

Nathaniel Lichfield & Partners Planning. Design. Economics.

HEaDROOM Update Report

Review of the Objectively Assessed Need for Housing

Sefton Council 30 July 2015 40873/JG

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Preface

Following the abolition of Regional Strategies [RS] in 2013, the Government's National Planning Policy Framework [the Framework] has placed the onus on Local Planning Authorities [LPAs] to determine their own housing requirements in Local Plans. The Government requires that an LPA's evidence base must identify the full objectively assessed need [OAN] for housing, which must meet the needs associated with population and household growth for all types of housing (including affordable) and cater for housing demand. The OAN cannot be constrained by supply considerations (i.e. Green Belt/environmental designations) at this stage. Furthermore, a planned level of housing to meet OAN must drive and support wider opportunities for economic growth and take account of market signals, including affordability¹.

From this housing OAN, the local authority derives a 'housing requirement' figure, or target, for its Local Plan, which takes into account various policy considerations. The Local Plan housing requirement should meet the OANs for market and affordable housing, subject only to the constraints referred to in the Framework (paragraphs 14 and 47).

NLP was appointed by Sefton Council [the Council] to prepare its housing OAN evidence base in March 2011. The analysis was subsequently updated in 2012 and 2014 to take into account newly released data, which is used to build up a picture of housing need. NLP uses a bespoke framework for assessing local housing need, which is termed 'HEaDROOM'. This framework sets out the scale of future housing needs based upon a range of housing, economic and demographic factors, trends and forecasts to help LPAs such as Sefton to make informed policy choices and identify their housing requirement through their Local Plan process.

At the heart of HEaDROOM is the demographic modelling tool 'PopGroup'. PopGroup is now owned by the Local Government Association and is a software model that uses a variety of inputs to project population, household and labour force change for areas and social groups.

The main inputs to PopGroup comprise the ONS's Sub-National Population Projections [SNPP] and the CLG's equivalent Sub-National Household Projections [SNHP]. Both datasets are usually published every two years, with a lag of around 6 months between the SNPP and the SNHP. The SNPP provides estimates of the future population of the English regions and local authorities and are based on the latest mid-year population estimates as well as underlying demographic assumptions regarding births, deaths and migration based on local trends. This 2015 Housing Need Update used the 2012-based SNPP, which were published on 26th June 2014 and supersede previous ONS projections.

¹CLG (March 2012): The National Planning Policy Framework, paragraph 17 bullet point no. 3

Importantly:

"The trends for these projections take into account information from the 2011 Census. The primary purpose of the subnational projections is to provide an estimate of the future size and age structure of the population of local authorities in England. These are used as a common framework for informing local-level policy and planning in a number of different fields as they are produced in a consistent way.²" [page 2].

The projections are trend-based, making assumptions about future births, deaths and migration levels based on trends in recent estimates, usually over a 5-year reference period. Hence for the 2012-based SNPP, much of the trend based data covers the period 2007/08-2011/12. They provide an indication of what the future population size and age and sex structure might be if recent trends continued. They are not forecasts and take no account of policy nor development aims that have not yet had an impact on observed trends³.

The other key demographic input to PopGroup relates to the 2012-based household projections [SNHP] which are derived by CLG from their household projections model, based on the equivalent SNPP dataset from the Office for National Statistics [ONS]. As with the SNPP, the household projections are generally updated every other year following the publication of updated mid-year estimates of population but occasionally an interim set of projections are produced to meet user needs, for example after census results are published.

The most recent household projections are the 2012-based SNHP, which are based on the 2012-based SNPP. The 2012-based household projections provide indications of household growth over the long term, to 2037 and represent the 'starting point' for identifying housing needs.

PopGroup incorporates a cohort component methodology for its population projection model (essentially the interplay between births, deaths and migration to/from an area over time); a household formation rate model for its household projection model and an economic activity rate model for its labour-force projection model. The evidence used is primarily trend-based, although a wide range of different future scenarios can be modelled by changing assumptions and inputs to the model depending upon the future outcome desired (i.e. a target level of job growth, reduced housing vacancy rates and so on).

PopGroup is widely used by over 100 LPA and private sector bodies including Sheffield and Leeds, and has been endorsed by a number of Inspectors at Local Plan Examinations in Public [EiP] and at appeal, such as at Lichfield, Cannock Chase and South Worcestershire. Likewise, Inspectors have criticised authorities which have used methodologies that are not as well established or are seen as 'black box'.

For example, at the EiP into the Stroud District Local Plan⁴, the Inspector

²ONS (May 2014): 2012-based SNPP for England, Statistical Bulletin

³ONS (29 May 2014): Methodology: 2012-based SNPP, page 1

⁴ Stroud District Council Examination of the Stroud District Local Plan: Inspector's Initial Conclusions on Stage 1 of the Examination, 2nd June 2014

commented as follows:

"although Dr Woodhead uses CLG projections and other official ONS/Census material and refers to recognised housing and employment forecasting models, his own methodology is not as transparent as it could be and the range of assumptions used are strongly disputed by other parties. He considers several population/household figures and projections, headship rates, economic and social factors, with a wide range of assumptions. However, he does not use established models such as "POPGROUP" or "HEaDROOM", which he feels might over-estimate housing and employment needs; but **such models provide a consistent approach, provided the assumptions are realistic and the implications are acknowledged**." [NLP emphasis, paragraph 29]

In the non-technical summary below we provide an overview of how the recently released demographic data has informed the update to the previous HEaDROOM report(s).

Non-Technical Summary

Introduction

- 1.1 Nathaniel Lichfield & Partners [NLP] was appointed by Sefton Council to prepare a study analysing housing needs in the Borough in March 2011. The study set out the scale of future housing needs based on a range of housing, economic and demographic factors, trends and forecasts to help Sefton Council make informed policy choices and identify their housing requirement through the Local Plan process. The original study concluded that Sefton's housing need was around 480 dwellings per annum [dpa].
- 1.2 Following the release of the new population projections (the 2010 and 2011based Sub-National Population Projections [SNPP]) and selected 2011 Census population data in 2012, it was recognised that there was a need to refresh the previous study to ensure that the housing requirements were as up-to-date and robust as possible. The subsequent 2012 update concluded that increasing the housing need figure to 575 dpa would be appropriate. However, it was accepted that if the Council could demonstrate (through the use of policy) that it could bring empty homes back into use and thereby reduce vacancy rates significantly, then a lower figure of 510 dpa could be justified.
- In December 2014, further data releases from CLG⁵ (including the Interim 2011-based sub-national household projections [SNHP]) and the 2011 Census (as well as further guidance and clarification on the process to be taken in defining objectively assessed needs) were published. A further Housing Needs Study update was produced which concluded that based on this new data full, objectively assessed housing needs for Sefton would fall in the range 600 dpa 800 dpa. Though it is for the Council to ultimately conclude on a final housing requirement, NLP indicated that 615 dpa might represent an appropriate figure.
- 1.4 The December 2014 study also recognised that when CLG published its 2012based sub-national household projections, there would be a further need to update the study. This is because the 2012-based household projections are the first full (25 year) set of household projections that account for the 2011 Census and provide a new government 'starting point' for assessing housing needs.
- 1.5 CLG published the 2012-based SNHP in February 2015. This non-technical summary summarises the key findings of this Housing Need Update report, with a step-by-step analysis of how the full, objectively assessed need [OAN] has been derived. It also provides background commentary of the new data which may impact on the assessment of housing need.

⁵ Department for Communities and Local Government

Implications of New Data

2012-based Household Projections

- 1.6 The 2012-based household projections were published by CLG in February 2015⁶. Over the Council's plan period (2012-30), they project annual household growth in Sefton of 576 per annum. This is a significant increase on the previous 2011-based (Interim) projections (400 household per annum [hpa] between 2011 and 2021) and the 2008-based household projections (323 hpa between 2008 and 2033)⁷. This increase is attributable to a combination of factors in the population and household projections, but specifically, changes to the underlying population and household formation rates.
- 1.7 The 2012-based household projections project higher rates of household formation compared with the 2011-based interim projections (however these were heavily influenced by the impact of recession), however the rates are still below those in the 2008-based projections.
- 1.8 The prime cause of the population increase under the 2012 SNPP is a significant increase in projected migration into Sefton. The previous 2008-based SNPP projected that Sefton would see little change in the population due to migration; however, the 2012-based SNPP indicate Sefton will see large levels of net in-migration in the future, as a result of population growth in the wider sub-region (specifically in Liverpool), which results in more people out-migrating to areas such as Sefton.
- 1.9 The combination of higher projected population growth, ageing within the Sefton population (with older households tending to be smaller in size) and high rates of household formation have resulted in the 2012-based SNHP generating higher levels of household growth than their two immediate predecessors.
- 1.10 Notwithstanding this, Sefton's projected household growth (11%) is less than the UK average (24%) and in the lowest quarter of all UK local authorities household growth rates.

