.6   The PPG identifies that longer term change in house prices may indicate an imbalance between demand and supply of housing. Although it suggests using mix-adjusted and/or House Price Indices, these are not available at the local authority level and therefore price paid data is considered the most reasonable indicator for this.

4.7   CLG publish series data on District level median house prices based on Land Registry Data from 1996-2012. Land Registry 'Price Paid' Data is used for 2013. Figure 4.1 shows the median house prices for the last 15 years within Canterbury District, Kent and England. As of 2013, median house prices in Canterbury District were £210,000 compared to £200,000 in Kent and £187,000 in England. This represents a rise since 1998 of 204% (equivalent to a rise of £146,000) - a higher absolute increase and rate of increase than both the County and nationally. This rise of 204% places Canterbury is in the worst 25% of local authorities across England in terms of rate of house prices increase.

Figure 4.1   Median House Price 1998-2013
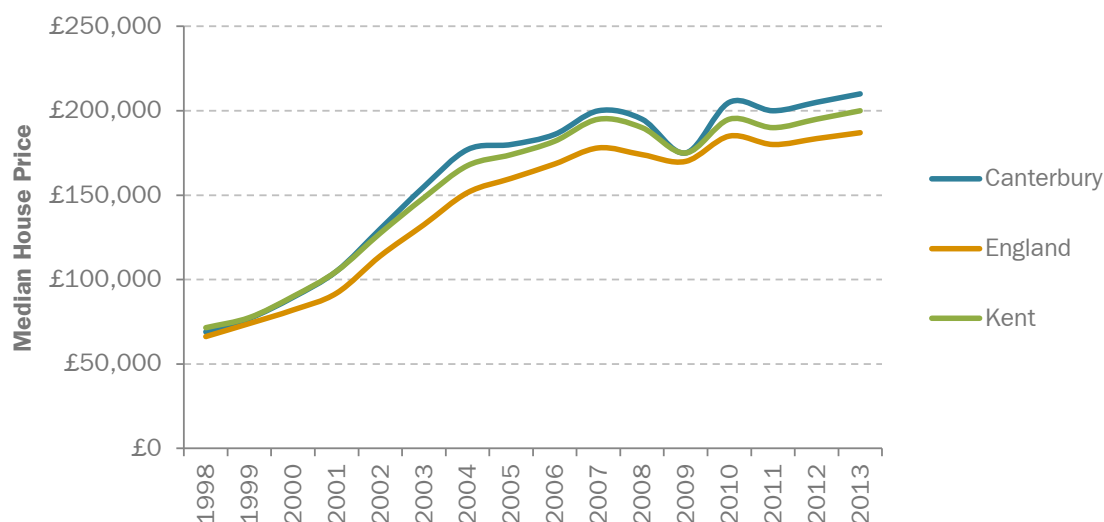
Source: CLG Live Table 586/Land Registry

Table 4.1   House Price and Change Data

	1998	2013	Absolute Change	% Change
Canterbury	**£69,000**	**£210,000**	**+£141,000**	**+204%**
Kent	£71,500	£200,000	+£128,500	+180%
England	£66,250	£187,000	+£120,750	+182%

Source: CLG Live Table 586/Land Registry

Rents

4.8   High and increasing costs of private rents are another indicator of housing market stress. Although series data for this is only available from Q2 2011 to Q3 2014, significant trends are still apparent within Canterbury District.

4.9   In the 12 months to Q3 2014 median monthly rents were £795 within Canterbury District compared to £695 in the 12 months to Q2 2011. This represents an increase of £100 (a rise of 14.4%). Across Kent, this equivalent change was an increase of 8.0% to £675 and nationally, rents rose 4.4% to £595. Figure 4.2 shows this, indicating that rents in Canterbury are absolutely higher than both Kent and England, whilst also seeing significantly higher rates of increase in recent years.

Figure 4.2   Median Monthly Rents
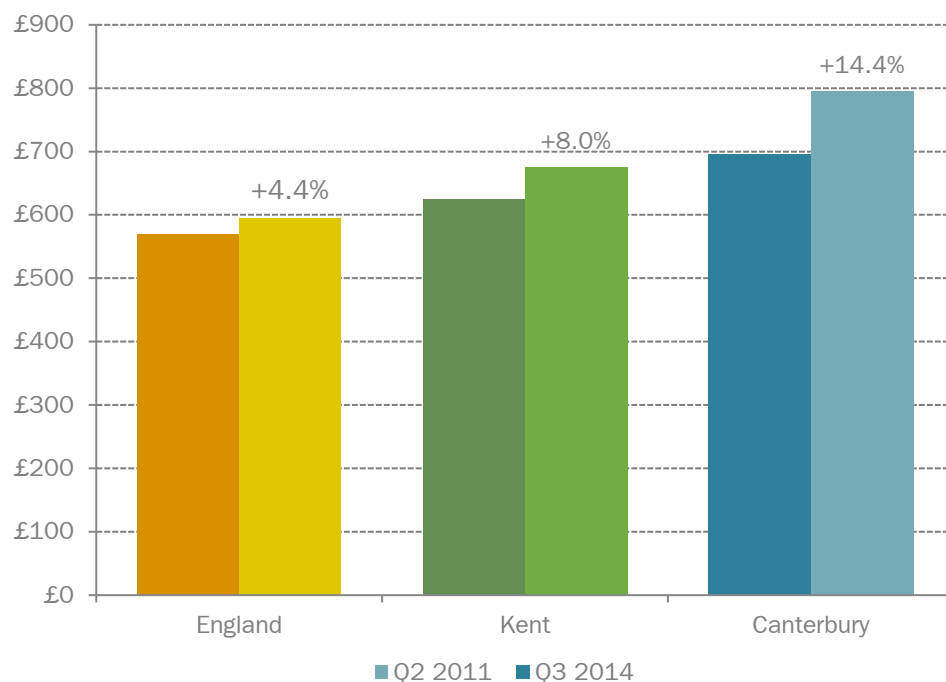
Source: VOA Private Rental Market Statistics

Table 4.2   Median Monthly Rental Costs and Change Data

	Q2 2011	Q3 2014	Absolute Change	% Change
Canterbury	**£695**	**£795**	**+£100**	**+14.4%**
Kent	£625	£675	+£50	+8.0%
England	£570	£595	+£25	+4.4%

Source: VOA Private Rental Market Statistics

Affordability

4.10   The PPG identifies that assessing affordability involves comparisons between the cost of housing and ability to pay. The indicators for this are lower quartile house prices and lower quartile earnings which together form an affordability ratio which can be tracked over time. The affordability ratio is another indicator of housing supply failing to keep pace with demand; as house prices increase, in the absence of wage growth, affordability worsens.

4.11   Over the last 15 years, the lower quartile affordability ratio in Canterbury has increased from 4.8 to 9.12 – an increase of 91%. Over the same time period,

the affordability ratio increased in Kent from 4.1 to 8.2 (an increase of 100%) and in England from 3.57 to 6.45 (81%). The change in affordability for all three regions is shown in Figure 4.3.

Figure 4.3   Lower Quartile Affordability Ratio 1998-2013
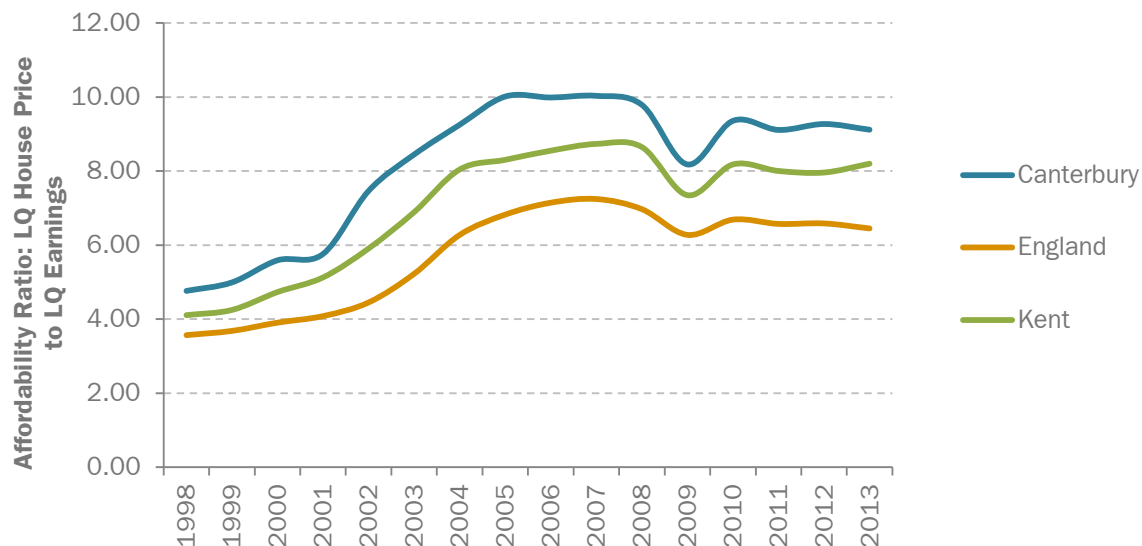
Source: CLG Live Table 576

Table 4.3   Affordability Ratio and Change Data

	1998	2013	Absolute Change	% Change
Canterbury	**4.76**	**9.12**	**+4.36**	**+204%**
Kent	4.11	8.20	+4.09	+180%
England	3.57	6.45	+2.88	+182%

Source: CLG Live Table 576

Rate of Development

4.12   The rate of development is a supply-orientated indicator of past under-delivery and resulting backlog which may have arisen. A way of assessing the extent of backlog is comparing completions against the relevant requirement for the corresponding period. This is shown for 2006/07 to 2012/13 (the latest year for which there is an available Annual Monitoring Report) in Table 4.4.

Table 4.4   Housing Completions Against Targets 2006/07 to 2012/13

Year	Relevant Target	Net Completions	Surplus/ Shortfall	Cumulative
2006/07	510	638	128	128
2007/08	510	1,284	774	902
2008/09	510	965	455	1,357
2009/10	510	305	-205	1,152
2010/11	510	357	-153	999
2011/12	510	624	114	1,113
2012/13	510	524	14	1,127
Total	*3,570*	*4,697*	*1,127*	*~*

Source: Canterbury City Council Annual Monitoring Report 2012/13
https://www.canterbury.gov.uk/media/796164/AMR1213Final.pdf

4.13   Since 2006, Canterbury Council's housing target has remained as that identified within the South East Plan. Though this has been revoked, this will contain to remain the housing target for the District until a revised figure has been agreed for the new Local Plan. This target is 10,200 homes within Canterbury District between 2006 and 2026.

4.14   In Canterbury District, recent years have shown housing delivery has been overall in excess of the SEP target, albeit with some years of under-delivery in 2009/10 and 2010/11 which are potentially attributable to the effect of recession.

Overcrowding and Homelessness

4.15   Overcrowding, shared households and homelessness are further indicators that there may be additional pressures to increase housing delivery above the baseline demographic needs. In areas with particularly high house prices and rents, households may either choose or be forced to accept sub-optimal living conditions, resulting in overcrowded homes and homelessness.

4.16   As of 2011, 7.6% of households in Canterbury were living in overcrowded accommodation. This is lower than England (8.7%) but higher than in Kent (6.9%) as shown in Table 4.5. Overcrowding in Canterbury has increased 19.1% which is a lower rate of increase than Kent and England.

Table 4.5   Overcrowding Data

	% Households Overcrowded		Change
	2001	**2011**	
Canterbury	**6.4%**	**7.6%**	**+19.1%**
Kent	5.3%	6.9%	+30.9%
England	7.1%	8.7%	+22.7%

Source: Census 2001, Census 2011

4.17   Canterbury also has a higher rate of homeless households in temporary accommodation compared to Kent (1 per 1,000 households compared to 0.88 per 1,000 households), albeit this is still lower than nationally, where 2.44 per

1,000 households are in temporary accommodation. In Canterbury, this rate represents a 79.7% decline on 2004/05 levels, which is a greater decline compared to Kent and England as shown in Table 4.6.

Table 4.6   Homelessness Data - Households in Temporary Accommodation

	Households in Temporary Accommodation (per 1,000 households)		Change
	2004/05	**2012/13**	
Canterbury	**4.9**	**1.0**	**-79.7%**
Kent	3.7	0.9	-75.9%
England	4.8	2.4	-49.0%

Source: CLG Live Table 784 (P1e Returns)

4.18   In addition to assessing market signals within Canterbury, the PPG states that (ID: 2a-20);

"Appropriate comparisons of Indicators should be made. This includes comparisons with longer term trends (both in absolute level and rates of change) in the: housing market area; similar demographic and economic areas; and nationally…"

4.19   Therefore, for the purposes of this assessment, Canterbury has been compared to;

- Neighbouring Authorities and other Authorities within Kent which may have housing market links with Canterbury and may constitute the housing market area; and,

- Authorities from across England which prima facie, have, similar characteristics.

4.20   A summary of the comparisons against neighbouring authorities which could potentially form part of the housing market is shown overleaf in Table 4.7. The comparisons against similar Authorities is shown in Table 4.7.

Table 4.7   Market Signals Comparator Table - Kent Authorities

	House Prices			Rents			Affordability Ratio (LQ House Price to LQ Earnings)			Overcrowding			Homelessness		
	Median (2013)	Absolute Change (£) (1998-2013)	Change % (1998-2013)	Median Monthly Rent (Q3 2014)	Absolute Change (£) (1998-2013)	Change % (Q2 2011-Q3 2014)	Ratio (2013)	Absolute Change (1998-2013)	Change % (1998-2013)	% of Housing Over-Occupied (2011)	Absolute Change (2001-2011)	% Change (2001-2011)	Incidence of homeless h'holds (2012/13)	Absolute Change (2004/05-2012/13)	% Change (2004/05-2012/13)
1	Sevenoaks	Sevenoaks	Canterbury	Sevenoaks	Sevenoaks	Tonbridge and Malling	Sevenoaks	Sevenoaks	Dartford	Dartford	Gravesham	Gravesham	Ashford	Ashford	Ashford
2	Tunbridge Wells	Tunbridge Wells	Thanet	Tonbridge and Malling	Tonbridge and Malling	Sevenoaks	Tunbridge Wells	Tunbridge Wells	Swale	England	Dartford	Dartford	Maidstone	Canterbury	Canterbury
3	Tonbridge and Malling	Tonbridge and Malling	Dartford	Tunbridge Wells	Canterbury	Canterbury	Tonbridge and Malling	Tonbridge and Malling	Medway	Gravesham	Tunbridge Wells	Maidstone	Medway	Sevenoaks	Maidstone
4	Canterbury	Canterbury	England	Canterbury	Tunbridge Wells	Gravesham	Canterbury	Canterbury	Sevenoaks	Tunbridge Wells	Thanet	Tonbridge and Malling	England	Maidstone	Thanet
5	Maidstone	Dartford	Medway	Dartford	Dartford	Dartford	Maidstone	Dartford	Dover	Thanet	Maidstone	Thanet	Dartford	Dover	Dartford
6	Dartford	Maidstone	Shepway	Maidstone	Maidstone	Maidstone	Ashford	Maidstone	Tunbridge Wells	Shepway	Shepway	Tunbridge Wells	Thanet	Thanet	Dover
7	Ashford	England	Dover	Ashford	Gravesham	Tunbridge Wells	Dartford	Ashford	Thanet	Canterbury	England	Shepway	Dover	Dartford	England
8	Gravesham	Ashford	Swale	Gravesham	Ashford	Thanet	Gravesham	Swale	Gravesham	Medway	Medway	Dover	Gravesham	Shepway	Medway
9	England	Gravesham	Gravesham	Medway	Medway	Medway	Shepway	Gravesham	Canterbury	Maidstone	Dover	England	Swale	Swale	Sevenoaks
10	Shepway	Shepway	Tunbridge Wells	Swale	Thanet	Ashford	Thanet	Thanet	Tonbridge and Malling	Swale	Tonbridge and Malling	Medway	Canterbury	Tonbridge and Malling	Swale
11	Dover	Dover	Tonbridge and Malling	England	Swale	Dover	Swale	Shepway	Ashford	Dover	Canterbury	Sevenoaks	Shepway	England	Shepway
12	Swale	Swale	Ashford	Thanet	England	England	Dover	Dover	Maidstone	Ashford	Sevenoaks	Canterbury	Tunbridge Wells	Medway	Gravesham
13	Medway	Thanet	Maidstone	Dover	Dover	Swale	Medway	Medway	England	Tonbridge and Malling	Swale	Ashford	Sevenoaks	Tunbridge Wells	Tonbridge and Malling
14	Thanet	Medway	Sevenoaks	Shepway	Shepway	Shepway	England	England	Shepway	Sevenoaks	Ashford	Swale	Tonbridge and Malling	Gravesham	Tunbridge Wells

Table 4.8   Market Signals comparisons against similar Authorities

	House Prices			Rents			Affordability Ratio (LQ House Price to LQ Earnings)			Overcrowding			Homelessness		
	Median (2013)	Absolute Change (£) (1998-2013)	Change % (1998-2013)	Median Monthly Rent (Q3 2014)	Absolute Change (£) (1998-2013)	Change % (Q2 2011-Q3 2014)	Ratio (2013)	Absolute Change (1998-2013)	Change % (1998-2013)	% of Housing Over-Occupied (2011)	Absolute Change (2001-2011)	% Change (2001-2011)	Incidence of homeless h'holds (2012/13)	Absolute Change (2004/05-2012/13)	% Change (2004/05-2012/13)
1	Guildford	Cambridge	Cambridge	Guildford	Cambridge	Cambridge	Guildford	Cambridge	Exeter	Cambridge	Oxford	Winchester	Taunton Deane	Winchester	Winchester
2	Cambridge	Guildford	Exeter	Oxford	Guildford	Canterbury	Winchester	Guildford	Cambridge	Oxford	Cambridge	Taunton Deane	Cambridge	Canterbury	Canterbury
3	Winchester	Oxford	Canterbury	Winchester	Canterbury	Bath & North East Somerset	Cambridge	Canterbury	Canterbury	Exeter	England	Bath & North East Somerset	England	Guildford	Cambridge
4	Oxford	Winchester	Bath & North East Somerset	Cambridge	Oxford	Guildford	Oxford	Winchester	Bath & North East Somerset	England	Bath & North East Somerset	England	Oxford	Cambridge	England
5	Bath & North East Somerset	Bath & North East Somerset	Oxford	Bath & North East Somerset	Bath & North East Somerset	Oxford	Canterbury	Exeter	Guildford	Canterbury	Winchester	Canterbury	Exeter	Bath & North East Somerset	Bath & North East Somerset
6	Canterbury	Canterbury	England	Canterbury	Winchester	Winchester	Bath & North East Somerset	Oxford	England	Guildford	Exeter	Oxford	Canterbury	Exeter	Taunton Deane
7	Exeter	Exeter	Taunton Deane	Exeter	Exeter	Exeter	Taunton Deane	Bath & North East Somerset	Taunton Deane	Bath & North East Somerset	Taunton Deane	Exeter	Bath & North East Somerset	England	Exeter
8	England	England	Guildford	England	England	England	Exeter	Taunton Deane	Oxford	Winchester	Canterbury	Cambridge	Winchester	Taunton Deane	Guildford
9	Taunton Deane	Taunton Deane	Winchester	Taunton Deane	Taunton Deane	Taunton Deane	England	England	Winchester	Taunton Deane	Guildford	Guildford	Guildford	Oxford	Oxford

Summary

4.21   In line with the PPG, the evidence on market signals does indicate upwards adjustment on the demographic-led starting point may be required in Canterbury. House prices, rents and affordability indicate potential problems within Canterbury compared to England and Kent; however the District has performed better in terms of overcrowding and homelessness, and changes since 2001.

4.22   The demographic-led starting point has been arrived as described as 620 dwellings per annum, and the uplift to take account of market signals will need to be set at that which is 'reasonable', noting that (PPG ID 2a-020);

"…[plan-makers] *should increase planned supply by an amount that, on reasonable assumptions…could be expected to improve affordability…"*

Recent Inspector's examination findings[7] have suggested an uplift of 10% is appropriate, with the Inspector into the Eastleigh Core Strategy specifically concluding:

"It is very difficult to judge the appropriate scale of such an uplift. I consider a cautious approach is reasonable bearing in mind that any practical benefit is likely to be very limited because Eastleigh is only a part of a much larger HMA. Exploration of an uplift of, say, 10% would be compatible with the "modest" pressure of market signals recognised in the SHMA itself."

At face value, the evidence suggests the scale of market signal pressure in Canterbury is greater than *"modest"* and as such a reasonable market signal uplift to the demographic baseline might be considered to be greater than 10%. By way of illustration, a 20% uplift on the 620 dwellings per annum 'starting point' would equal total housing needs of 744 dwellings per annum.

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[7] See Inspector's preliminary findings into Uttlesford and Eastleigh Core Strategies respectively (December 2014)

5.0 # Affordable Housing Needs

5.1 Within this section, a calculation of affordable housing need, in line with the PPG, and for some more specific details the former CLG SHMA Guidance (2007), has been undertaken for Canterbury to inform the assessment of the scale of housing affordability as well as arriving at an estimate of future housing need. The basic approach to this is:

> **Total Current Housing Need (gross) to be addressed**
> Plus
> **Total Newly Arising Housing Need (gross per annum)**
> Less
> **Annual Supply of Affordable Housing**
> Equals
> **Net Housing Need**

Background

5.2 With regards to the incorporation of affordable housing needs into the total housing figures included in Local Plans, the PPG (ID 2a-029-20140306) sets out the following:

"The total affordable housing need should…be considered in the context of its likely delivery as a proportion of mixed market and affordable housing developments, given the probable percentage of affordable housing to be delivered by market housing led developments. An increase in the total housing figures included in the local plan should be considered where it could help deliver the required number of affordable homes."

5.3 The PPG sets out that '*the total housing figures'* are about much more than just demographic need and should include an increase towards meeting full affordable housing needs.

5.4 The importance of considering affordable housing needs in an objective assessment of housing need calculation has been recently (19/02/15) confirmed in the High Court judgment Satnam Millennium Ltd vs Warrington Borough Council.[8] It sets out the requirement for an objective assessment of housing need to cater for affordable housing needs within its calculation. The judgment found that the adopted objective assessment of housing need figure proposed in Warrington's Local Plan was not in compliance with policy because (para 43) "*the assessed need was never expressed or included as part of the OAN".* The decision found that the *"proper exercise"* had not been undertaken, namely:

"(a) having identified the OAN for affordable housing, that should then be considered in the context of its likely delivery as a proportion of mixed

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[8] 2015] EWHC 370 (Admin) Case No: CO/4055/2014 http://www.bailii.org/ew/cases/EWHC/Admin/2015/370.html

market/affordable housing development; an increase in the total housing figures included in the local plan should be considered where it could help deliver the required number of affordable homes;

(b) the Local Plan should then meet the OAN for affordable housing, subject only to the constraints referred to in NPPF, paragraphs 14 and 47."

Affordable Housing Needs Calculation

Stage 1: Current Housing Need Steps 1.1 to 1.4

5.5   The first stage of the assessment considers current (backlog) affordable housing need. The PPG is clear that an estimate should be made of the number of households who lack their own housing or live in unsuitable housing and who cannot afford to meet their housing needs, in the open market. The PPG (ID 2a- 024-20140306) provides an indication of the types of housing that should be considered unsuitable which are set out below:

- Homeless households
- Households in temporary accommodation;
- Over-crowded housing;
- Concealed households;
- Existing affordable housing tenants in need; and
- Households from other tenures in need and those that cannot afford their own homes.

5.6   Although potentially not including all households in need of housing, the housing waiting list is the starting point for estimating what the need and demand for housing waiting list in priority need were accommodated, it would be reasonable to assume that all demand for affordable housing would be met, even if there remain households in need which are not reflected in the housing waiting list.

5.7   Therefore, it has been considered that the components of housing need as those in need and within a reasonable preference group for affordable housing (e.g. homeless households and overcrowded households), currently concealed households and other groups in need, for which the waiting list has been used as a best case proxy.

5.8   Data from CLG Local Authority Housing Statistics 2013/14 identifies that at April 2014 a total of 1,734 households were on the housing waiting list, this figure has been corroborated by Canterbury City Council. Data from Canterbury City Council identifies that 599 of these households are existing social rented or affordable rent tenants seeking a transfer.

5.9   Data from CLG and the Census 2011 has been utilised to illustrate the quantity of concealed households. However, given the potential for double counting (some concealed households may already be on the waiting list), the fact that the Census only calculates concealed families and the temporal proximity of

data from the Census 2011, the waiting list provides the most appropriate gross estimate of current housing need.

5.10   The components of current housing need in Canterbury City Council are set out below.

Table 5.1   Current Housing Need

Component	Households	Source/Calculation
Housing waiting list priority bands	1,734	CLG Local Authority Housing Statistics 2013/14
of which Homeless Households (inc. Temporary Accommodation)	243	CLG Local Authority Housing Statistics 2013/14
of which Overcrowded, Concealed or Insanitary Households	393	CLG Local Authority Housing Statistics 2013/14
Gross Estimate of Current Housing Need	**1,734**	(households in priority bandings)
of which current occupiers of affordable housing	599	Canterbury County Council
Net Estimate of Current Housing Need (Backlog)	**1,135**	Gross Estimate of Current Housing Need - of which current occupiers of affordable housing

Source: CLG Local Authority Housing Statistics 2013/14 and Canterbury City Council

5.11   Whilst the SHMA Practice Guidance suggests transfers should be added in at the supply stage (i.e. units becoming available when existing tenants are rehoused), NLP has presented this in the need stage to reflect the fact that some of those currently in need of affordable housing and on the waiting list are current occupiers, and that the net backlog is reduced accordingly. This backlog of current housing need will ultimately need to be factored into the current supply of affordable housing stock in order to reduce the scale of those in need of housing.

Stage 2: Future Need steps 2.1 to 2.3

5.12   Future housing need is split into two components. The PPG (ID-2a-025-20140306) sets out firstly that *"the process should identify the minimum household income required to access lower quartile (entry level) market housing"*. This could be either through purchasing a dwelling or renting privately. Secondly, existing households fall into need to be considered as part of future affordable housing needs.

New Household Formation (Step 2.1)

5.13   The PPG recommends that gross household formation should be used as the measure of newly forming households, as opposed to net household growth which takes into account household dissolution (ID-2a-025-20140306). This is

required to ensure that household dissolution is not double counted in the calculation, once as a net loss of households and potentially again as a re-let of the house they may have occupied. However, gross household formation is typically much higher than net rates, and may represent an overestimate of the amount of households seeking new housing in each year within Canterbury.

5.14   For the purposes of considering future newly forming households, the CLG 2012 based household projections have been used. This calculation is included in Appendix 4.

Table 5.2   Gross newly forming households Canterbury City Council 2012 to 2032

	No. newly forming households annually (gross) 2012 to 2032
Canterbury	1,029

Source: CLG 2012 based household projections, NLP analysis

5.15   This output of future housing need should be treated with caution. Such gross estimates may include people that form several different households over the period at different stages of their life, but does not account for their previous household no longer existing. For example a single person household could evolve into a couple, then one with children over the twenty year period.