Defining the Housing Market Area

1.11 A Housing Market Area [HMA] is a geographical area which reflects where people choose to live and work. A HMA can be defined by looking at commuting and migration patterns. The Planning Practice Guidance ("the Practice Guidance") defines a HMA as the area at which around 70% of all local moves are self-contained. On this basis, it is concluded that the Borough can be considered as a single HMA for the purposes of this study. It is,

⁶ The February 2015 release provided headline figures for household projections at the Local Authority level (based on the 2012 Sub-National Population Projections), as well as 'Stage 1' headship rates data, which provide data on headship rates for each Local Authority, by age, sex and relationship status. At the time of writing, CLG had yet to release full 'Stage 2' outputs, which detail household typologies, though it is understood these will be released mid-summer.

⁷ These household projections produced by CLG are produced by applying projections of household headship rates to each of the respective population projections.

however, recognised that there remains strong linkages with neighbouring areas such as West Lancashire District, and particularly with Liverpool.

Market Signals

- 1.12 The Practice Guidance indicates that once an assessment of need based upon household projections (i.e. the housing need generated by population growth) is established, this should be adjusted to reflect market signals. A worsening trend in any of these 'signals' (which include house prices, cost of rents and overcrowding) would mean that some upward adjustment to planned housing numbers should be made.
- 1.13 Following an analysis of market signals it was considered that some upward adjustment could be necessary. This was particularly so due to the underdelivery of housing (i.e. housing targets not being met) in recent years and given how parts of Sefton remain (compared to other areas in Merseyside) relatively unaffordable. However, the scale of adjustment to housing supply over and above demographic-led projections at this time would be moderate, in line with the Practice Guidance.
- 1.14 On this basis it was considered appropriate to apply an uplift (increase) above and beyond the level of need generated by future population growth (the 'demographic-led needs') by around 10% in order to plan positively for growth; address worsening market signals (such as increasing house prices); and address past under-delivery.

The Future Housing Market

- 1.15 In order to identify the future need for housing in Sefton, a number of different scenarios for levels of population, housing and economic growth have been tested. These address the following questions:
 - 1 Demographic Led (Scenarios A to C): "How much development is required to meet projected levels of population change?"
 - 2 Economic Led (Scenarios D to H): "How much development would be needed to ensure forecasts of future employment change are supported by the local labour supply?"
- 1.16 Scenarios A to H were modelled in PopGroup. The key outputs for the scenarios are shown in Table 1.1.

	Population Change	Jobs	Dwelling Change	Dwellings p.a. to 2030
Scenario A: 2012 SNHP/SNPP			+10,874	+604
Scenario Ai: 2012 SNPP, Partial Catch-up to 2008 Headship Rates	+4,961	-2,642	+11,291	+627
Scenario Aii: Reduction in Dwelling Vacancy			+10,300	+572
Scenario B: 5 Year Migration Trend	-3,494	-5,801	+7,399	+411
Scenario C: 10 Year Migration Trend	-7,823	-7,805	+5,424	+301
Scenario D: Past Job Trend	-3,236	-5,464	+7,431	+413
Scenario E: Job Stabilisation (0 additional Jobs)	+10,114	+0	+12,825	+712
Scenario F: LEP Baseline	+4,248	-2,500	+10,463	+581
Scenario G: LEP Policy On	+12,908	+900	+13,980	+777
Scenario H: Blended Jobs (Experian, Oxford Economics)	+35,652	+10,099	+23,147	+1,286

Table 1.1 Summary of Updated Sefton Scenarios 2012-30

Source: NLP using PopGroup

1.17

A number of key themes were evident for all of these scenarios which will shape the need for future housing in Sefton:

- 1 There will be significant ageing of the population, leading to smaller household sizes;
- 2 There is forecast to be a decline in the number of working age residents, despite increases in the State Pension Age and older age economic activity;
- 3 Natural change is negative across all scenarios, indicating there will be more deaths than births in the Borough;
- 4 Although past trends indicate there has been net out-migration from the Borough, the 2012 SNPP project there to be high levels of in-migration to Sefton (in line with projected population growth and ageing in the wider region).

An Objective Assessment of Housing Need

- 1.18 The modelling outputs show a range of housing needs, but highlight the common trend of ageing in the population. This has implications for housing need and labour supply, given the overall lower economic activity associated with an older population. It is projected (in the 2012 SNPP) that migration will be the key driver of population growth in Sefton, reflective of the Borough's position within the wider housing market as a destination for older migrants from surrounding areas.
- 1.19 The Practice Guidance, along with a number of recent High Court decisions, has clearly set out that a stepped approach must be taken to deriving objectively assessed needs. NLP's work has used the most recent population

and household projections, as well as available information on economic growth targets and market signals, such as house prices and affordability.

- 1.20 Our work has concluded that Sefton's full, objectively assessed housing need to address demographic needs would equate to 690 dpa, whilst to meet economically driven needs, the range would be higher – from 710 dpa at the bottom end, to as high as 1,290 dpa at the top end over the plan period 2012-2030.
- 1.21 This has been based on the following staged process:
 - The Government's Planning Practice Guidance is clear that the 'starting point' for establishing the full objectively assessed need for housing is the CLG's latest household projections. In Sefton's case, the latest 2012-based projections would suggest a figure of **604 dpa** (this is derived through applying an allowance for vacant /second homes to the household growth of 576 per annum) over the Council's plan period. However, such a scenario in isolation makes no allowance for economic growth needs or national policy requirements to 'boost significantly' the supply of housing (as required by the National Planning Policy Framework).
 - Before allowances are made for economic growth and market signals, we must determine whether it is appropriate to adjust this demographic starting point of 604 dpa. NLP considers that it may be reasonable to make a small adjustment to allow for higher rates of household formation in younger age groups given the 2012-based rates represent lower household formation than projected in the 2008-based rates. However, given the age profile of Sefton this only has a relatively small impact on overall housing needs, increasing from 604 dpa to **627 dpa**.
 - The next stage involves testing whether an upward adjustment is necessary to the demographic-led needs in response to worsening market signals. This is a 'supply' response (i.e. an increase in housing *supply*, as opposed to responding to the housing *need* arising from population growth). This increase in supply helps to address issues such as high house prices, rents and overcrowding, and is termed the 'market signals uplift';
 - The Practice Guidance states that worsening trends in **any** of the market signals indicates there should be uplift on the demographic-led needs. Although in Sefton the picture is mixed (with house prices and rents lower than the national average for example), in the context of the local area, Sefton is relatively less affordable. In addition, there are some issues in the Borough related to past under-delivery of housing. It is NLP's judgement that uplift in the region of 10% would be reasonable for Sefton, which, based on the demographic led needs of 627 dpa, would equate to **690 dpa**. This figure of 690 dpa is the level of housing needed to accommodate future population growth whilst also responding to market signals, as such is the 'demographic-driven objective assessment of need';