5.16   By way of comparison, if net household formation from the 2012 household projections are utilised, this would total 600 additional households each year for Canterbury, which is a substantial reduction from the 1,029.

Table 5.3   Net newly forming households Canterbury City Council 2012 to 2032

	No. newly forming households annually (net) 2012 to 2032
Canterbury	600

Source: CLG 2012 based household projections, NLP analysis

Those unable to rent or buy (Step 2.2)

5.17   This stage of the assessment undertakes an affordability test. Information in respect of local house prices, market rents and household income levels has informed the test which estimates the ability of households to afford lower quartile market housing. The affordability test has been calculated by identifying the costs of entry level (lower quartile) market housing, the costs of which have been obtained from the Land Registry, as well as private rental costs obtained from the VOA.

5.18   Drawing upon the review of current house prices and private rental values, lower quartile prices for a house (£179,000) and a rental property (£7,416 per annum) have been used as an indicator of the entry price to market housing. Such houses are available within Canterbury and such values are relatively typical of smaller 1 and 2 bed properties on the market, ideal for newly forming households seeking to move into a first property.

5.19   In order to understand what income would be required to sustain ownership or occupation of such properties, it is necessary to consider how much households can afford to spend on their housing. The former CLG SHMA Guidance sets out that a household can be considered able to afford to buy a home if it costs 3.5 times the gross household income for a single earner or 2.9 times the gross household income for a dual-income household. However, the PPG does not prescribe exactly how these affordability calculations should be undertaken other than to say that access to lower quartile (entry level) market housing.

5.20   The household income data utilised for Canterbury does not differentiate between single earners and dual earners, and as such a 3.5 multiplier is considered appropriate in order to test best case outcomes. NLP has complemented this with evidence from the Council of Mortgage Lenders, who identified that in Q1 2012, the median loan-to-value ratio for first time buyers was 80% with an income multiple of 3.3. Although there may be difficulties in newly forming households in being able to secure a 20% deposit, there are options available including Government initiatives such as Help to Buy as well as traditional sources of deposits such as parents. On this basis it is considered a useful sensitivity to test.

5.21   In respect of renting, the former CLG SHMA Guidance (2007) set out that a household can be considered able to afford market house renting in cases where the rent payable was up to 25% of their gross household income. These affordability criteria have been applied to the identified rental costs to arrive at an income threshold to support ownership/occupation of entry level market housing. However, there is more up to date evidence which suggests that the proportion of gross income household spend on rent may be higher than 25%. For example, the current HCA guidance to Registered Providers for assessing the affordability of their products sets out that 35% of gross household income can be spent on rent, whilst data released more recently than the former CLG SHMA Guidance[9] estimates that the national average is 34.4% of gross household income (including state assistance) is spent on rent.

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[9] CLG English Housing Survey 2010/11

Table 5.4   Income Thresholds for Entry Level Market Housing

Market	Price/Product	Cost	Basis	Income Threshold
Private Buy	Lower Quartile House Prices	£179,000	3.5 x income (CLG Practice Guidance)	£51,142
			20% Deposit and 3.3 x income (CML)	£43,394
Private Rent	Lower Quartile Rental Prices	£7,416 p.a.	25% Income (CLG Practice Guidance)	£29,664
	Lower Quartile Rental Prices		35% income (HCA Guidance)	£21,189

Source: CLG SHMA Guidance, CML, HCA Guidance, Land Registry, VOA, NLP Analysis

5.22   NLP has applied these thresholds to the income distributions for existing households and newly forming households in Canterbury to identify the proportion of such households that can afford to access lower quartile market housing. This is graphically represented in Figure 5.1, which presents the income distributions as cumulative proportions, identifying the thresholds for each of the four tested entry level scenarios.

Figure 5.1   Affordability Modelling Canterbury City Council
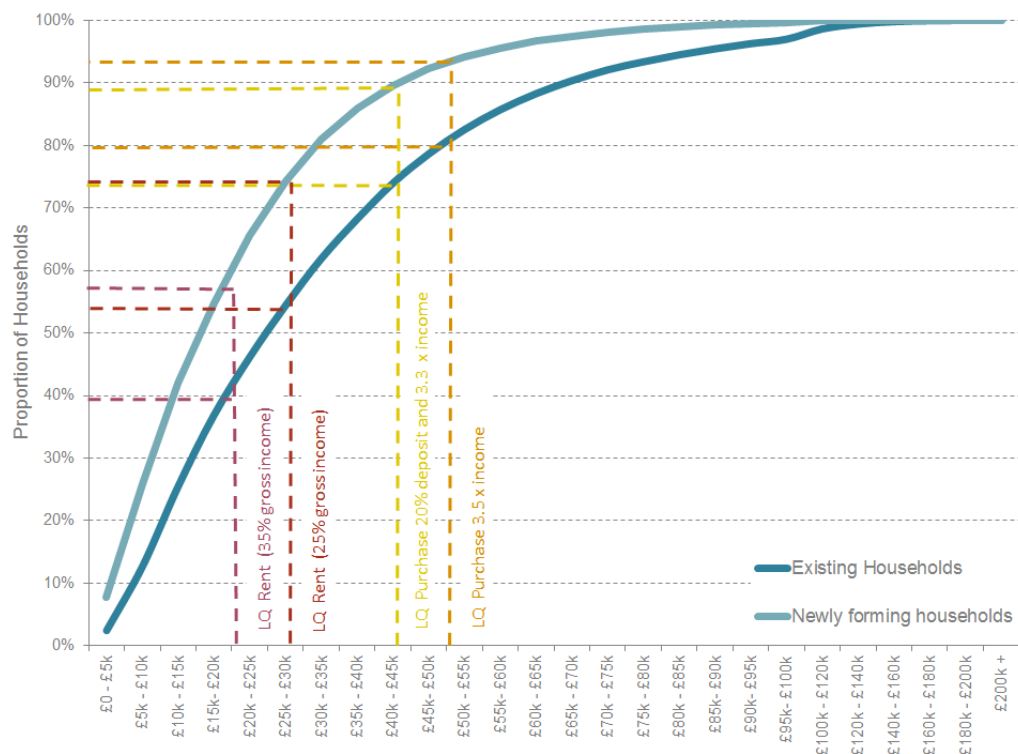
Source: CACI Income Data, Rightmove, VOA and NLP analysis

5.23   As Figure 5.1 illustrates the income distribution of newly forming households is different from total households, reflecting their lesser incomes. This means that a greater proportion of newly forming households are unable to access market housing than households overall. The PPG, however, sets out clearly that the affordability of housing for newly forming households must be

considered foremost, as it is these households that will most likely fall into housing need if their housing requirements are not met in the market. The percentage of both existing and newly forming households unable to afford to buy/rent is set out below in Table 5.5.

Table 5.5   Proportionate affordability for existing and newly forming households

	Income threshold	Existing Households	Newly Forming Households
Buy a Lower Quartile Priced Property (£179,000) with 3.5 x Income	£51,142	79.52%	92.70%
Buy a Lower Quartile Priced Property (£179,000) with 20% Deposit and 3.3 x Income	£43,394	72.10%	88.57%
Rent a Lower Quartile Priced Property (£7,416 p.a.) paying 25% gross income	£29,664	53.85%	73.88%
Rent a Lower Quartile Priced Property (£7,416 p.a.) paying 35% gross income	£21,189	39.08%	57.56%

Source: NLP analysis

5.24   Table 5.5 illustrates that, a minimum of 80% of households overall, and 93% of newly forming households, are unable to afford to purchase a house within Canterbury. Looking at private market rents, assuming 35% of gross income is spent on rent, a minimum of 39% of overall households are unable to afford to rent in the private market, with this increasing to 58% when considering newly forming households.

5.25   In summary, the components of the future affordable housing need are set out below in Table 5.6.

Table 5.6   Future Affordable Housing Needs – Gross Household Formation

Component	#		Source/Calculation
Newly forming households (Gross per annum)	1,029		CLG 2012 based household projections
% unable to rent or buy in the private market	74%	58%	NLP affordability modelling
Newly forming households unable to afford market housing (per annum)	761	597	Newly forming households (Gross per annum) x % unable to rent or buy in the private market
Existing households falling into need (annual average)	222		CLG Local Authority Live Table 2012/13 and 2013/14 (average 193 in 2012/13 and 250 in 2013/14).
Estimate of Future Housing Need (p.a.)	**983**	**819**	Newly forming households unable to afford market housing (per annum) + Existing households falling into need (annual average)

Source: NLP Analysis

5.26   These outputs of future housing need should be treated with caution. Utilising gross estimates of household formation may include people that form several different households over the period at different stages of their life, but does not account for their previous household no longer existing.

5.27   By way of comparison, if net household formation from the CLG 2012 based household projections were utilised, this would total only 600 additional households each year, which would reduce the estimated scale of needs considerably, as shown in Table 5.7. It should be noted that this 'net' approach was utilised within the Canterbury Development Requirements Study (DRS) (January 2012). It is also suggested an approach within the Planning Advisory Service (PAS) guidance on Objectively Assessed Need and Housing Targets (June 2014), which sets out one inherent drawback of the PPG approach is that:

"…only part of the affordable housing need is a component of the OAN – that part which relates to <u>net new households</u>. As defined in the PG, affordable need also includes housing for existing households – including those that are currently in unsuitable housing and those who will 'fall into need' in the plan period (i.e. their housing will become unsuitable for them). For the most part the needs of these households are not for net new dwellings. Except for those who are currently homeless or 'concealed'. If they move into suitable housing they will free an equivalent number of existing dwellings, to be occupied by people for whom they are more suitable. If the affordable needs of existing households are included in the OAN, the resulting figure will too large."

5.28   If considering net new households, the calculation would need to exclude supply of re-lets (i.e. supply arising from household dissolution) in order to avoid double counting.

Table 5.7   Future Affordable Housing Needs – Net New Households

Component	#		Source/Calculation
Newly forming households (net new households per annum)	600		CLG 2012 based household projections
% unable to rent or buy in the private market	74%	58%	NLP affordability modelling
Newly forming households unable to afford market housing (per annum)	444	348	Newly forming households (Gross per annum) x % unable to rent or buy in the private market
Existing households falling into need (annual average)	222		CLG Local Authority Live Table 2012/13 and 2013/14 (average 193 in 2012/13 and 250 in 2013/14).
Estimate of Future Housing Need (p.a.)	**666**	**570**	Newly forming households unable to afford market housing (per annum) + Existing households falling into need (annual average)

Source: NLP Analysis

5.29   Based upon the above, these calculations of future need based upon gross household formation must therefore be seen only as one factor in assessing and considering an objective assessment of future housing need and demand.

Stage 3: Affordable Housing Supply steps 3.1 to 3.8

5.30   This Section estimates the existing and forthcoming stock of affordable housing as per the PPG. This stage examines housing stock that can accommodate households in housing need. The information is required in order to calculate net affordable housing requirements. The model considers both <u>current</u> affordable housing stock (including how much of this is available) as well as the level of <u>future</u> annual new supply.

Current Affordable Housing Stock steps 3.1 to 3.5

5.31   The PPG (ID 2a-026-20140306) sets out the below current components of housing stock used to accommodate current households in affordable housing need as well as future supply.

- Affordable dwellings that are going to be vacated by current occupiers that are fit for use by other households;

- Surplus stock (vacant dwellings);

- Committed supply of new affordable units; and

- Identifying units to be taken out of management (demolition or replacement).

5.32   Table 5.8 below sets out these current components of supply in Canterbury.

Table 5.8   Current Supply of Affordable Housing in Canterbury

Component	#	Source
Step 3.1 (Affordable Dwellings Occupied by households in need)	599	Canterbury City Council
PLUS Step 3.2 (Surplus Stock) - Vacant but available for letting	31	CLG Local Authority Housing Statistics (LAHS) 2013/14
PLUS Step 3.3 (Committed Supply of New Affordable Housing)	260	Canterbury City Council
MINUS Step 3.4 (Units to be taken out of management) - Vacant but not available for letting	3	CLG Local Authority Housing Statistics (LAHS) 2013/14
EQUALS Step 3.5 Current Supply of Affordable Housing	**887**	~

Source: CCC and CLG Local Authority Housing Statistics (LAHS) 2013/14

Future Affordable Housing Supply steps 3.6 to 3.7

5.33   The PPG (ID 2a-027-20140306) also requires the calculation of social re-lets and intermediate affordable housing (excluding transfers) to be assessed as future components of affordable housing supply.

" plan makers should calculate the level of likely future affordable housing supply taking into account future annual supply of social housing re-lets (net), calculated on the basis of past trends (generally the average number of re-lets over the previous three years should be taken as the predicted annual levels)".

5.34   Social re-lets data and intermediate housing sales has been obtained from the CLG Local Authority Live Table which is only available for two years, 2012/13 and 2013/14, as such the average number for both components can only be an average over a two year period. The data obtained for both of these components is set out below in

Table 5.9   Future Annual Supply of Social Re-lets and intermediate housing

	Social re-lets	Intermediate housing sales
2012/13	149	30
2013/14	115	26
Average	**132**	**28**

Source: CLG Local Authority Live Table 2012/13 and 2013/14

Estimate of Net Affordable Housing Needs

5.35   Bringing the above elements together the analysis can calculate net housing need. This is done on an annual basis, and as such it will be necessary to convert the backlog of need into an annual quota based upon the period which this backlog will be addressed. It is a point for the trajectory to set out how and when backlog of affordable housing need will be delivered in the plan period. However, for the purposes of an objective assessment of housing need calculation, this annualised figure will make no difference to the total affordable

housing need over the plan period. Table 5.10 below sets out the calculation of net annual affordable housing need, in line with the PPG utilising gross rates for newly forming households.