- However, even at this level of provision, the overall level of job growth would still be negative over the plan period a figure of **712 dpa** would be needed to prevent the local economy from declining.
- Some of the employment-led scenarios indicate a level of housing need and population growth which could be considered very challenging in the context of past trends and the future population of the Borough. In particular, the Oxford Economics and Experian projections would require extremely high levels of in-migration to support job growth, resulting in a complete reversal of past trends (which show steady population decline). It is necessary that an assessment of housing need is based on scenarios that could *"reasonably be expected to occur"⁶* and that future assessments of job growth should be considered in the context of the likely future change in the labour force.
- In this context, it would not be unreasonable for the Borough to plan for a job growth target which aims at stabilising the current number of jobs. Indeed, the 2012 SNPP scenario indicates that the projected population growth would still result in job losses (albeit at a slower rate than past trends), with 712 dpa the point at which sufficient housing is provided to maintain the current number of jobs in the Borough. Provision of 777 dpa would deliver enough housing to support job growth in line with the LEP's 'Policy On' job growth forecast for the Borough (job growth of +900 to 2030) this job growth is based on an aspirational model of job growth in Sefton and the Liverpool City Region;
- However the LEP's forecasts of job change in the Borough are considerably more modest and achievable than the Experian, Oxford Economics [OE] or the Cambridge Econometrics [CE] forecasts, which project job growth of between 8,758 and 13,100 jobs additional jobs between 2012 and 2030. On the grounds that over 30% of the job growth forecast by CE was attributable to the public sector, which is considered unlikely given ongoing Government cutbacks in the sector, this scenario was excluded as an outlier and a 'blended average' of the Experian and OE forecasts (+10,099 jobs) was modelled. Providing this level of jobs would require **1,286 dpa**. It is considered that, whilst high, it would be appropriate to use this scenario to inform the top end of the economic-led housing OAN range. It is recognised that some of this job growth could be 'absorbed' through changes in the economic activity levels of the existing resident workforce, through a reduction in unemployment levels or a reversal in current trends in out commuting. If successful, these interventions could justify a lower housing requirement, although this would need to be fully justified by the Council and supported in policy terms.
- 1.22 On the above basis it was considered that based on the staged approach to identifying the housing OAN as set out in the Practice Guidance, the **demographically-driven housing objectively assessed need [OAN] would equate to 690 dpa**, whilst to address economic needs and to align with the

⁸ PPG §ID2a-003-20140306

ELR, the economic-led OAN range would be higher, at around 710 dpa – 1,290 dpa.

This range has been derived on the basis of the above framework, with the range representing the following:

- The demographically driven housing OAN, at 690 dpa, represents the outcome of the staged approach to identifying the housing OAN as set out in the Practice Guidance. It takes the CLG's latest household projections as its starting point (604 dpa 2012-2030, including an allowance for vacant/second homes), adjusts this to 627 dpa to accelerate the household formation rate of the younger age groups, and finally uplifts this figure by 10% to address worsening market signals and past under-delivery.
- Such an approach meets Sefton Council's 's demographic requirements in full; represents a substantial boost on the amount of housing that has been delivered in the past (387 dpa over the past 11 years) and exceeds the LEP's baseline projection of job growth. However, it is recognised that due to the demographic challenges facing the Borough (with a very substantial ageing of the population and the propensity of younger residents to leave the Borough), even this level of dwelling provision would lead to a decline in the total number of jobs between 2012 and 2030.
- Taking an economically-driven housing OAN approach which doesn't lead to a decline in jobs over time, a figure of **710 dpa** would effectively stabilise the economy and ensure that at the very least the number of jobs based in the Borough stabilises over the coming years.
- Moving upward, a figure of 780 dpa would align with the current LEP's Policy On growth aspirations (+900 jobs), whilst at the very top end of any economically-driven housing OAN range, a figure of **1,290 dpa** would align with the 'blended average' of the Experian and OE job growth projections in the Borough, equivalent to an additional 10,099 jobs by 2030.
- 1.24 In general, whilst recognising that this would be very challenging to deliver, it is considered that greater weight could be attached to a housing need figure towards the upper end of the 710 dpa 1,290 dpa economically driven OAN range. This would reflect the most recent economic projections for the Borough.
- 1.25 Whilst this is the OAN that Sefton Council should consider, it is of course recognised that the housing requirement figure it ultimately chooses to take forward in its emerging Local Plan may be different (if justified in accordance with the Framework and Practice Guidance). It is recognised that this is likely to be very challenging to deliver and may raise planning issues which can only be addressed in the context of a sub–regional assessment of housing need and supply.

1.23

- 1.26 A relatively wide housing OAN range has been identified in this study, whilst work relating to the Council's emerging ELR is ongoing. As such, it may be that Sefton Council wishes to commission further work to refine the point on the OAN range Sefton Council should be seeking to go for as its housing requirement.
- 1.27 There are significant implications of a high OAN in terms of Sefton Borough's ability to accommodate such growth and the knock on implications for neighbouring local authorities and their regeneration strategies and housing delivery programmes.
- 1.28 An OAN of the scale identified by the economically-driven OAN range particularly at the top end of the range - is likely to be very challenging to deliver and may raise planning issues which can only be addressed in the context of a sub-regional assessment of housing need and supply.

Housing Needs to 2035

1.29 Initial analysis of housing needs in Sefton over a longer time period (2012-2035) indicates that the housing need in the latter years will start to decline. Were housing need to be assessed over this longer period, it is therefore likely that the average annual housing need would be significantly lower as a result of the reduced need between 2030 and 2035, largely caused by the ageing (and dwindling) population. It will be for the Council to consider whether to pursue these findings further and potentially use this to inform the housing requirement for the Borough over a longer timeframe.

2.0 Introduction

2.1 This report provides an update to the NLP HEaDROOM Update Report: *Review of the Objectively Assessed Need for Housing in Sefton*' (December 2014). In light of new data, notably the 2012-based Sub-National Household Projections [SNHP] which were released in February 2015, there was a requirement to update the Council's objectively assessed housing need. In line with the Planning Practice Guidance, these represent the new starting point for objectively assessed housing need (albeit not necessarily the end-point).

Background

- 2.2 Sefton Council appointed NLP in March 2011 to analyse housing requirements in the Borough. This featured NLP's HEaDROOM framework, setting out the scale of future housing need based on a range of housing, economic and demographic factors, trends and forecasts, in order to help the Council make informed policy choices and identify their housing requirement through the Local Plan.
- In December 2012, in light of the 2010-based Sub-National Population Projections [SNPP] and other various data updates produced as a result of the 2011 Census, NLP prepared a HEaDROOM update report which produced findings on housing need over the period 2011-2031. Following the release of the 2012-based SNPP (and utilising the 2011-based (Interim⁹) Sub-National Household Projections [SNHP] which were available at the time), a further update report was commissioned in December 2014, looking at the housing need for Sefton over two timeframes – 2012-2030 and 2012-2035.
- It was always the Council's intention to review any housing requirement following the publication of the 2012-based SNPP and the 2012-based SNHP. Following the release of these household projections in February 2015, this report provides a further update on considering housing OAN in Sefton.

Structure of Report

2.5 This report is set out as follows;

- Section 3.0 Context sets out the findings of previous reports and the data which underpinned them, as well as providing an in-depth analysis of the latest demographic data (notably the 2012-based household and population projections);
- Section 4.0 Housing Market Area examines the extent to which Sefton Borough can be considered to comprise a self-contained HMA for the purposes of assessing objectively assessed housing need;

⁹ The 2011-based household projections are 'interim' because they are based on the 2011-based interim SNPP, which incorporate valuable information available from the Census 2011, and project forward 10 years instead of the usual 25 years. These interim projections are not in the usual schedule of releases but have been produced to meet specific user requirements for an updated set of projections which incorporate data from the 2011 Census but are only required to 2021.

- Section 5.0 Objective Assessment of Housing Needs presents the findings of the model updates for Sefton and the implications for housing need;
- Section 6.0 Market Signals revisits the market signals data for Sefton in order to inform objectively assessed need, using updated data where possible ; and
- Section 7.0 Conclusion brings together the new evidence to provide an updated assessment of housing need, taking into account the new data utilised in this report.

Context

HEaDROOM Update Report (December 2014)

Introduction

3.1

3.0

The scenarios to be updated from the December 2014 update report are illustrated below. These represent the key demographic (blue) and economic-led (green) scenarios, which, alongside market signals and affordable housing needs, form the necessary basis for considering housing needs in the Borough.



Figure 3.1 Dwelling Outputs - Scenarios to be updated

Source: NLP HEaDROOM Update Report (December 2014)

3.2

The key aspects of each of these scenarios, including how they may need to be adapted to take into account the latest data, are:

A: Department for Communities and Local Government Projections
+ Vacancy – this took the Department for Communities and Local
Government [CLG] 2011-based Interim household projections at face
value (trending forward annual change beyond 2021 to obtain a
household projection for the extended time period to 2030) and applied a
vacancy rate, indicating a need for 419 dwellings per annum [dpa]. It is

important to note that these headline household projections produced by CLG were based on the 2011-based (Interim) Sub National Population Projections, hence applying the 2011-based headship rates to the 2012 SNPP results in a different figure of household growth;

- **B: Baseline (Indexed headship rates)** NLP's 'baseline' scenario applied the 2011-based interim household projections (indexed post-2021), to the more up-to-date 2012 SNPP¹⁰;
- Bc: Partial Catch Up Headship Rates this scenario assumed that, post 2021 (the end date for the 2011-based interim household projections) household headship rates would see a return to longer term trends by assuming that headship rates would make up half of the difference (by 2033) between the 2008-based projections and the 2011based trend. This sensitivity test was based upon Alan Holmans' 2013 TCPA work¹¹. A similar approach is adopted in relation to the 2012based household projections (covered in further detail below);
- Bf: Baseline +4.29% Vacancy (Indexed headship rates) this scenario utilised the baseline scenario (Scenario B), but instead of assuming that current vacancy rates remain constant over time, this assumed that proportionately more homes would be brought back into use in line with policy aspirations. As a result, the housing need outcome under this scenario is slightly lower than Scenario B, as more dwellings in the current stock become available, thus reducing the need for additional housing. A similar approach is adopted in this update report. It should be noted that this scenario does not form part of objectively assessed need, given that it is based on policy aspirations. This scenario acts as an indicator for the Council in arriving at a final housing requirement and the potential impact such a policy could have;
- **E: Sefton Experian** This report update uses Experian job growth forecasts as part of a 'blended job growth' scenario;
- F: Local Enterprise Partnership [LEP] Job Growth –A 'policy off' approach (and predominantly trend-based scenario) based on the Liverpool LEP's local area based econometric model. This report does not seek to update the job growth forecasts used in the LEP Scenario from the December 2014 report, but in the absence of any LEP update re-models the scenario in light of the new household formation data;
- **G: LEP Job Growth 'Policy On'** A 'Policy On' scenario based upon Liverpool LEP's local area based econometric model, whereby known projects and growth opportunities are factored into the model, boosting total job growth. As above, this report does not seek to update the job growth forecasts used in the December 2014 report, but in the absence of any LEP update re-models the scenario in light of the new household formation data;

¹⁰ Since the 2012-based projections (in terms of the headline outputs for Local Authorities) is based on the 2012 SNPP, then running a POPGROUP scenario which applies the detailed data on headship rates in the 2012 SNHP to the 2012 SNPP population will produce the same level of absolute household growth as the headline CLG figures

population will produce the same level of absolute household growth as the headline CLG figures ¹¹Alan Holmans (2013): TCPA Tomorrow Series Paper 16: New Estimates of Housing Demand and Need in England 2011 to 2031

- **H: Job Stabilisation** as before, this scenario keeps the number of jobs based in Sefton constant over the plan period. This provides an indication of the 'tipping point' of housing delivery below which would likely result in job losses and the economy contracting.
- I: Past Trends Job Growth in the December 2014 report this scenario applied the past annual rate of change of -1,080 jobs annually. In light of new revised data on job growth in recent years, the past annual average is now less negative, at -304 annually, trended forward in this scenario.

Additional Scenarios

In addition to updating the above scenarios, this report provides analysis of three further scenarios:

- Short and Long Term Migration Trends in light of the 2012-based SNPP/SNHPs, it was also agreed that NLP would model scenarios which trended forward migration levels achieved over the past five and ten year periods; and
- **'Blended' job growth scenario** modelled the average annual job growth projected by the Experian and Oxford Economics [OE] job projections.

Current Data

As in the December 2014 HEaDROOM update, the most up-to-date Office for National Statistics (ONS) population projections remain the 2012-based Sub National Population Projections (released May 2014). These projections continue to underpin the PopGroup scenarios for Sefton. Given the recency of this report, there are a number of other data sources which have not been updated and remain the same as in the December 2014 study. These are:

- Second Home/Vacancy Rates [CLG Council Tax Base Data];
- Unemployment [Model-based estimates, based on Annual Population Survey];
- Labour Force Ratio [Based on 2011 Census]; and,
- Local Enterprise Partnerships Employment Forecasts.

New Data

As stated, this report incorporates the new household projections to assess the potential implications on objectively assessed housing need in Sefton. These projections come in two forms:

• Headline outputs for absolute levels of annual household growth by Local Authority, based on the 2012 SNPP; and

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- Detailed headship rates, which indicate the percentage of people in a given age/sex/relationship status group who will form a head of household. When applied to the 2012 SNPP these will produce the same level of household growth indicated in the headline outputs; however, these projections can be applied to any population projection to derive household growth.
- In February 2015, CLG released the 2012-based SNHP for England¹². These were the first full set of government projections covering a full 25-year period released since the 2008-based projections (December 2010). These projections also take into account the 2011 Census. Over the Council's Plan period, the 2012 household projections project growth of 576 households per annum for Sefton. This is considerably higher than both the 2008-based and 2011-based household projections, as shown in Table 3.1.

Table 3.1	Projected Household Growth in Sefton
-----------	--------------------------------------

	2008-based	2011-based Interim	2012-based
	Projections (2008-	Projections (2011-	projections (Plan
	2033)	2021)	period - 2012-2030)
Average Annual Household Growth	323	400	576

Source: CLG 2008/2011/2012-based Household Projections

Note: It is important to note that each of these household projections are based on their respective population projections. Hence applying the projections of household headship rates which underpin each one to different populations (such as applying the 2011-based headship rates to the 2012-based populations as in the previous update report) would result in a different household growth figure than those presented above.

This section examines the reasons behind the substantial change in household projections in order to assess whether sensitivity tests to the demographic-led scenarios would be justified and the potential impact on housing need in Sefton.

Household Formation

- The 2012-based SNHP were based on a period when household formation across England had slowed due to the impact of recessionary trends, namely a shortfall in housing supply coupled with issues regarding affordability and mortgage availability. This meant that many households which would have otherwise formed (namely younger households) were not able to. Household projections (and household formation rates) are projections weighted heavily towards recent trends – therefore trending forward this supressed household formation might not be representative of the true need for housing within an area.
- 3.9 The average household size, as projected by each of the household projections, is shown for Sefton in Figure 3.2. Whilst this suggests that the

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¹² The February 2015 release only included Stage 1 outputs – these cover household headship by sex, age and relationship status. As of June 2015, CLG has not released the Stage 2 outputs (these include household headship rates by household type).

2012-based SNHPs generate higher household formation rates than the 2011based projections, they are still below the 2008-based projections (which are based on longer terms trends and do not take into account supressed household formation as a result of the recession)¹³. Although historic average household size has been revised upwards in the 2012-based SNHP, the 2008based SNHP still show a faster rate of decline.





Source: Note:

Historic trends (since 1991) are revised upon the release of each set of full household projections. The historic rates presented here are taken from the 2012-based household projections, and were revised to slightly lower rates than the 2008-based household projections (i.e. a higher average household size).

3.10 In isolation, this would suggest that the 2012-based SNHP would project fewer households (under the same population) than the 2008-based projections. However, this is not the case. In order to explain the differences in household growth, it is therefore necessary to consider the population upon which each household projection is based.

Population Size

3.11 The total population for Sefton, as projected in the 2008, 2011 and 2012-based SNPPs is shown in Figure 3.3. This would appear to go some way to explaining the significant increase in household growth in Sefton under the 2012 projections.

¹³ It is important to note that there may also be differences in average household size due to the different age structure of the population, though in comparison to changes in headship rates these are likely to have a small impact.

3.12 There is a pronounced shift between the 2008-based and 2012-based population projections from population decline to growth. By 2033 there are about 15,000 more people in Sefton under the 2012-based SNPP compared to the 2008-based SNPP. Therefore, even with slightly lower rates of household formation, the absolute level of household growth under the 2012-based projections is substantially higher. Despite the 2011-based (Interim) SNPP having a slightly higher population projection compared to the 2012-based SNPP, the lower household formation rates in the 2011-based Interim household projections have had a moderating effect, bringing the total household growth figure below that projected in the 2012-based SNHP.