Table 5.10   Canterbury Affordable Housing Need Calculation utilising gross household formation

Stage and step in calculation	Notes	Based on 25% income	Based on 35% income
Stage 1: Current Need (Gross)			
1.1 Homeless households and those in temporary accommodation	(CLG Local Authority Housing Statistics)	243	243
1.2 Overcrowding and concealed household	Overcrowding and insanitary (CLG Local Authority Housing Statistics)	393	393
1.3 Other Groups	(CLG Local Authority Housing Statistics)	1,098	1,098
1.4 Total current housing need (gross)	1.1+1.2+1.3	1,734	1,734
1.4 Annual quota (2012-2031)		91	91
Stage 2: Future Need			
2.1 New household formation (gross p.a)		1,029	1,029
2.2 Proportion of new households unable to buy or rent in the market	Unable to afford lower quartile rents	74%	58%
2.3 Existing households falling into need	CLG Local Authority Live Table 2012/13 and 2013/14 (average 193 in 2012/13 and 250 in 2013/14)	222	222
2.4 Total newly arising housing need (gross p.a.)	(2.1 x 2.2) +2.3	983	819
Stage 3. Affordable Housing Supply			
Current Supply			
3.1 Affordable dwellings occupied by households in need	From CCC	599	599
3.1 Annual quota (2012-2031)		32	32
3.2 Surplus stock (Vacant but available for letting)	(CLG Local Authority Housing Statistics)	31	31
3.3 Committed supply of affordable housing	(CLG Local Authority Housing Statistics)	260[10]	260
3.4 Units to be taken out of management (Vacant but not available for letting)	(CLG Local Authority Housing Statistics)	3	3
3.5 Total affordable housing stock available	3.1(annual)+3.2-3.4	60	60
Future Supply			
3.6 Annual supply of social relets (net)	CLG Local Authority Live Table 2012/13 and 2013/14 (average 149 in 2012/13 and 115 in 2013/14)	132	132
3.7 Annual supply if intermediate housing available for re-let or resale	CLG Local Authority Live Table 2012/13 and 2013/14 (average 30 in 2012/13 and 26 in 2013/14)	28	28
3.8 Annual supply of affordable housing	3.6 + 3.7	160	160
Net Annual Affordable Housing Need	1.4 (annual)+2.4-3.5-3.8	**854**	**690**

Source: DCLG General Notes on Local Authority Live Tables 2013/14, CCC and NLP analysis using POPGROUP

5.36   This illustrates that net annual need based on current data (2013/14) over the plan period 2012 to 2031 amounts to between 690 and 854 affordable

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[10] Committed supply is not included for the purposes of calculating objective assessment of housing needs because this supply must be considered as part of the objective assessment of housing need calculation aside from affordable housing needs.

dwellings per annum. This reflects gross household formation and does not account for household dissolutions, with the implication that needs are likely to be inflated under this approach.

5.37   As an alternative to the above scenario, Table 5.11 sets out a scenario which utilises the figure for net newly forming households.

Table 5.11   Canterbury Affordable Housing Need Calculation utilising net household formation

Stage and step in calculation	Notes	Number based on 25% income	Number based on 35% income
Stage 1: Current Need (Gross)			
1.1 Homeless households and those in temporary accommodation	(CLG Local Authority Housing Statistics)	243	243
1.2 Overcrowding and concealed household	Overcrowding and insanitary (CLG Local Authority Housing Statistics)	393	393
1.3 Other Groups	Including people who need to move on medical and welfare grounds and those who need to move to a particular part of the LPA to avoid hardship (CLG Local Authority Housing Statistics)	1,098	1,098
1.4 Total current housing need (gross)	1.1+1.2+1.3	1,734	1,734
Annual quota of backlog (2012-2031)		91	91
Stage 2: Future Need			
2.1 New household formation (gross p.a)		600	600
2.2 Proportion of new households unable to buy or rent in the market	Unable to afford lower quartile rents	74%	58%
2.3 Existing households falling into need	CLG Local Authority Live Table 2012/13 and 2013/14 (average 193 in 2012/13 and 250 in 2013/14)	222	222
2.4 Total newly arising housing need (gross p.a.)	(2.1 x 2.2) +2.3	666	570
Stage 3. Affordable Housing Supply			
Current Supply			
3.1 Affordable dwellings occupied by households in need	From CCC	599	599
3.1 Annual quota (2012-2031)		32	32
3.2 Surplus stock (Vacant but available for letting)	(CLG Local Authority Housing Statistics)	31	31
3.3 Committed supply of affordable housing	(CLG Local Authority Housing Statistics)	260[11]	260
3.4 Units to be taken out of management (Vacant but not available for letting)	(CLG Local Authority Housing Statistics)	3	3
3.5 Total affordable housing stock available	3.1(annual)+3.2-3.4	60	60
Net Annual Affordable Housing Need		**697**	**601**

Source: DCLG General Notes on Local Authority Live Tables 2013/14, NLP analysis using POPGROUP

5.38   Undertaking the above calculation utilising a net figure for newly forming households, demonstrates that affordable housing needs range between 601 and 697 per annum over the plan period 2012 to 2031. These lower estimates reflect the use of net household formation rates, which are more indicative of

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[11] Committed supply is not included for the purposes of calculating objective assessment of housing needs because this supply must be considered as part of the objective assessment of housing need calculation aside from affordable housing needs.

overall need for housing, given they represent all the demographic factors underpinning structural needs for housing (including household dissolutions).

5.39   Assuming delivery of affordable housing is at 30%[12] of total delivery, this would amount to total housing need of between 2,003 (assuming 35% income is spent and utilising net newly forming households) and 2,847 per annum (assuming 25% income is spent and utilising gross figures for newly forming households) to deliver these quantities of affordable housing.

Summary

5.40   Although it is not clear to what extent the outcomes of the above affordable housing need scenarios represent a "*future scenarios that could be reasonably expected to occur*", as is required by the PPG (ID 2a-003-20140306), it is clear that there is a significant affordable housing need in Canterbury. The Council needs to consider if an uplift in overall housing delivery is required to meet these affordable housing needs. Clearly the Council will need to consider this in coming to a conclusion on full objectively assessed housing needs for Canterbury.

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[12] As set out in Policy HD2: Affordable Housing, of the Canterbury District Local Plan

6.0 # Conclusion

6.1 This report has sought to provide an update on objectively assessed housing needs within Canterbury, in light of new data and evidence released since the Development Requirements Study, in line with the NPPF and PPG.

Summary of the Evidence

6.2 Based on a demographic starting point of the 2012 SNPP and the 2012 SNHP, there is a need for 620 dwellings per annum over the period 2012-31 which takes into account the necessary dwelling vacancy rates to accommodate household growth of 597 per annum. It is deemed that past migration trends would not represent a suitable alternative for considering demographic-led for the reasons discussed and therefore the figure of 620 dwellings per annum should be considered the starting point for the full objective assessment of housing needs.

6.3 The economic-led scenarios which were previously analysed as part of the DRS have been updated to take into account new data on commuting, unemployment and economic activity. This is in addition to the updated underlying population and household projections. In line with the PPG, economic-led scenarios should be considered in the context of how they can help reduce commuting pressures, and do not represent a definitive assessment of housing needs in their own right. They should also be considered in the context of demographic and labour force change, given that the job forecasts give limited consideration to the profile of the population over time.

6.4 Were Canterbury to seek to maintain the current commuting ratio, then there would need to be growth of the labour force (compared to demographic-led trends alone) in order to support the job growth forecasts in each of the scenarios, which would require in-migration and subsequently additional housing. This need for housing is 717 dwellings p.a. (2012-31) in order to support the economic forecast of 208 jobs p.a., and 813 dwellings p.a. to support the economic futures 'preferred scenario' of 328 jobs p.a.

6.5 The analysis of market signals data has shown that in Canterbury, in line with the PPG, upward adjustment should be made to the starting point and is justified. This is based on examination of the relevant market signals, which include house prices, rents and affordability, covering the current position and changes over time. Appropriate comparisons have been made against national indicators as well as other Local Authorities within similar economic characteristics and neighbouring Authorities within Kent, and uplift on the baseline demographic need of 620 dwellings per annum will need to be made as a response to these market signals as part of the full objective assessment of need.

6.6   Affordable housing needs in Canterbury amount to between 601 and 697 affordable dwellings per annum when utilising net formation rates for new households and between 690 and 854 when utilising gross formation rates for new households. Assuming the delivery of these affordable dwellings at 30% of total housing, the outcomes of these scenarios increase significantly to between 2,003 and 2,847 total dwellings per annum. It is clear that there are significant affordable housing needs in Canterbury and the Council will need to consider whether an uplift in the objective assessment of housing need and an increase in the total housing figures included in the Local Plan could help deliver the required affordable homes.

6.7   On the above basis, and in light of the clear need (as set out in the Government's practice guidance) for uplift above the demographic baseline to account for market signals, affordable housing needs and economic growth, there is no basis for considering objectively assessed needs within the District would be as low as the demographic starting point of 620 dwellings per annum.

Next Steps

6.8   The Council will need to consider this evidence work and draw its conclusion on the following matters:

1   The extent of uplift required to the 'starting point' estimate of need based on the household projections to take account of employment growth and market signals;

2   Consider the estimates of affordable housing need, the limitations associated with the different methodologies, and its delivery as a proportion of market housing, in assessing the full need for affordable housing;

3   Consider the above in the context of the wider Housing Market Area; and

4   Taking account of these, consider how far the proposed housing requirement figure of 780 dwellings per annum in the submission Local Plan meets the full objectively assessed need for housing, in line with paragraph 47 of the NPPF.

Appendix 1   Model Inputs/Assumptions

	Scenario A: 2012 SNPP, 2012 SNHP	Scenario B: 2012 SNPP, 'Partial Catch-up' Headship Rates	Scenarios C and D: Economic-led (Experian forecasts)
Population			
Baseline Population	A base population is taken from the ONS 2012 Sub-National Population Projections for Canterbury District. This population is split by single year of age and gender.		
Births	The number of projected births in Canterbury District is taken from the ONS 2012-based SNPP.		Fertility Rates are applied to the population forecast using the projected Fertility rates for Canterbury District from the 2012-based SNPP.
Deaths	The number of projected births in Canterbury District is taken from the 2012-based SNPP.		Mortality Rates are applied to the population forecast using the projected Fertility rates for Canterbury District from the 2012-based SNPP.
Internal Migration	Gross domestic in and out migration flows are taken from the 2012-based SNPP from totalling 'cross-border' and 'internal' migration flows for Canterbury District.		Internal in-migration and out-migration is flexed (inflated or deflated) to achieve the necessary number of economically active people to support the number of jobs in Canterbury as modelled in the economic-led scenarios.
International Migration	As above but for international flows.		As above but for international flows.
Propensity to Migrate (Age Specific Migration Rate)	~		Age specific migration rates (ASMigR) for both in and out domestic and international migration are based upon the age profile of migrants to and from Canterbury District in the 2012-based SNPP. These identify a migration rate for each age cohort within Canterbury District (for both in and out flows separately) which is applied to each individual age providing an age specific migration rate. This then drives the demographic profile of those people moving into and out of Canterbury (but not the total number of migrants).

	Scenario A: 2012 SNPP, 2012 SNHP	Scenario B: 2012 SNPP, 'Partial Catch-up' Headship Rates	Scenarios C and D: Economic-led (Experian forecasts)
Housing			
Headship Rates	Headship Rates that are specific to Canterbury are taken from the 2012-based Sub-National Household Projections. These have been calculated according to sex and five year age group. These headship rates are the percent of the population in a given age/sex group who will form a household and hence derive the household growth figure from the projection population.	Headship Rates that are specific to Canterbury are taken from the 2012-based Sub-National Household Projections. These are used to 2017, after which point it is assumed that headship rates in the 15-34 age groups will begin to 'catch-up' to half of the difference between the 2012 and 2008 rates by 2033. These rates have been calculated according to sex and five year age group. These headship rates are the percent of the population in a given age/sex group who will form a household and hence derive the household growth figure from the projection population.	Headship Rates that are specific to Canterbury are taken from the 2012-based Sub-National Household Projections. These have been calculated according to sex and five year age group. These headship rates are the percent of the population in a given age/sex group who will form a household and hence derive the household growth figure from the projection population.
Population not in households	The non-household population (e.g. those in institutional care, military barracks, and prisons) is taken from the 2012-based household projections. These are given as numbers for sex and five year age groups.		The non-household population (e.g. those in institutional care, military barracks, and prisons) is taken from the 2012-based household projections. The numbers are used below age 75 and are given by sex and five year age groups. Above age 75 these have been converted into a percent to allow for differences in the non-household population in the oldest age groups under different levels of population growth than that prescribed in the 2012 SNPP.
Vacancy/2nd Home Rate	A vacancy/second home rate is applied to the number of households, representing the natural vacancies/not permanently occupied properties which occur within the housing market to allow for movement and meant that more dwellings than households are required to meet needs. An average from 2010-2013 is applied across the projection period. This totals data from lines 12, 14 and A to L for 2010-12 and line 16 and B to L for 2013. This means the average second/home vacancy rate for Canterbury District (applied over the projection period) is estimated to be 3.79%.		