Figure 3.3 Total Population, Sefton – 2008-based, 2011-based [Interim] and 2012-based SNPPs



Population Age Structure

3.13

Having analysed the total headline population growth rates which underpin the various SNHPs, it is also necessary to consider the components of change in the total population, and particularly the age structure of the projected population. The age structure is a critical consideration when examining household projections. Areas which are projected to see an increase in the numbers of older people as a percentage of the total population (even when there is little population growth or even decline) will likely see growth in households as such households tend to be smaller on average. In Sefton, ageing of the population is likely to be a significant driver of growth in the number of households.

3.14 The projected change in the population age/sex structure of Sefton between 2012 and 2037 is shown in Figure 3.4. It shows a decline in almost all age groups below the age of 65, compensated for by large increases in older age groups, in particular those aged 90+. This will not only have implications for housing outcomes over time, but also the economic related outcomes (due to the decrease in the size of the labour force). Although projected increases in older age economic activity may help to offset some of this decline, particularly with the rises in State Pension Age, overall the Borough will see a significant decline in the size of the labour force.



Figure 3.4 Population Age/Sex Structure in Sefton, 2012-2037 (as projected in the 2012 SNPP)

Source: ONS 2012-based SNPP

Note: Grey bars represent current (2012) population. Green/Blue bars represent population as projected in 2037.

Components of Population Growth

- 3.15 The differences in the projected natural change and migration in the 2008, 2011 and 2012-based SNPPs can further indicate why there are substantial differences in population (and therefore household) growth.
- In Sefton, natural change (arising from births and deaths) under the 2008based and 2012-based population projections is similar, being consistently negative (i.e. there are more deaths than births, resulting in decline). Up to 2020, natural change in the projections is about 300 per annum, declining over the longer term to about 700 by 2030 (for both the 2008-based and 2012based SNPPs).

3.17 Analysis of the migration figures which underpin the 2008 and 2012-based SNPPs explains why the population projections can fluctuate extensively. These migration projections are shown in Figure 3.5. Over the 25-year period 2008 to 2033, the 2008-based projections projected total net migration in to Sefton of 660 people. This is a result of net out-migration throughout the first half of the projection period and net in-migration in the latter half. In contrast, the 2012-based SNPPs project consistent growth in net in-migration between 2012 and 2037, totalling 13,100 over the 25-year period. Both projections indicate increasing net migration over time; however, the upward shift in the latest projections has had a significant impact on total net migration (and overall population growth) for Sefton.



Figure 3.5 Projected Total Net Migration for Sefton - 2008-based and 2012-based SNPPs

Source: ONS 2008-based SNPP and 2012-based SNPP

The methodology used to project migration in the 2012-based SNPP helps to explain these significant differences and is described by the Office for National Statistics (ONS) as follows:

"...to project internal migration moves, five-year trend data from 2007/08 to 2011/12 are used...to calculate cross-border moves, and average of five years' cross-border estimates data from 2007/08 to 2011/12 has been used... for immigration (international flows) an average of six years' historic trend data from 2006/07 to 2011/12 has been used...

Internal migration estimates produced by ONS provide an origin-destination matrix which provides information on moves from each local authority to every other local authority by sex and single year of age. To project internal migration moves, five-year trend data from 2007/08 to 2011/12 are used to estimate the average proportion of the population that has left a particular local authority and where they have moved to.")¹⁴

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¹⁴ONS (29 May 2014): "Methodology: 2012-based Subnational Population Projections"

- 3.19 The methodology document for the 2008-based SNPP indicates that the same methods were used, i.e. extrapolating five year internal migration and six year international migration data¹⁵. By projecting out-flows from all local authorities, in-flows can be calculated.
- 3.20 In Sefton, international and cross-border flows (to the rest of UK) in the 2012based SNPP are relatively constant over the projection period and broadly align with past trends. Internal migration (to/from England) is the main cause of the increase in migration and overall population growth. The ONS methodology indicates that the internal migration estimates take into account age-specific migration rates of those moving out of a given authority based on recent trends; this inherently means that the number of people leaving an authority (and entering another) will be impacted by the size of the population in that authority.
- 3.21 Therefore any local authority which has a strong migratory relationship with Sefton, and has experienced a change in the projected population size, will impact the total number of people migrating to Sefton. In addition, outmigration from Sefton will be impacted by the change in Sefton's population over time.
- 3.22 Taking into account the above, it is highly likely (given its size and location) that changes to Liverpool City's population projection (between the 2008-based and 2012-based) will have had an impact on Sefton. Although the impact on Sefton migration is not limited solely to Liverpool, this will explain a significant amount of the shift in migration trends to Sefton, given the migratory relationship that exist between the authorities (these migratory relationships are explored further in Section 4.0 and are illustrated in Figure 4.1).
- There has been a substantial shift in the projected population for Liverpool under the 2012 SNPP compared with both the 2008-based and 2011-based (Interim) SNPPs as shown in Table 3.2 and Figure 3.6. Although both the 2008 and 2012-based projections projected Liverpool's population to increase, the starting points differ significantly and this impacts on the size of the population over the projection period.

Table 3.2	Components of Population Change – Liverpool City
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		2008-based	2011-based Interim	2012-based
Population in 2012		445,800	465,200	469,690
	Population Growth*	980	-650	1,052
Average Annual	Natural Change	1,776	1,800	1,753
	Net Migration	-784	-2,400	-670

Source: ONS 2008/2011/2012-based SNPP *May not sum due to rounding.

¹⁵ <u>http://www.ons.gov.uk/ons/rel/snpp/sub-national-population-projections/2008--based-projections/subnational-population-projections-across-the-uk.pdf</u>



Figure 3.6 Past and Projected Population – Liverpool City

Source: ONS Mid-Year Estimates, 2008/2011/2012-based Sub-National Population Projections

3.24

Since the release of the 2011 Census and 2012 Mid-Year Estimates (MYE), the total population of Liverpool has been revised upwards significantly. The 2008-based projections had a much lower starting point and by 2012 projected about 24,000 fewer people than was actually recorded in the 2012 MYEs (i.e. the base for the 2012 SNPP). This is because the 2008-based projections had a starting point which had been derived through estimating population change from the 2001 Census. At the 2011 Census, the actual population of Liverpool was accurately recorded. It was found that the methods used to estimate population change between 2001 and 2011 had significantly under-recorded the actual levels of population growth. This led to the MYEs being revised, as illustrated in Figure 3.6.

- 3.25 This under-recording of the population in Liverpool is likely to be related to the method of recording internal migration in the MYEs and how this is affected in areas with large student populations. The 2011 Census which fed into the 2012-based SNPP helped correct this problem to provide a revised starting point (as well as revising the mid-year estimates for 2001-11 which inform the projections) for the Liverpool population.
- 3.26 Overall, the result of a much larger population in 2012 and higher population growth over the projection period means that there is a larger 'pool' of migrants to move from Liverpool to Sefton.
- 3.27 Typically, migration out of Liverpool (to Sefton) is focussed in the older age groups, whilst migration out of Sefton to Liverpool primarily comprises those in the young adult age groups (e.g. to attend University, find work, etc.). The 2011 Census showed that a higher than average percentage of those who

migrated from Liverpool to Sefton were aged 50 and over (13%, compared to 8% in that age category migrating from Liverpool to elsewhere in England) and a higher than average percent of those who migrated from Sefton to Liverpool were aged 16-49 (82%).

The figure below shows the population change in Liverpool and Sefton as projected in the 2012 SNPP between 2012 and 2037. In Liverpool, the over 65 population in 2037 is significantly larger than in 2012. Given ONS' methodology of applying age-specific migration rates, this means there is a larger 'pool' of potential migrants which is ultimately likely to lead to a higher number of migrants moving into Sefton. At the same time, the population in the young adult age groups in Sefton shrinks between 2012 and 2037, hence there is a smaller 'pool' of migrants who are likely to out-migrate to places such as Liverpool.





Source: NLP based on 2012-based SNPP

The cumulative effect of the increased total population in Liverpool; the ageing of the Liverpool population; and the strong migratory relationships that exist between Liverpool and Sefton mean that the projections of migration increase compared to past trends. This is illustrated in Figure 3.8. Although the 2012 SNPP projects average annual net migration well above gross levels seen since the 1990s, past trends do not illustrate the age profile and migration patterns in the wider North West Region. It is reasonable to assume that, in line with the ONS projections, higher projected population growth in areas such as Liverpool will ultimately impact upon Sefton as migration trends filter across the region, particularly given Sefton's position within the wider HMA as a

3.29

destination for older migrants, and the pronounced ageing within the local population.



Figure 3.8 Sefton's Historic and Projected Migration - 1992/1993 to 2036/2037

Summary

3.30

This section has examined the underlying population projections which underpin the 2012-based household projections, and the extent to which these represent a reasonable basis for considering future population growth. This has examined how the population and migration projections have changed for Sefton, the methodology used by ONS in producing these projections and the impact of changes to the projected population in the wider North West Region (and primarily Liverpool). Although past gross migration trends would appear to be significantly different from the migration figures projected within the SNPP, the migration projections are in fact reflective of Sefton's position within the wider region and housing market area as a destination for older age migrants and those looking to retire.

3.31 In summary:

- 1 The 2012-based Sub National Household Projections [SNHP] indicate higher average annual household growth than both the 2008-based and 2011-based (Interim) projections;
- 2 The headship rates in the 2012-based Sub National Population Projections [SNPP] are higher (particularly in younger age groups) than the 2011-based (Interim) SNHP, but remain lower than the 2008-based SNHP;

Source: ONS Mid-Year Estimates, 2012 SNPP

- 3 The 2012 SNPP (upon which the household projections are based) project growth in Sefton about 15,000 higher than the 2008-based SNPP, which projected population decline;
- 4 This change has been caused by complex changes to the internal migration projections for Sefton;
- 5 These migration projections are influenced by past trends in those who have moved out of a Local Authority as a proportion of the population in that age/sex group;
- 6 Changes in the population projection for authorities which have strong migratory relationships with Sefton will impact on the total number of people moving into Sefton; and
- 7 This is particularly relevant for Liverpool, where the 2012 SNPP suggests a larger and growing population compared to previous projections, providing a larger pool of potential migrants and contributing significantly to the higher levels of in-migration to Sefton.
- 3.32 This combination of population growth and household formation in Sefton has led to higher levels of household growth compared to previous SNHP iterations, indicating average household growth of 576 annually over the Council's Plan period.

The Sefton Housing Market Area

4.1 The Localism Act 2011 includes the statutory duty to cooperate on strategic planning for cross-boundary issues, and this requirement is reiterated in the Framework in terms of addressing housing figures and job growth. In particular, the Framework states:

"...LPAs 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." [Paragraph 159]

- 4.2 Over the past year or so Inspectors¹⁶ have consistently taken the view that Strategic Housing Market Assessments [SHMAs] must be undertaken for the whole Housing Market Area and that objectively assessed housing needs should reflect such geographies. This section considers, in light of additional data which has become available since the publication of the December 2014 HEaDROOM update, whether defining Sefton as a self-contained Housing Market Area still remains appropriate for the purposes of objectively assessing housing need in line with the relevant policy.
- 4.3 This level of self-containment is also recommended in the Planning Practice Guidance (March 2014). This provides some guidance on defining s including consideration of household migration and search patterns. The Practice Guidance states:

"Migration flows and housing search patterns reflect preferences and the trade-offs made when choosing housing with different characteristics. Analysis of migration flow patterns can help to identify these relationships and the extent to which people move house within an area. The findings can identify the areas within which a relatively high proportion of household moves (typically 70 per cent) are contained. This excludes long distance moves (e.g. those due to a change of lifestyle or retirement), reflecting the fact that most people move relatively short distances due to connections to families, friends, jobs, and schools." [Paragraph 2a-011-20140306]

4.4 Migration flows and calculation of self-containment percentages within and between local authorities have been used by NLP to assist in defining the Sefton Housing Market Area.

Summary of Current Evidence

4.5 The December 2014 HEaDROOM update provided an in-depth review of previous definitions of the Housing Market Area. Since this was published, no additional analysis or updates have been produced regarding those studies, and hence the review is still relevant in the context of considering the Housing Market Area.

¹⁶ Waverley Borough Council Core Strategy Examination in Public, Letter from Inspector Michael Hetherington June 2013; and Hart District Council Core Strategy Examination in Public, Letter from Inspector Kevin Ward July 2013

- 4.6 This evidence is summarised as follows:
 - 1 The 'Definition of Housing Market Areas in the North West Region' (2008) Nevin Leather Associates study concluded that Sefton fell within the Merseyside sub-region which covers five authorities. This looked at a range of tests, including travel to work, migration, functional economic areas and school catchments;
 - 2 A CLG study of the Geography of Housing Market Areas (2010) analysed Housing Market Areas across a range of geographies, and indicated that Sefton spanned two individually defined Housing Market Areas as well as sitting completely within a wider Housing Market Area (the 'Liverpool' Strategic Housing Market Area); and
 - 3 The Sefton SHMA (2008) acknowledged that whilst Sefton sits within a wider Liverpool-centred Housing Market Area, Borough levels of migration and commuting self-containment suggested that Sefton could be considered a Housing Market Area in its own right. Even so, the SHMA considered that there were two distinct sub-areas within the Borough.
- 4.7 The evidence included as part of the 2014 HEaDROOM report is summarised below.

Extent of the Sefton Housing Market Area

- 4.8 The December 2014 HEaDROOM update presented a range of data and analysis which looked at commuting, migration and other relevant Housing Market Area data in line with the Practice Guidance to determine the Housing Market Area. At the time of writing, not all of the Census (2011) data on migration was available, and hence the 2014 study used a combination of migration estimates, 2001 Census migration data and 2011 Census commuting data.
- 4.9 Now that the relevant data from the 2011 Census is available, this section reexamines the housing market data to determine whether Sefton remains a selfcontained Housing Market Area as previously concluded.

Migration

4.10 Table 4.1 and Figure 4.1 show that the strongest migratory relationship is between Liverpool and Sefton, with 2,055 people migrating from Liverpool to Sefton, and 2,467 people moving in the opposite direction. Outside this area, there are high levels of interdependency between Sefton and West Lancashire and, to a lesser extent, Knowsley and Wirral. The 2011 Census showed that Sefton overall as an area of net domestic out-migration, with 1,573 more people migrating out of Sefton than migrating in annually.

Table 4.1 Migration between Local Authorities

	Migration into Sefton	Migration out of Sefton
Liverpool	2,055	2,467
West Lancashire	722	692
Knowsley	466	351
Wirral	205	252
St. Helens	160	161
Manchester	115	271
Leeds	102	165
Total	20,355	21,928

Source: Census 2011





Source: Census 2011/NLP

Migratory Self-Containment

4.11

In line with the Practice Guidance, NLP analysed the levels of self-containment within Sefton Borough including and excluding long distances moves¹⁷ to test whether Sefton represented a Housing Market Area in its own right. This analysis is shown in Table 4.2. Excluding long-distance moves, the data show that 74% of those who migrated into Sefton also originated there. Of those who originally lived in Sefton before moving, 70% chose to remain in the Borough. This indicates that Sefton comprises a self-contained Housing Market Area, given that more than 70% of in and out moves are self-contained. Even with the inclusion of long distance moves (i.e. moves to/from the UK

¹⁷ Short-distance Authorities include Lancashire, Greater Manchester, West Yorkshire, South Yorkshire, Derbyshire, Staffordshire, Shropshire and North-East Wales. Migration to Counties/Local Authorities beyond these are considered to be 'long-distance' and for the purposes of lifestyle change.

taking into account that these are likely to include moves for lifestyle changes, which are not associated with determining a Housing Market Area), selfcontainment within Sefton remains close to the 70% requirement, at 64-69%.

Table 4.2 Self-Containment (Internal Migration)

	Inward Migration Self- Containment (%)	Outward Migration Self- Containment (%)
Excluding long-distance moves	74.1%	70.4%
All moves	69.2%	64.2%

Source: NLP based on Census 2011

Commuting

4.12

The commuting relationships (also taken from the 2011 Census) between Sefton and the surrounding authorities are shown in Figure 4.2. The highest levels of commuting are between Sefton and Liverpool, with 24,208 commuting from Sefton to Liverpool and 11,542 moving in the opposite direction. Of those working in Sefton, 72% also live in the Borough.