	Scenario A: 2012 SNPP, 2012 SNHP	Scenario B: 2012 SNPP, 'Partial Catch-up' Headship Rates	Scenarios C and D: Economic-led (Experian forecasts)
Economic			
Economic Activity Rate	Age and gender-specific economic activity rates are used. The basis for this is the ONS 2006-based Labour Force projections. The annual growth rates for these projections are re-based to the 2011 Census, and also take into account the 2012 Annual Population Survey. These are assumed to remain constant beyond the end year of the 2006-based labour force projections, however have been adjusted to take account of changing pension ages (beyond that already taken into account in the projections).		
Commuting Rate	A standard net commuting rate is inferred through the modelling using a Labour Force Ratio which is worked out using the formula: (A) Number of employed workers living in area ÷ (B) Number of workers who work in the area (number of jobs). In Canterbury District data on these (both taken from the 2011 Census) given a commuting rate of 0.97 (52,708 employed people living in Canterbury and 54,112 jobs in Canterbury).		
Unemployment	The unemployment rate uses an ILO based definition using data from the ONS Annual Population Survey estimate of economically active people not in employment. This is estimated in Canterbury to be 6.8% in 2012 and 13.9% in 2013. It is assumed that over time, as the economy recovers, that unemployment will decline to a level in line with that seen in Canterbury pre-recession. Therefore, a reduction to the pre-recession rate (5.45%) is assumed by 2020, and the unemployment rate is held constant thereafter.		

Appendix 2   Canterbury Model Outputs

Scenario A: Demographic-led Needs – 2012 Headship Rates

Population Estimates and Forecasts — NLP

Components of Population Change — Canterbury

Year beginning July 1st ………….

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Births																			
Male	767	762	749	742	733	724	718	710	703	696	689	683	679	675	673	671	670	669	668
Female	730	726	713	707	698	690	684	676	670	663	656	651	647	643	641	639	638	637	636
All Births	1,497	1,488	1,462	1,449	1,432	1,414	1,402	1,387	1,373	1,358	1,345	1,334	1,326	1,319	1,314	1,310	1,307	1,306	1,304
TFR	1.51	1.53	1.52	1.52	1.52	1.51	1.51	1.51	1.51	1.51	1.51	1.50	1.50	1.49	1.48	1.47	1.47	1.46	1.46
Births input	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Deaths																			
Male	721	687	681	683	689	693	696	699	706	717	725	733	744	757	770	781	796	811	826
Female	849	783	775	773	771	763	762	762	762	763	764	769	776	782	790	801	814	827	842
All deaths	1,570	1,471	1,456	1,457	1,460	1,456	1,457	1,461	1,468	1,479	1,489	1,502	1,520	1,540	1,560	1,582	1,611	1,638	1,668
SMR: male	103.5	96.7	93.6	91.4	89.5	87.5	85.2	83.1	81.5	80.0	78.4	76.8	75.5	74.3	73.1	71.8	70.9	69.9	69.0
SMR: female	106.9	98.0	95.5	94.1	92.5	90.1	88.3	86.5	84.7	83.0	81.2	79.8	78.4	77.0	75.6	74.4	73.4	72.3	71.5
SMR: person	105.3	97.4	94.6	92.8	91.1	88.8	86.8	84.9	83.1	81.5	79.8	78.3	76.9	75.6	74.3	73.1	72.1	71.1	70.3
Expectation	79.2	80.0	80.4	80.7	80.9	81.2	81.5	81.8	82.0	82.2	82.5	82.8	83.0	83.2	83.4	83.6	83.8	83.9	84.1
Expectation	83.0	83.8	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.6	85.8	86.0	86.2	86.4	86.5	86.7	86.8	87.0	87.1
Expectation	81.3	82.1	82.4	82.6	82.8	83.1	83.3	83.6	83.8	84.0	84.2	84.5	84.7	84.9	85.0	85.2	85.4	85.5	85.7
Deaths input	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
In-migration from the UK																			
Male	5,584	5,575	5,590	5,611	5,626	5,630	5,620	5,603	5,584	5,616	5,669	5,728	5,814	5,901	5,985	6,029	6,088	6,157	6,218
Female	6,279	6,229	6,226	6,255	6,248	6,242	6,207	6,174	6,141	6,174	6,243	6,306	6,411	6,510	6,617	6,666	6,733	6,798	6,868
All	11,863	11,804	11,817	11,867	11,874	11,872	11,828	11,776	11,725	11,790	11,912	12,034	12,225	12,411	12,602	12,694	12,821	12,955	13,086
SMigR: male	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SMigR: fem	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Migrants in	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Out-migration to the UK																			
Male	5,526	5,522	5,542	5,555	5,549	5,556	5,562	5,548	5,526	5,492	5,465	5,454	5,481	5,527	5,584	5,663	5,734	5,798	5,845
Female	6,770	6,490	6,351	6,329	6,257	6,257	6,260	6,212	6,149	6,082	6,020	6,002	6,046	6,110	6,196	6,297	6,385	6,478	6,524
All	12,296	12,012	11,893	11,884	11,834	11,813	11,822	11,759	11,674	11,573	11,485	11,456	11,527	11,637	11,780	11,959	12,119	12,276	12,369
SMigR: mal	62.3	62.0	62.0	62.0	61.7	61.7	61.7	61.6	61.5	61.3	60.9	60.6	60.6	60.6	60.8	61.0	61.3	61.4	61.5
SMigR: fem	70.0	68.4	67.6	67.7	67.4	67.4	67.7	67.7	67.5	67.1	66.6	66.1	66.2	66.3	66.5	66.7	67.0	67.4	67.4
Migrants in	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
In-migration from Overseas																			
Male	2,082	2,072	2,053	2,093	2,052	2,048	2,021	2,007	1,992	1,995	2,009	2,024	2,051	2,088	2,123	2,139	2,159	2,176	2,200
Female	2,529	2,482	2,444	2,464	2,445	2,426	2,408	2,389	2,362	2,359	2,379	2,391	2,432	2,477	2,527	2,565	2,594	2,623	2,646
All	4,611	4,554	4,497	4,557	4,498	4,474	4,429	4,397	4,354	4,354	4,388	4,414	4,484	4,565	4,650	4,704	4,753	4,799	4,846
SMigR: mal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SMigR: fem	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Migrants in	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Out-migration to Overseas																			
Male	1,728	1,714	1,699	1,687	1,681	1,670	1,669	1,655	1,640	1,644	1,657	1,671	1,698	1,736	1,769	1,786	1,806	1,823	1,846
Female	2,218	2,171	2,135	2,129	2,129	2,105	2,101	2,082	2,055	2,052	2,072	2,084	2,126	2,170	2,221	2,258	2,288	2,316	2,340
All	3,945	3,885	3,834	3,816	3,810	3,775	3,770	3,738	3,696	3,696	3,729	3,756	3,824	3,906	3,990	4,044	4,093	4,139	4,186
SMigR: mal	351.3	347.2	343.0	339.9	337.9	334.8	334.2	332.1	329.8	331.5	334.7	337.4	341.5	347.0	351.3	351.6	352.7	353.5	355.2
SMigR: fem	536.6	538.2	538.0	542.5	546.9	544.5	546.9	547.2	545.5	550.0	558.8	562.7	572.1	581.2	590.6	595.1	598.5	601.9	604.7
Migrants in	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Migration - Net Flows																			
UK	-433	-208	-76	-18	+40	+59	+6	+17	+51	+216	+427	+577	+698	+774	+822	+735	+702	+679	+717
Overseas	+665	+669	+663	+742	+688	+698	+659	+659	+659	+658	+659	+659	+660	+660	+660	+660	+660	+660	+660

Summary of population change — *2012-2031*

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2012-2031	
Natural cha	-73	+18	+6	-8	-28	-42	-56	-74	-95	-121	-144	-168	-194	-221	-246	-272	-303	-333	-364	-2,717	
Net migrati	+232	+462	+586	+724	+728	+757	+664	+676	+709	+875	+1,086	+1,236	+1,358	+1,434	+1,482	+1,395	+1,362	+1,339	+1,377	+18,483	+973
Net change	+159	+479	+593	+716	+700	+715	+609	+602	+614	+753	+942	+1,069	+1,164	+1,213	+1,236	+1,123	+1,058	+1,007	+1,013	+15,766	
Crude Birth	9.75	9.68	9.47	9.35	9.19	9.04	8.92	8.80	8.67	8.54	8.41	8.30	8.19	8.08	7.99	7.92	7.85	7.79	7.73		
Crude Dea	10.23	9.56	9.43	9.40	9.38	9.31	9.28	9.26	9.28	9.31	9.32	9.34	9.38	9.44	9.49	9.56	9.67	9.77	9.89		
Crude Net I	1.51	3.00	3.80	4.67	4.68	4.84	4.23	4.29	4.48	5.50	6.80	7.69	8.39	8.79	9.02	8.43	8.17	7.99	8.16		

Summary of Population estimates/forecasts

Population at mid-year

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	7,682	7,750	7,784	7,750	7,667	7,598	7,539	7,470	7,409	7,347	7,286	7,227	7,170	7,118	7,072	7,033	7,003	6,979	6,961	6,948
5-10	9,262	9,406	9,501	9,687	9,860	9,949	10,054	10,124	10,155	10,136	10,059	9,993	9,945	9,885	9,829	9,770	9,711	9,654	9,598	9,546
11-15	8,495	8,296	8,223	8,164	8,228	8,430	8,579	8,686	8,848	8,992	9,123	9,257	9,327	9,387	9,388	9,339	9,294	9,270	9,232	9,196
16-17	3,542	3,542	3,738	3,639	3,537	3,406	3,347	3,445	3,497	3,675	3,722	3,747	3,805	3,866	3,958	3,995	3,959	3,940	3,940	
18-59Fema	89,978	89,364	89,045	89,027	89,056	89,083	88,988	88,663	88,341	88,137	87,975	87,976	88,195	88,456	88,769	89,109	89,372	89,583	89,749	89,925
60/65 -74	20,165	20,639	21,045	21,419	21,860	22,123	22,341	22,495	22,702	22,702	22,487	22,424	22,620	22,939	23,352	23,829	24,274	24,770	25,273	25,712
75-84	9,683	9,780	9,952	10,066	10,145	10,344	10,739	11,171	11,570	12,069	12,972	13,578	14,046	14,413	14,767	14,982	15,150	15,230	15,324	15,365
85+	4,592	4,631	4,750	4,876	4,992	5,114	5,174	5,315	5,450	5,633	5,825	6,040	6,300	6,513	6,685	6,943	7,288	7,702	8,075	8,531
Total	153,399	153,558	154,037	154,630	155,346	156,046	156,761	157,370	157,972	158,586	159,340	160,282	161,351	162,515	163,728	164,963	166,086	167,145	168,151	169,165

Dependency ratios, mean age and sex ratio

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-15 / 16-6	0.26	0.26	0.26	0.26	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.26	0.26	0.26	0.26
65+ / 16-65	0.30	0.31	0.32	0.33	0.34	0.34	0.35	0.36	0.36	0.37	0.38	0.38	0.39	0.40	0.40	0.41	0.42	0.43	0.43	0.44
0-15 and 65	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.64	0.65	0.66	0.66	0.67	0.67	0.68	0.69	0.69	0.70	
Median age	36.2	36.2	36.3	36.3	36.4	36.5	36.7	36.9	37.2	37.4	37.6	37.8	38.1	38.2	38.4	38.5	38.7	39.0	39.2	39.4
Median age	39.7	40.2	40.7	41.0	41.3	41.6	41.9	42.2	42.5	42.7	42.9	43.2	43.4	43.5	43.7	43.8	44.0	44.2	44.4	44.7
Sex ratio m	93.7	94.6	95.3	95.7	96.1	96.5	96.8	97.2	97.5	97.7	97.9	98.1	98.2	98.3	98.4	98.5	98.6	98.7	98.9	99.1

Population impact of constraint

		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Number of persons		-43	-42	-43	-45	-45	-46	-45	-45	-45	-45	-44	-45	-44	-44	-44	-44	-44	-44	-43

Households

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030			
Number of	61,432	61,727	62,246	62,761	63,307	63,859	64,433	65,006	65,578	66,147	66,719	67,326	67,983	68,641	69,339	70,027	70,726	71,404	72,077	72,774	11,342	Households
Change in Households		+295	+519	+515	+546	+552	+574	+573	+572	+569	+572	+607	+657	+658	+697	+689	+698	+678	+674	+696	+597	p.a.
Number of	63,852	64,158	64,698	65,234	65,801	66,375	66,971	67,567	68,162	68,753	69,348	69,979	70,661	71,345	72,070	72,786	73,512	74,217	74,917	75,640	11,788	Dwellings
Change in over previou		+307	+540	+535	+568	+574	+596	+596	+595	+591	+595	+631	+683	+684	+725	+716	+726	+705	+700	+723	+620	p.a.

Labour Force

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030			
Number of	72,714	72,588	72,721	72,843	73,006	73,054	73,135	73,233	73,375	73,281	73,124	72,936	72,700	72,879	73,104	73,310	73,484	73,616	73,750	73,916	1,201	Labour Forc
Change in Labour Forc		-126	+132	+123	+163	+47	+81	+98	+142	-94	-156	-189	-236	+179	+225	+205	+174	+132	+134	+166	+63	p.a.
Number of	69,575	64,163	65,184	66,191	67,246	68,197	69,181	70,176	71,224	71,132	70,981	70,798	70,569	70,742	70,961	71,161	71,330	71,458	71,588	71,749	2,174	Jobs
Change in over previou		-5,411	+1,020	+1,007	+1,055	+951	+984	+995	+1,048	-92	-151	-183	-229	+173	+219	+199	+169	+128	+130	+161	+114	p.a.

Scenario B: 2012 Headship Rates 'Partial Catch Up' (Sensitivity)

Population Estimates and Forecasts						NLP													

Components of Population Change — Canterbury

Year beginning July 1st ....