Figure 4.2 Commuting Flows, 2011





4.13

Figure 4.2 also indicates high levels of commuting between Sefton and West Lancashire, Knowsley, St Helens and Warrington. Overall, there is a net outflow of commuters from Sefton (-19,181). This is a reduction from the 21,171 net loss of commuters from Sefton Borough recorded in the 2001 Census, suggesting a slight re-balancing. This is primarily due to more commuters

travelling into the Borough from Liverpool, which has increased from 9,842 to 11,542 over the ten-year period.

4.14 The commuting data indicates that of those who work in Sefton, 66.1% of people also live there, and of those who live in Sefton, 54.1% also work there. In total at the 2011 Census, 55,569 people lived and worked in Sefton.

Implications for the Sefton Housing Market Area

- 4.15 The December 2014 HEaDROOM update presented a range of evidence to justify that Sefton was a self-contained HMA. This included a review of other evidence, including the 2008 SHMA (which followed the findings of previous studies, including Ecotec Study 2006 and Nevin Leather Research 2008), which analysed migration, commuting and house prices. NLP's own analysis within that report further supported these findings, particularly with regard to Sefton's level of self-containment.
- 4.16 In light of new evidence, this 2015 update shows that those findings still remain valid, with the self-containment identified in the 2011 Census supporting the idea that Sefton could be (in the context of internal migration at least), a self-contained Housing Market Analysis, with migratory self-containment above 70%. The commuting data also suggests a relatively high level of self-containment.

Summary

- 4.17 The Housing Market Analysis assessment for Sefton demonstrates that the Borough can be satisfactorily considered as a self-contained Housing Market Analysis.
- 4.18 In summary:
 - 1 The Practice Guidance defines an Housing Market Analysis as a geography at which 70% of local moves are contained, whilst the former CLG Guidance notes that the benchmark for self-containment may be lower in more rural areas;
 - 2 The 2008 SHMA stated that due to the high levels of migratory and commuting self-containment that Sefton could be considered to be a self-contained HMA;
 - 3 Excluding long-distance movements, an assessment of 2011 Census data on migration suggests that the Borough has migratory self-containment comfortably over 70%, to 74%;
 - 4 There are high levels of commuting self-containment recorded in the 2011 Census;
 - 5 On this basis Sefton can be considered as a single HMA for the purpose of considering housing needs in the context of the Local Plan.
- 4.19 Notwithstanding, the objective assessment of need for Sefton still fully account for cross-boundary dynamics, due to modelling assumptions concerning future

migration patterns There remain strong linkages between Southport in the north of the Borough, and West Lancashire to the east, as well as strong commuting and migration linkages with Liverpool City.
5.0 Objectively Assessed Housing Need

Introduction

5.1 In utilising NLP's HEaDROOM framework, this section provides an update to the scenarios presented in the December 2014 report (with the addition of three further scenarios), in light of the latest CLG household projections. The scenarios comprise:

Demographic-led Scenarios:

a **Scenario A: 2012-based SNHP and 2012 SNPP** – this scenario models the housing need (and subsequent economic-related outputs) based on the latest 2012-based population and headship forecasts for Sefton. It takes account of dwelling vacancy rates in order to derive a housing need figure from the projections in household growth.

In addition, two sensitivity tests have been analysed, which are also based on the 2012 SNPP;

- Scenario Ai: Partial Catch-Up Using the 2012-based headship rates¹⁸ as a starting point, it is projected that by 2033 (starting after 2017 to allow for full economic recovery) headship rates for the younger adults age groups¹⁹ will have made up half of the difference between the 2012 and 2008-based headship rates;
- ii Scenario Aii: Reduction in Vacancy Rate Projecting that the number of empty homes brought back into use in Sefton increases over the course of the plan period (to 2030) in line with the Council's policy aspirations. Currently at 4.6% of dwellings in the Borough (as obtained from CLG Council Tax Base Data from 2014, which includes 0.294% second homes) this would be gradually reduced by 2030 to 4.294% (4.0% vacancy, plus 0.294% for second homes);
- b Short Term Migration Trends based on average gross flows of internal and international migration in Sefton over the five year period 2007/08 to 2011/12 as taken from the ONS Mid-Year Estimate Series, assuming Sefton will continue to see gross migration at a level in line with recent trends;
- c **Long Term Migration Trends** as above, but using a ten year migration average, from 2001/02 to 2011/12, assuming Sefton will continue to see gross migration in line with levels on average over the last decade.

¹⁸ Headship rates refer to the percent of the population in a given age/sex group who will form a head of household. ¹⁹ As defined by males and families in the age groups 15, 10, 20, 24, 25, 20, and 20, 24.

¹⁹ As defined by males and females in the age groups 15-19, 20-24, 25-29 and 30-34.

Employment-led Scenarios:

- d **Past Trends Growth** Taking into account average net job loss of 304 annually between 1997 and 2014, this scenario assumes this will continue over the plan period;
- e **Job Stabilisation** constraining the number of net additional jobs over the plan period to zero, to assess the level of housing needed to maintain the current number of jobs;
- f **Local Enterprise Partnership (LEP) Job Growth Baseline** A 'policyoff' approach (and predominantly trend-based scenario) based on the Liverpool LEP's local area based econometric model. This does not take into account known investment/significant development projects in the Borough. This provides potential unconstrained employment decline in the total number of jobs in Sefton of -2,500 between 2012 and 2030;
- g **LEP Job Growth 'Policy On'** A 'Policy On' scenario based upon Liverpool LEP's local area based econometric model, whereby known projects and growth opportunities are factored into the model, boosting total job growth. This provides potential unconstrained employment growth in Sefton of 900 jobs (gross²⁰) between 2012 and 2030;
- h **'Blended Job Growth' Scenario** Based on a combination of two economic growth forecasts for Sefton, taken from Oxford Economics and Experian (10,099 net job growth 2012-2030) averaging the two models.

Assumptions and Approach

There are a number of underlying assumptions which NLP has adopted that form the basis for most modelled scenarios. These include;

- a Future change assumed in the Total **Fertility** Rates (TFR) and Standardised **Mortality** Rates (SMR) are based on the birth and death projections derived from the 2012 SNPP;
- b Projected migration under the 2012-SNPP based scenarios is taken from the age-specific numbers of in and out internal and international migrants as projected. For the five and ten year trend scenarios, the total number of migrants is constrained to those figures, and the ageprofile is based on the 2012-SNPP projections of migration. In economic-led scenarios, migration is flexed (i.e. inflated or constrained) in order to produce a population and labour force sufficient to support the given level of job change.
- c Inputs on **headship rates** are based on the 2012-based household projections (detailed data) which provide data by 5-year age group and sex for Sefton. These cover a 25-year period to 2037 and the sensitivity scenario is as described, taking into account the 2008-based household projections.

5.2

²⁰ Note – the net job growth figure under the LEP 'Policy On' scenario is zero over the plan period, an outcome which has already been modelled under Scenario E.

- d In Sefton (as in any area), housing **vacancies and second homes** will result in the number of dwellings needed exceeding the total number of households under a given scenario. In establishing future projections, it is likewise expected that the dwelling need will exceed household projections. Hence a vacant and second home rate of 4.6% is applied, with the exception of Scenario Aii, which assumes a reduction in dwelling vacancy in line with policy aspirations;
- e In order to calculate **unemployment** rates, the figures for 2012 (8.5%) and 2013 (8.4%) (as taken from the Annual Population Survey) were used. The figure was held constant to 2015 to reflect initial stabilisation at the current high rate, and then gradually reduced on a linear basis to the longer term average (2004-2013) of 7.22% over a five-year time frame. This figure was then held constant to the end of the forecasting period on the grounds that it better reflects the long term trend than the current unemployment rate;
- f Age and gender-specific **economic activity rates** are used. The bases for these are the 2011 Census²¹, and for age groups up to 65-69 the ONS 2006-based Labour Force Projections [LFP] have been applied. In addition, allowances have been made (for 65-69) for the increases in State Pension Age which will occur in 2018-2020 and 2026-2028. In the oldest age groups (70+), the ONS LFP significantly underestimated the economic activity rate, projecting a slight decline in male rates over the period 2006-2020 and female rates to remain static. Therefore an alternative assumption has been adopted, whereby rates are projected to reach a mid-point between the ONS LFP and a linear trend based on growth between 2001 and 2011. These rates are then held constant.
- g It has been assumed that the **commuting rate (or labour force ratio)** remains static with no inferred increase or decrease in the ratio between in- and out-commuting. The 2011 Census identified the commuting rate in Sefton of 1.185 (i.e. Sefton is an area of net out-commuting).