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Births																			
Male	767	762	749	742	733	724	718	710	703	696	689	683	679	675	673	671	670	669	668
Female	730	726	713	707	698	690	684	676	670	663	656	651	647	643	641	639	638	637	636
All Births	1,497	1,488	1,462	1,449	1,432	1,414	1,402	1,387	1,373	1,358	1,345	1,334	1,326	1,319	1,314	1,310	1,307	1,306	1,304
TFR	1.51	1.53	1.52	1.52	1.52	1.51	1.51	1.51	1.51	1.51	1.51	1.50	1.50	1.49	1.48	1.47	1.47	1.46	1.46
Births input	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·
Deaths																			
Male	721	687	681	683	689	693	696	699	706	717	725	733	744	757	770	781	796	811	826
Female	849	783	775	773	771	763	762	762	762	763	764	769	776	782	790	801	814	827	842
All deaths	1,570	1,471	1,456	1,457	1,460	1,456	1,457	1,461	1,468	1,479	1,489	1,502	1,520	1,540	1,560	1,582	1,611	1,638	1,668
SMR: male	103.5	96.7	93.6	91.4	89.5	87.5	85.2	83.1	81.5	80.0	78.4	76.8	75.5	74.3	73.1	71.8	70.9	69.9	69.0
SMR: fema	106.9	98.0	95.5	94.1	92.5	90.1	88.3	86.5	84.7	83.0	81.2	79.8	78.4	77.0	75.6	74.4	73.4	72.3	71.5
SMR: perso	105.3	97.4	94.6	92.8	91.1	88.8	86.8	84.9	83.1	81.5	79.8	78.3	76.9	75.6	74.3	73.1	72.1	71.1	70.3
Expectation	79.2	80.0	80.4	80.7	80.9	81.2	81.5	81.8	82.0	82.2	82.5	82.8	83.0	83.2	83.4	83.6	83.8	83.9	84.1
Expectation	83.0	83.8	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.6	85.8	86.0	86.2	86.4	86.5	86.7	86.8	87.0	87.1
Expectation	81.3	82.1	82.4	82.6	82.8	83.1	83.3	83.6	83.8	84.0	84.2	84.5	84.7	84.9	85.0	85.2	85.4	85.5	85.7
Deaths inp	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·
In-migration from the UK																			
Male	5,584	5,575	5,590	5,611	5,626	5,630	5,620	5,603	5,584	5,616	5,669	5,728	5,814	5,901	5,985	6,029	6,088	6,157	6,218
Female	6,279	6,229	6,226	6,255	6,248	6,242	6,207	6,174	6,141	6,174	6,243	6,306	6,411	6,510	6,617	6,666	6,733	6,798	6,868
All	11,863	11,804	11,817	11,867	11,874	11,872	11,828	11,776	11,725	11,790	11,912	12,034	12,225	12,411	12,602	12,694	12,821	12,955	13,086
SMigR: mal	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
SMigR: fem	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Migrants in	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·
Out-migration to the UK																			
Male	5,526	5,522	5,542	5,555	5,549	5,556	5,562	5,548	5,526	5,492	5,465	5,454	5,481	5,527	5,584	5,663	5,734	5,798	5,845
Female	6,770	6,490	6,351	6,329	6,284	6,257	6,260	6,212	6,149	6,082	6,002	6,002	6,046	6,110	6,196	6,297	6,385	6,478	6,524
All	12,296	12,012	11,893	11,884	11,834	11,813	11,822	11,759	11,674	11,573	11,485	11,456	11,527	11,637	11,780	11,959	12,119	12,276	12,369
SMigR: mal	62.3	62.0	62.0	62.0	61.7	61.7	61.7	61.6	61.5	61.3	61.0	60.6	60.6	60.6	60.8	61.0	61.3	61.4	61.5
SMigR: fem	70.0	68.4	67.6	67.7	67.4	67.4	67.7	67.7	67.5	67.1	66.6	66.1	66.2	66.3	66.5	66.7	67.0	67.4	67.4
Migrants in	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·
In-migration from Overseas																			
Male	2,082	2,072	2,053	2,093	2,052	2,048	2,021	2,007	1,992	1,995	2,009	2,024	2,051	2,088	2,123	2,139	2,159	2,176	2,200
Female	2,529	2,482	2,444	2,464	2,445	2,426	2,408	2,389	2,362	2,359	2,379	2,391	2,432	2,477	2,527	2,565	2,594	2,623	2,646
All	4,611	4,554	4,497	4,557	4,498	4,474	4,429	4,397	4,354	4,354	4,388	4,414	4,484	4,565	4,650	4,704	4,753	4,799	4,846
SMigR: mal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SMigR: fem	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Migrants in	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·
Out-migration to Overseas																			
Male	1,728	1,714	1,699	1,687	1,681	1,670	1,669	1,655	1,640	1,644	1,657	1,671	1,698	1,736	1,769	1,786	1,806	1,823	1,846
Female	2,218	2,171	2,135	2,129	2,129	2,105	2,101	2,082	2,055	2,052	2,072	2,084	2,126	2,170	2,221	2,258	2,288	2,316	2,340
All	3,945	3,885	3,834	3,816	3,810	3,775	3,770	3,738	3,696	3,696	3,729	3,756	3,824	3,906	3,990	4,044	4,093	4,139	4,186
SMigR: mal	351.3	347.2	343.0	339.9	337.9	334.8	334.2	332.1	329.8	331.5	334.7	337.4	341.5	347.0	351.3	351.6	352.7	353.5	355.2
SMigR: fem	536.6	538.2	538.0	542.5	546.9	544.5	546.9	547.2	545.5	550.0	558.8	562.7	572.1	581.2	590.6	595.1	598.5	601.9	604.7
Migrants in	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·	·
Migration - Net Flows																			
UK	-433	-208	-76	-18	+40	+59	+6	+17	+51	+216	+427	+577	+698	+774	+822	+735	+702	+679	+717
Overseas	+665	+669	+663	+742	+688	+698	+659	+659	+659	+658	+659	+659	+660	+660	+660	+660	+660	+660	+660

Summary of population change																			*2012-2031*
Natural cha	-73	+18	+6	-8	-28	-42	-56	-74	-95	-121	-144	-168	-194	-221	-246	-272	-303	-333	-364	-2,717
Net migrati	+232	+462	+586	+724	+728	+757	+664	+676	+709	+875	+1,086	+1,236	+1,358	+1,434	+1,482	+1,395	+1,362	+1,339	+1,377	+18,483
Net change	+159	+479	+593	+716	+700	+715	+609	+602	+614	+753	+942	+1,069	+1,164	+1,213	+1,236	+1,123	+1,058	+1,007	+1,013	+15,766
Crude Birth	9.75	9.68	9.47	9.35	9.19	9.04	8.92	8.80	8.67	8.54	8.41	8.30	8.19	8.08	7.99	7.92	7.85	7.79	7.73	
Crude Dea	10.23	9.56	9.43	9.40	9.38	9.31	9.28	9.26	9.28	9.31	9.32	9.34	9.38	9.44	9.49	9.56	9.67	9.77	9.89	
Crude Net	1.51	3.00	3.80	4.67	4.68	4.84	4.23	4.29	4.48	5.50	6.80	7.69	8.39	8.79	9.02	8.43	8.17	7.99	8.16	

Summary of Population estimates/forecasts

Population at mid-year

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	7,682	7,750	7,784	7,750	7,667	7,598	7,470	7,409	7,347	7,286	7,227	7,170	7,118	7,072	7,033	7,003	6,979	6,961	6,948	
5-10	9,262	9,406	9,501	9,687	9,860	9,949	10,054	10,124	10,155	10,136	10,059	9,993	9,945	9,885	9,829	9,770	9,711	9,654	9,598	9,546
11-15	8,495	8,296	8,223	8,164	8,228	8,430	8,579	8,686	8,848	8,992	9,123	9,257	9,327	9,387	9,388	9,339	9,294	9,270	9,232	9,196
16-17	3,542	3,691	3,328	3,639	3,537	3,406	3,347	3,445	3,497	3,553	3,675	3,722	3,747	3,805	3,866	3,958	3,995	3,959	3,940	3,940
18-59Fema	89,978	89,364	89,045	89,027	89,056	89,083	88,988	88,663	88,341	88,137	87,975	87,976	88,195	88,456	88,769	89,109	89,372	89,583	89,749	89,925
60/65 -74	20,165	20,639	21,045	21,419	21,860	22,123	22,341	22,495	22,702	22,730	22,424	22,487	22,620	22,939	23,352	23,829	24,274	24,770	25,273	25,712
75-84	9,683	9,780	9,952	10,066	10,145	10,344	10,739	11,171	11,570	12,069	12,972	13,578	14,046	14,413	14,767	14,982	15,150	15,230	15,324	15,365
85+	4,592	4,631	4,750	4,876	4,992	5,114	5,174	5,315	5,450	5,633	5,825	6,040	6,300	6,513	6,685	6,943	7,288	7,702	8,075	8,531
Total	153,399	153,558	154,037	154,630	155,346	156,046	156,761	157,370	157,972	158,586	159,340	160,282	161,351	162,515	163,728	164,963	166,086	167,145	168,151	169,165

Dependency ratios, mean age and sex ratio

0-15 / 16-65	0.26	0.26	0.26	0.26	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.26	0.26	0.26	0.26
65+ / 16-65	0.30	0.31	0.32	0.33	0.34	0.34	0.35	0.36	0.36	0.37	0.38	0.38	0.39	0.40	0.40	0.41	0.42	0.43	0.43	0.44
0-15 and 65	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.65	0.66	0.66	0.67	0.67	0.67	0.68	0.69	0.69	0.70	0.70
Median age	36.2	36.2	36.3	36.3	36.4	36.5	36.7	36.9	37.2	37.4	37.6	37.8	38.1	38.2	38.4	38.5	38.7	39.0	39.2	39.4
Median age	39.7	40.2	40.7	41.0	41.3	41.6	41.9	42.2	42.5	42.7	42.9	43.2	43.4	43.5	43.7	43.8	44.0	44.2	44.4	44.7
Sex ratio m	93.7	94.6	95.3	95.7	96.1	96.5	96.8	97.2	97.5	97.7	97.9	98.1	98.2	98.3	98.4	98.5	98.6	98.7	98.9	99.1

Population impact of constraint

Number of persons		-43	-42	-43	-45	-45	-46	-45	-45	-45	-45	-44	-45	-44	-44	-44	-44	-44	-44	-43

Households

Number of	61,432	61,727	62,246	62,761	63,307	63,859	64,477	65,096	65,710	66,321	66,942	67,602	68,311	69,019	69,767	70,505	71,253	71,977	72,692	73,441
Change in Households		+295	+519	+515	+546	+552	+617	+620	+614	+612	+621	+660	+709	+708	+748	+738	+748	+724	+715	+749
Number of	63,852	64,158	64,698	65,234	65,801	66,375	67,017	67,660	68,298	68,934	69,579	70,265	71,002	71,738	72,515	73,282	74,060	74,812	75,555	76,334
Change in over previou		+307	+540	+535	+568	+574	+642	+644	+638	+636	+645	+686	+737	+736	+778	+767	+778	+752	+743	+778

Households column (2012-2031): 12,009 Households / +632 p.a.
Dwellings column (2012-2031): 12,482 Dwellings / +657 p.a.

Labour Force

Number of	72,714	72,588	72,721	72,843	73,006	73,054	73,135	73,233	73,375	73,281	73,124	72,936	72,700	72,879	73,104	73,310	73,484	73,616	73,750	73,916
Change in Labour Force		-126	+132	+123	+163	+47	+81	+98	+142	-94	-156	-189	-236	+179	+225	+205	+174	+132	+134	+166
Number of	69,575	64,163	65,184	66,191	67,246	68,197	69,181	70,176	71,224	71,132	70,981	70,798	70,569	70,742	70,961	71,161	71,330	71,458	71,588	71,749
Change in over previou		-5,411	+1,020	+1,007	+1,055	+951	+984	+995	+1,048	-92	-151	-183	-229	+173	+219	+199	+169	+128	+130	+161

Labour Force column (2012-2031): 1,201 Labour Forc / +63 p.a.
Jobs column (2012-2031): 2,174 Jobs / +114 p.a.

Scenario C: Economic Forecast (208 jobs p.a.)

Population Estimates and Forecasts — NLP

Components of Population Change — Canterbury

Year beginning July 1st …………

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	
Births																				
Male	767	900	871	848	819	794	773	750	726	723	719	716	713	699	684	670	658	648	639	
Female	730	857	830	808	780	756	736	715	692	689	685	682	679	666	652	638	627	617	609	
All Births	1,497	1,756	1,701	1,656	1,598	1,550	1,509	1,465	1,418	1,412	1,405	1,398	1,391	1,365	1,336	1,309	1,285	1,265	1,248	
TFR	1.51	1.53	1.52	1.52	1.52	1.51	1.51	1.51	1.51	1.51	1.51	1.50	1.50	1.49	1.48	1.47	1.47	1.46	1.46	
Births input																				
Deaths																				
Male	721	704	696	696	699	701	702	703	709	720	729	738	750	763	775	786	801	815	831	
Female	849	803	792	788	782	772	768	766	764	767	769	775	783	789	796	807	819	832	846	
All deaths	1,570	1,508	1,488	1,484	1,481	1,473	1,470	1,470	1,473	1,486	1,498	1,513	1,533	1,552	1,571	1,593	1,620	1,648	1,677	
SMR: male	103.5	96.7	93.6	91.4	89.5	87.5	85.2	83.1	81.5	80.0	78.4	76.8	75.5	74.3	73.1	71.8	70.9	69.9	69.0	
SMR: femal	106.9	98.0	95.5	94.1	92.5	90.1	88.3	86.5	84.7	83.0	81.2	79.8	79.8	77.0	75.6	74.4	73.4	72.3	71.5	
SMR: perso	105.3	97.4	94.6	92.8	91.1	88.8	86.8	84.9	83.1	81.5	79.8	78.3	76.9	75.6	74.3	73.1	72.1	71.1	70.3	
Expectation	79.2	80.0	80.4	80.7	81.0	81.3	81.6	81.9	82.2	82.4	82.6	82.9	83.1	83.3	83.5	83.7	83.9	84.1	84.2	
Expectation	82.7	83.7	84.0	84.2	84.4	84.7	84.9	85.1	85.3	85.6	85.8	86.0	86.2	86.4	86.6	86.8	87.0	87.1	87.3	
Expectation	81.1	82.0	82.3	82.6	82.8	83.1	83.3	83.6	83.8	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.5	85.6	85.8	
Deaths input																				
In-migration from the UK																				
Male	8,361	5,060	5,079	5,040	5,166	5,217	5,259	5,242	5,771	5,817	5,880	5,956	5,820	5,882	5,972	6,030	6,087	6,156	6,198	
Female	9,401	5,653	5,657	5,619	5,737	5,784	5,809	5,777	6,346	6,395	6,476	6,558	6,417	6,488	6,603	6,668	6,732	6,798	6,845	
All	17,762	10,713	10,735	10,659	10,903	11,001	11,068	11,019	12,117	12,212	12,356	12,514	12,237	12,369	12,575	12,698	12,820	12,954	13,043	
SMgR: mal	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
SMgR: fem	0.3	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Migrants in	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Out-migration to the UK																				
Male	2,875	6,024	6,046	6,120	6,005	5,966	5,919	5,905	5,340	5,291	5,254	5,226	5,475	5,547	5,597	5,661	5,734	5,798	5,865	
Female	3,522	7,079	6,928	6,972	6,800	6,719	6,662	6,612	5,942	5,860	5,787	5,751	6,040	6,132	6,211	6,295	6,386	6,478	6,546	
All	6,397	13,103	12,974	13,092	12,805	12,685	12,582	12,516	11,282	11,151	11,041	10,976	11,515	11,679	11,807	11,956	12,121	12,276	12,412	
SMgR: mal	32.4	60.7	62.3	64.5	64.8	65.9	66.7	68.0	62.8	61.9	60.9	59.9	61.7	62.1	62.1	62.3	62.6	62.8	63.0	
SMgR: fem	36.4	65.1	66.7	69.8	70.8	72.6	74.5	76.5	71.1	70.0	68.5	67.1	69.1	69.6	69.8	70.1	70.5	71.0	71.2	
Migrants in	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
In-migration from Overseas																				
Male	1,157	1,160	1,157	1,210	1,175	1,183	1,156	1,156	1,156	1,156	1,156	1,156	1,156	1,156	1,156	1,156	1,156	1,156	1,156	
Female	958	959	958	984	967	970	957	957	957	957	957	957	957	957	957	957	957	957	957	
All	2,115	2,119	2,115	2,194	2,141	2,153	2,113	2,113	2,113	2,113	2,113	2,113	2,113	2,113	2,113	2,113	2,113	2,113	2,113	
SMgR: mal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMgR: fem	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants in	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Out-migration to Overseas																				
Male	774	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	
Female	632	633	634	633	634	634	634	634	634	634	634	634	634	634	634	634	634	634	634	
All	1,406	1,408	1,409	1,408	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	
SMgR: mal	157.4	138.7	141.6	144.9	149.1	152.8	156.6	160.7	165.2	165.3	164.7	163.4	161.4	160.5	159.5	158.3	156.9	155.6	154.2	
SMgR: fem	153.0	134.3	140.6	146.1	153.1	160.0	167.5	175.8	185.0	187.1	187.5	186.0	182.9	181.9	181.0	179.8	178.7	177.9	177.3	
Migrants in	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Migration - Net Flows																				
UK	+11,365	-2,390	-2,239	-2,433	-1,903	-1,683	-1,513	-1,497	+834	+1,061	+1,315	+1,537	+722	+690	+767	+742	+699	+677	+632	
Overseas	+709	+712	+706	+787	+732	+744	+704	+704	+704	+704	+704	+704	+704	+704	+704	+704	+704	+704	+704	

Summary of population change — 2012-2031

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2012-2031
Natural cha	-74	+249	+214	+172	+117	+78	+39	-5	-55	-75	-93	-115	-142	-187	-235	-284	-335	-383	-428	-1,541
Net migrati	+12,074	-1,678	-1,533	-1,646	-1,171	-939	-810	-793	+1,538	+1,765	+2,019	+2,241	+1,425	+1,394	+1,471	+1,446	+1,403	+1,381	+1,335	+20,922
Net change	+12,001	-1,429	-1,319	-1,474	-1,053	-862	-771	-798	+1,483	+1,690	+1,926	+2,126	+1,284	+1,207	+1,236	+1,162	+1,067	+998	+907	+19,381
Crude Birth	9.39	10.67	10.42	10.23	9.95	9.71	9.50	9.27	8.95	8.82	8.68	8.53	8.40	8.18	7.95	7.73	7.54	7.38	7.24	
Crude Dea	9.85	9.15	9.11	9.17	9.22	9.22	9.25	9.30	9.30	9.29	9.26	9.23	9.26	9.30	9.35	9.41	9.51	9.61	9.73	
Crude Net	75.75	-10.19	-9.39	-10.17	-7.29	-5.88	-5.10	-5.02	9.71	11.03	12.48	13.68	8.61	8.36	8.75	8.55	8.23	8.06	7.75	

Summary of Population estimates/forecasts

Population at mid-year

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	7,682	8,164	8,322	8,396	8,382	8,351	8,349	8,161	7,969	7,844	7,745	7,666	7,602	7,519	7,442	7,349	7,246	7,133	7,012	6,898
5-10	9,262	9,725	9,767	9,911	10,032	10,103	10,163	10,349	10,482	10,624	10,681	10,718	10,785	10,660	10,520	10,385	10,266	10,154	10,052	9,945
11-15	8,495	8,963	8,702	8,592	8,610	8,768	8,882	8,960	9,105	9,304	9,491	9,702	9,808	10,010	10,156	10,230	10,263	10,337	10,256	10,168
16-17	3,542	4,837	5,287	5,225	4,951	4,803	4,730	4,727	4,884	5,012	5,354	5,443	5,533	5,592	5,726	5,827	5,793	5,868	6,012	
18-59Fema	89,978	98,000	95,603	93,744	91,924	90,358	88,834	87,267	85,693	86,082	86,577	87,280	88,300	88,612	88,908	89,220	89,514	89,782	90,042	90,185
60/65 -74	20,165	21,020	21,345	21,642	21,993	22,172	22,324	22,550	22,606	22,334	22,434	22,605	22,921	23,336	23,820	24,273	24,773	25,280	25,720	
75-84	9,683	9,922	10,073	10,158	10,206	10,387	10,757	11,167	11,546	12,053	12,953	13,560	14,026	14,387	14,727	14,929	15,097	15,173	15,265	15,314
85+	4,592	4,768	4,871	4,984	5,079	5,182	5,224	5,349	5,465	5,652	5,854	6,078	6,351	6,560	6,729	6,985	7,323	7,730	8,098	8,538
Total	153,399	165,400	163,970	162,651	161,177	160,124	159,262	158,491	157,694	159,177	160,867	162,793	164,919	166,203	167,410	168,646	169,808	170,875	171,873	172,780

Dependency ratios, mean age and sex ratio

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-15 / 16-6	0.26	0.25	0.25	0.26	0.27	0.27	0.28	0.28	0.29	0.29	0.29	0.29	0.28	0.28	0.28	0.28	0.28	0.27	0.27	0.27
65+ / 16-65	0.30	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.37	0.37	0.37	0.38	0.38	0.39	0.39	0.40	0.41	0.42	0.42	0.43
0-15 and 6	0.56	0.54	0.56	0.57	0.59	0.61	0.62	0.64	0.65	0.66	0.66	0.67	0.67	0.67	0.68	0.68	0.69	0.69	0.70	
Median age	36.2	33.9	34.3	34.8	35.3	35.8	36.3	36.7	37.2	37.3	37.4	37.5	37.6	37.8	38.0	38.3	38.6	39.0	39.5	39.9
Median age	39.7	37.7	38.5	39.2	40.0	40.6	41.2	41.8	42.4	42.4	42.5	42.5	42.4	42.6	42.7	42.9	43.1	43.4	43.6	43.9
Sex ratio m	93.7	94.0	94.7	95.2	95.8	96.2	96.6	97.1	97.5	97.7	97.9	98.0	98.1	98.2	98.3	98.4	98.6	98.7	98.9	99.0

Population impact of constraint

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Number of persons		+11,798	-2,182	-2,162	-2,415	-1,943	-1,742	-1,519	-1,514	+784	+845	+888	+960	+24	-83	-55	+7	-3	-2	-85

Labour Force

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031		
Number of	72,714	78,946	78,084	77,254	76,438	75,643	74,870	74,125	73,390	73,604	73,819	74,033	74,247	74,462	74,676	74,890	75,104	75,319	75,533	75,747	3,033	Labour Forc
Change in Labour Force		+6,231	-862	-830	-816	-794	-773	-745	-734	+214	+214	+214	+214	+214	+214	+214	+214	+214	+214	+214	+160	p.a.
Number of	69,575	69,783	69,991	70,199	70,407	70,615	70,823	71,031	71,239	71,447	71,655	71,863	72,071	72,279	72,487	72,695	72,903	73,111	73,319	73,527	3,952	Jobs
Change in over previou		+208	+208	+208	+208	+208	+208	+208	+208	+208	+208	+208	+208	+208	+208	+208	+208	+208	+208	+208	+208	p.a.

Households

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031		
Number of	62,421	66,073	66,131	66,199	66,292	66,447	66,589	66,747	66,894	67,714	68,567	69,451	70,412	71,109	71,809	72,523	73,278	74,025	74,774	75,533	13,112	Households
Change in Households		+3,652	+58	+67	+94	+154	+142	+159	+147	+820	+852	+884	+961	+697	+700	+714	+755	+747	+749	+759	+690	p.a
Number of	64,880	68,676	68,736	68,806	68,904	69,064	69,212	69,377	69,529	70,382	71,268	72,187	73,186	73,910	74,638	75,380	76,165	76,941	77,720	78,509	13,629	Dwellings
Change in over previou		+3,796	+60	+70	+97	+160	+147	+165	+153	+852	+886	+919	+999	+724	+728	+742	+785	+776	+779	+789	+717	p.a.

Scenario D: Economic Futures 'Preferred' Scenario (328 jobs p.a.)

Population Estimates and Forecasts — NLP

Components of Population Change — Canterbury

Year beginning July 1st ....

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	
Births																				
Male	767	903	877	857	830	808	789	770	748	747	746	745	744	732	719	706	696	686	679	
Female	730	860	836	816	791	770	752	733	712	712	711	709	708	697	685	673	662	654	647	
All Births	1,497	1,762	1,713	1,673	1,621	1,578	1,541	1,502	1,460	1,459	1,457	1,454	1,452	1,429	1,404	1,379	1,358	1,340	1,326	
TFR	1.51	1.53	1.52	1.52	1.52	1.51	1.51	1.51	1.51	1.51	1.51	1.50	1.50	1.49	1.48	1.47	1.47	1.46	1.46	
Births input																				
Deaths																				
Male	721	705	697	697	700	702	703	705	711	722	731	741	753	767	779	790	806	821	836	
Female	849	804	792	789	783	773	770	769	767	769	772	778	786	793	800	811	824	837	851	
All deaths	1,570	1,508	1,489	1,486	1,484	1,476	1,474	1,474	1,477	1,492	1,504	1,519	1,540	1,559	1,579	1,602	1,630	1,658	1,688	
SMR: male	103.5	96.7	93.6	91.4	89.5	87.5	85.2	83.1	81.5	80.0	78.4	76.8	75.5	74.3	73.1	71.8	70.9	69.9	69.0	
SMR: fema	106.9	98.0	95.5	94.1	92.5	90.1	88.3	86.5	84.7	83.0	81.2	79.8	78.4	77.0	75.6	74.4	73.4	72.3	71.5	
SMR: perso	105.3	97.4	94.6	92.8	91.1	88.8	86.8	84.9	83.1	81.5	79.8	78.3	76.9	75.6	74.3	73.1	72.1	71.1	70.3	
Expectation	79.2	80.0	80.4	80.7	81.0	81.3	81.6	81.9	82.2	82.4	82.6	82.9	83.1	83.3	83.5	83.7	83.9	84.1	84.2	
Expectation	82.7	83.7	84.0	84.2	84.4	84.7	84.9	85.1	85.3	85.6	85.8	86.0	86.2	86.4	86.6	86.8	87.0	87.1	87.3	
Expectation	81.1	82.0	82.3	82.6	82.8	83.1	83.3	83.6	83.8	84.1	84.3	84.5	84.7	84.9	85.1	85.3	85.5	85.7	85.8	
Deaths input																				
In-migration from the UK																				
Male	8,421	5,115	5,130	5,087	5,209	5,260	5,301	5,283	5,816	5,862	5,926	6,002	5,863	5,924	6,014	6,072	6,128	6,197	6,238	
Female	9,468	5,714	5,713	5,670	5,786	5,831	5,854	5,821	6,396	6,445	6,527	6,609	6,465	6,535	6,650	6,714	6,778	6,842	6,889	
All	17,888	10,829	10,843	10,757	10,995	11,090	11,155	11,104	12,212	12,307	12,453	12,611	12,328	12,459	12,664	12,786	12,906	13,039	13,127	
SMiGR: ma	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
SMiGR: fem	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Migrants in	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Out-migration to the UK																				
Male	2,818	5,970	5,996	6,074	5,962	5,924	5,878	5,865	5,295	5,246	5,208	5,180	5,432	5,505	5,555	5,619	5,693	5,758	5,826	
Female	3,452	7,016	6,871	6,920	6,751	6,671	6,616	6,567	5,892	5,810	5,737	5,700	5,993	6,085	6,164	6,248	6,341	6,433	6,502	
All	6,270	12,987	12,867	12,994	12,713	12,595	12,495	12,432	11,187	11,056	10,945	10,879	11,425	11,590	11,718	11,867	12,034	12,191	12,328	
SMiGR: ma	31.7	60.0	61.5	63.5	63.8	64.7	65.4	66.5	61.2	60.2	59.2	58.1	59.8	60.1	60.1	60.2	60.4	60.6	60.7	
SMiGR: fem	35.7	64.3	65.8	68.7	69.5	71.0	72.7	74.5	69.0	67.7	66.2	64.7	66.6	67.0	67.1	67.3	67.6	68.0	68.2	
Migrants in	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
In-migration from Overseas																				
Male	1,157	1,160	1,157	1,210	1,175	1,183	1,156	1,156	1,156	1,156	1,156	1,156	1,156	1,156	1,156	1,156	1,156	1,156	1,156	
Female	958	959	958	984	967	970	957	957	957	957	957	957	957	957	957	957	957	957	957	
All	2,115	2,119	2,115	2,194	2,141	2,153	2,113	2,113	2,113	2,113	2,113	2,113	2,113	2,113	2,113	2,113	2,113	2,113	2,113	
SMiGR: ma	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SMiGR: fem	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Migrants in	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Out-migration to Overseas																				
Male	774	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	775	
Female	632	633	634	633	634	634	634	634	634	634	634	634	634	634	634	634	634	634	634	
All	1,406	1,408	1,409	1,408	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	1,409	
SMiGR: ma	157.4	138.4	140.9	143.7	147.5	150.9	154.2	157.9	161.6	161.6	160.8	159.2	157.0	155.9	154.8	153.3	151.8	150.4	148.9	
SMiGR: fem	153.0	133.9	139.6	144.6	151.0	157.3	164.0	171.6	179.8	181.4	181.3	179.4	176.2	174.8	173.6	172.1	170.8	169.8	168.0	
Migrants in	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	

Migration - Net Flows

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	
UK	+11,618	-2,158	-2,024	-2,237	-1,718	-1,505	-1,340	-1,328	+1,025	+1,251	+1,508	+1,731	+903	+869	+945	+919	+873	+848	+799	
Overseas	+709	+712	+706	+787	+732	+744	+704	+704	+704	+704	+704	+704	+704	+704	+704	+704	+704	+704	+704	

Summary of population change — 2012-2031

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	2012-2031
Natural cha	-74	+254	+224	+187	+137	+102	+68	+29	-18	-33	-47	-65	-88	-130	-175	-222	-272	-318	-362	-803
Net migrati	+12,327	-1,446	-1,317	-1,450	-986	-761	-637	-624	+1,728	+1,955	+2,211	+2,435	+1,607	+1,573	+1,649	+1,622	+1,576	+1,552	+1,503	+24,517
Net change	+12,253	-1,192	-1,094	-1,263	-849	-659	-569	-595	+1,711	+1,922	+2,164	+2,370	+1,519	+1,443	+1,473	+1,400	+1,304	+1,234	+1,141	+23,715
Crude Birth	9.38	10.68	10.45	10.28	10.03	9.80	9.62	9.41	9.13	9.10	8.87	8.74	8.62	8.42	8.19	7.98	7.80	7.64	7.51	
Crude Dea	9.84	9.14	9.08	9.13	9.18	9.17	9.19	9.23	9.22	9.20	9.16	9.13	9.15	9.18	9.22	9.27	9.36	9.45	9.56	
Crude Net	77.27	-8.76	-8.04	-8.91	-6.10	-4.73	-3.97	-3.91	10.78	12.06	13.47	14.63	9.54	9.26	9.63	9.39	9.05	8.85	8.51	

Summary of Population estimates/forecasts

Population at mid-year

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-4	7,682	8,173	8,344	8,433	8,438	8,429	8,452	8,290	8,122	8,022	7,948	7,893	7,854	7,794	7,738	7,665	7,579	7,482	7,376	7,274
5-10	9,262	9,732	9,780	9,932	10,060	10,140	10,208	10,407	10,556	10,719	10,800	10,863	10,961	10,866	10,755	10,650	10,559	10,475	10,400	10,319
11-15	8,495	8,971	8,715	8,610	8,632	8,795	8,913	8,995	9,141	9,545	9,764	9,879	9,093	10,254	10,346	10,400	10,400	10,442	10,377	
16-17	3,542	4,847	5,305	5,246	4,972	4,824	4,752	4,850	4,909	5,039	5,262	5,387	5,478	5,571	5,632	5,769	5,874	5,843	5,924	6,078
18-59Fema	89,978	98,205	95,999	94,321	92,669	91,259	89,886	88,465	87,032	87,579	88,232	89,093	90,273	90,734	91,179	91,630	92,079	92,492	92,896	93,181
60/65 -74	20,165	21,029	21,362	21,667	22,027	22,214	22,374	22,470	22,617	22,682	22,419	22,529	22,709	23,036	23,463	23,958	24,422	24,935	25,454	25,905
75-84	9,683	9,925	10,079	10,166	10,217	10,400	10,774	11,186	11,569	12,080	12,985	13,598	14,069	14,436	14,781	14,989	15,162	15,243	15,341	15,395
85+	4,592	4,770	4,876	4,991	5,088	5,193	5,236	5,363	5,481	5,670	5,874	6,101	6,376	6,588	6,759	7,017	7,359	7,769	8,140	8,584
Total	153,399	165,652	164,460	163,366	162,103	161,254	160,596	160,027	159,431	161,142	163,064	165,229	167,599	169,118	170,561	172,034	173,434	174,739	175,973	177,114

Dependency ratios, mean age and sex ratio

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
0-15 / 16-6	0.26	0.25	0.25	0.26	0.27	0.27	0.28	0.28	0.29	0.29	0.29	0.29	0.28	0.28	0.28	0.28	0.28	0.27	0.27	0.27
65+ / 16-65	0.30	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.37	0.37	0.37	0.38	0.38	0.39	0.39	0.40	0.41	0.41	0.42
0-15 and 65	0.56	0.54	0.55	0.57	0.59	0.60	0.62	0.63	0.65	0.65	0.66	0.66	0.66	0.66	0.67	0.67	0.68	0.68	0.69	0.69
Median age	36.2	33.9	34.2	34.6	35.1	35.6	36.0	36.3	36.9	37.0	37.0	37.1	37.2	37.4	37.6	37.9	38.2	38.6	39.0	39.5
Median age	39.7	37.7	38.4	39.1	39.7	40.3	40.8	41.4	41.9	41.9	42.0	42.0	41.9	42.0	42.1	42.3	42.4	42.6	42.9	43.2
Sex ratio m	93.7	93.9	94.6	95.2	95.7	96.2	96.6	97.0	97.4	97.6	97.8	97.9	97.9	98.1	98.2	98.3	98.4	98.6	98.7	98.9

Population impact of constraint

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Number of persons	+12,051	-1,950	-1,947	-2,219	-1,758	-1,563	-1,346	-1,345	+974	+1,035	+1,081	+1,154	+205	+95	+124	+184	+171	+169	+82	

Labour Force

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Number of	72,714	79,081	78,351	77,650	76,959	76,286	75,631	75,001	74,379	74,717	75,055	75,393	75,731	76,069	76,407	76,745	77,082	77,420	77,758	78,096	5,382 Labour Forc
Change in Labour Forc	+6,367	-730	-701	-691	-673	-655	-630	-622	+338	+338	+338	+338	+338	+338	+338	+338	+338	+338	+338		+283 p.a.
Number of	69,575	69,903	70,231	70,559	70,887	71,215	71,543	71,871	72,199	72,527	72,855	73,183	73,511	73,839	74,167	74,495	74,823	75,151	75,479	75,807	6,232 Jobs
Change in over previou	+328	+328	+328	+328	+328	+328	+328	+328	+328	+328	+328	+328	+328	+328	+328	+328	+328	+328	+328		+328 p.a.

Households

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030		
Number of	62,421	66,145	66,276	66,417	66,584	66,813	67,029	67,261	67,483	68,387	69,326	70,299	71,350	72,134	72,922	73,724	74,569	75,405	76,245	77,095	14,674 Households
Change in Households	+3,724	+131	+141	+168	+229	+216	+233	+221	+904	+939	+973	+1,051	+784	+788	+802	+844	+836	+840	+850		+772 p.a.
Number of	64,880	68,750	68,887	69,033	69,207	69,445	69,669	69,911	70,141	71,081	72,057	73,068	74,160	74,975	75,794	76,628	77,506	78,376	79,248	80,132	15,252 Dwellings
Change in over previou	+3,870	+136	+147	+174	+238	+224	+242	+230	+940	+976	+1,011	+1,093	+815	+819	+834	+878	+869	+873	+884		+803 p.a.

Appendix 3   Mid-Year Estimates Data

Name	Mid-Year Start Population	Births	Deaths	Births minus Deaths	Internal In	Internal Out	Internal Net	International Immigration	International Emigration	International Net Migration (Excluding Asylum Seekers)	Other Changes	Mid-Year End Population
Components of Change for England & Wales Mid-2002; revised in light of the 2011 Census												
CANTERBURY	135,381	1,298	1,649	-351	10,545	8,994	1,551	1,534	1,163	371	-433	136,483
Components of Change for England & Wales Mid-2003; revised in light of the 2011 Census.												
CANTERBURY	136,483	1,381	1,620	-239	10,710	8,861	1,849	1,580	746	834	-433	138,608
Components of Change for England & Wales Mid-2004; revised in light of the 2011 Census												
CANTERBURY	138,608	1,372	1,729	-357	11,577	9,727	1,850	2,006	1,097	909	-433	140,578
Components of Change for England & Wales Mid-2005; revised in light of the 2011 Census												
CANTERBURY	140,578	1,357	1,639	-282	10,525	9,595	930	1,947	885	1,062	-417	141,918
Components of Change for England & Wales Mid-2006; revised in light of the 2011 Census												
CANTERBURY	141,918	1,401	1,552	-151	10,906	9,642	1,264	2,212	1,331	881	-419	143,490
Components of Change for England & Wales Mid-2007; revised in light of the 2011 Census												
CANTERBURY	143,490	1,403	1,533	-130	11,634	10,265	1,369	2,694	1,740	954	-425	145,197
Components of Change for England & Wales Mid-2008; revised in light of the 2011 Census												
CANTERBURY	145,197	1,417	1,573	-156	10,369	9,638	731	2,241	1,533	708	-412	146,073
Components of Change for England & Wales Mid-2009; revised in light of the 2011 Census												
CANTERBURY	146,073	1,467	1,594	-127	11,166	10,622	544	2,403	2,091	312	-415	146,396
Components of Change for England & Wales Mid-2010; revised in light of the 2011 Census												
CANTERBURY	146,396	1,439	1,460	-21	11,570	10,175	1,395	2,325	1,097	1,228	-378	148,653
Components of Change for England & Wales Mid-2011; revised in light of the 2011 Census												
CANTERBURY	148,653	1487	1,466	21	11,373	10,491	882	2,687	1,336	1,351	-352	150,600

Appendix 4   2012 based household projections analysis of gross newly forming households

Age bands	Total Households							5 Year gross households						Annual gross households					Total
	2012	2017	2022	2027	2032	2037		2012-17	2017-22	2022-27	2027-32	Total		2012-17	2017-22	2022-27	2027-32	Total	
0_4	0	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0	
5_9	0	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0	
10_14	0	0	0	0	0	0		222	224	253	254	953		44	45	51	51	48	
15_19	232	222	224	253	254	248		3,048	2,862	3,085	3,424	12,419		610	572	617	685	621	
20_24	3505	3280	3084	3309	3677	3759		28	134	155	34	351		6	27	31	7	18	
25_29	3495	3533	3414	3239	3343	3667		713	838	787	701	3,039		143	168	157	140	152	1,029
30_34	3747	4208	4371	4201	3940	4006		256	184	275	326	1,041		51	37	55	65	52	
35_39	3940	4003	4392	4646	4527	4279		380	440	443	534	1,797		76	88	89	107	90	
40_44	5239	4320	4443	4835	5180	5080		177	222	283	293	975		35	44	57	59	49	
45_49	5637	5416	4542	4726	5128	5515		346	357	377	427	1,507		69	71	75	85	75	
50_54	5252	5983	5773	4919	5153	5549		302	369	407	433	1,511		60	74	81	87	76	
55_59	5040	5554	6352	6180	5352	5660		196	272	287	256	1,011		39	54	57	51	51	
60_64	5366	5236	5826	6639	6436	5616		311	353	471	565	1,700		62	71	94	113	85	
65_69	5582	5677	5589	6297	7204	7041		0	0	7	74	81		0	0	1	15	4	
70_74	4248	5540	5653	5596	6371	7373		0	0	0	0	0		0	0	0	0	0	
75_79	3714	4073	5388	5508	5467	6214		0	0	0	0	0		0	0	0	0	0	
80_84	3230	3248	3625	4880	5022	5022		336	795	1,177	1,505	3,813		67	159	235	301	191	
85&	3206	3566	4043	4802	6385	7552		60,653	63,153	65,987	68,637	258,430		12,131	12,631	13,197	13,727	12,922	

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