Model Outcomes

Demographic-led Scenarios

5.3 The demographic scenarios use the components of population change (births, deaths and migration) to project future housing need and economic outcomes. The outputs are presented over both the 2012-2030 period and 2012-2035 period (with the exception of some economic scenarios due to data limitations).

Scenario A: 2012 SNHP/2012 SNPP

5.4 This scenario models the 2012-based SNHP and the 2012-based SNPP. This means that it produces the same projection (in terms of total number of

²¹ Given the 2011 Census only provides rates for older age groups as a single '65 and over' age group, an estimate of older age economic activity (necessary in order to accurately project the labour force) has been calculated based on the decline in economic activity over the life course from the 2001 Census, which provided rates up to age 65-69 and 70-74.

households) as the headline projections of CLG's Live Table; however, modelling the scenario through PopGroup allows the derivation of job-related outputs, and more specific population change. In addition, it is necessary to apply a dwelling vacancy rate to the household growth projections, in order to derive the number of dwellings needed to accommodate household growth. This is necessary to allow for movement within the housing market, and explains why more dwellings than households are needed.

- 5.5 Under this scenario, the population of Sefton is projected to increase by 4,961 residents to 2030. This population growth arises primarily due to in-migration to Sefton, which totals 10,661. Natural change (arising from excess deaths over births) is consistently negative, and is testament to the ageing population. It is projected that, on average, Sefton will see decline of 391 residents per annum due to natural change. However, taking into account net in-migration, overall population growth is positive.
- 5.6 Using 2012 headship rates, there is projected to be a total dwelling need of 10,874 by 2030, equivalent to 604 dpa. This is as a result of in-migration (leading to population growth) and the ageing of the local population, given that older people tend to form smaller households over time.
- 5.7 Despite the overall population growth, the age profile of this population indicates a significant reduction in the labour force, declining by around 2,600 by 2030. This equates to job loss of 147 per annum based on the aforementioned commuting and unemployment assumptions.
- 5.8 They key outputs for this scenario are summarised in Table 5.1.

	Scenario A: 2012 SNPP, 2012 Headship Rates								
	2012-30	p.a.	2012-35	p.a.					
Population	+4,961	~	+5,866	~					
Dwellings	+10,874	+604	+13,095	+569					
Jobs	-2,642	-147	-3,702	-161					

Table 5.1 Summary of Outputs - Scenario A: 2012 SNHP, 2012 SNPP

Source: NLP using PopGroup / CLG / ONS

Scenario Ai: Partial Catch-Up

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5.9
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Whilst the 2012 household projections are more optimistic than their 2011based (Interim) counterparts, they nevertheless represent lower rates of household formation compared to the 2008-based SNHPs. These represented projections of headship rates in line with longer term trends and did not take into account impacts of the recession on both the supply of housing and the ability of households to form, given the lack of mortgage availability. Therefore NLP tested a scenario which assumes that over time, 'pent up' demand within the younger population (15-34 age groups) is released and results in higher household formation which, over the long term, returns to longer term trends. An example of this is shown Figure 5.1. This shows the changes to the 2012based headship rates for females in Sefton aged 20-24 and also the sensitivity conducted as part of Scenario Ai. It is assumed that these changes will begin to occur after a 5 year period (i.e. starting in 2018) to allow the economy to return to pre-recession trends.



Figure 5.1 Projected Headship rates - 2012 Baseline, Partial Catch Up



The population and economic outcomes under this scenario is the same as under Scenario A; the only difference is the household formation assumptions which result in the different housing-related outcomes. This is shown in Table 5.2.



	Dwelling Outputs					
	2012-30	p.a.	2012-35	p.a.		
2012 Baseline	+10,874	+604	+13,095	+569		
Scenario Ai: Partial Catch Up	+11,291	+627	+13,666	+594		

Source: NLP using PopGroup / ONS / CLG

Partial Catch-Up – Half of the difference between 2012-based and 2008-based projections is made up by 2033 (rates trended thereafter for 2012-2037 scenario), with this change beginning in 2018

Scenario Aii: Sensitivity: Vacancy Rate Adjustments

5.11 A further sensitivity test has been applied that seeks to model the implications of varying the level of vacant units/second homes in the Borough. The Council's target of reducing the vacancy rate to 4.0% (plus an allowance for

5.10

second homes, equal to 0.294%) would result in a need for 10,300 dwellings to 2030. This equates to a decline in the housing need compared to the 2012 Baseline (Scenario A) by 32 dwellings per annum. All other outputs (in terms of population, household growth, labour force change and job change) remain as in Scenario A.

Table 5.3	Dwelling Outpute	- Soncitivity Sconario	for Reduction in Dwelling Vacancy
1 4010 0.0	Dwenning Outputs	Ochanity Occhano	for reduction in Dwening vacancy

	Dwelling Outputs					
	2012-30	p.a.	2012-35	p.a.		
2012-based SNHP / SNPP Baseline	+10,874	+604	+13,095	+569		
Scenario Aiii: Reduction in Dwelling Vacancy	+10,300	+572	+12,513	+544		

Source: NLP using PopGroup / ONS / CLG

Scenario B: Short Term Migration Trends

- 5.12 Implicit within the 2012 SNPP for Sefton is the assumption that migration will increase compared to past trends. Although recent trends inform the 2012 SNPP, these take account of changes to the size and age structure of the population over time. As an alternative approach, NLP has modelled housing needs were Sefton to continue to experience past gross migration trends over the past 5 years.
- 5.13 Under this scenario, there is net in-migration of 2,581 to 2030. However, due to high levels of natural decline (as the population ages) there is overall population decline of 3,494 to 2030. In spite of this population decline, there is an increase in the number of households as the population ages and smaller households form. The total dwelling need between 2012 and 2030 under this scenario is 7,399, equivalent to 411 dpa.
- 5.14 There is a substantial decline in the size of the labour force (of 7,217) and subsequently the loss of 5,801 jobs. This is a result of lower levels of inmigration compared to Scenario A, which results in accelerating the ageing of the local population.

Scenario C: Long Term Migration Trend

- 5.15 This scenario is based upon the same assumptions as Scenario B, however a 10 year migration average is used rather than 5 year. Past trends over this period indicate that net migration has been -41 per annum on average.
- 5.16 Under this scenario, net migration, natural change and overall population change are all negative. Over the period to 2030, the population would decline by 7,823. This scenario results in the most significant decline in the size of the labour force (and therefore the number of jobs) of all the demographic-led scenarios, and the lowest dwelling need of just 301 dpa. The key outputs from the migration trend-based scenarios are presented in Table 5.4.

	Scenario B: 5 Year Migration Trend				Scenario C: 10 Year Migration T			
	2012-30	p.a.	2012-35	p.a.	2012-30	p.a.	2012-35	p.a.
Population	-3,494	-194	-6,492	-282	-7,823	-435	-12,274	534
Dwellings	+7,399	+411	+8,038	+349	+5,424	+301	+5,336	+233
Jobs	-5,801	-322	-8,485	-368	-7,805	-434	-11,075	-482

Table 5.4 Summary of Model Outputs – Scenarios B and C: Short/Long Term Migration

Source: NLP using PopGroup

Economic-led Scenarios

- 5.17 A series of employment-led scenario have also been assessed to identify how much additional housing may be needed to take account of employment growth²² which may be over and above demographic needs.
- 5.18 Whilst there are a complex set of issues involving matching labour markets and housing markets (with different occupational groups having a greater or lesser propensity to travel to work), there are some simple metrics which can explore the basic alignment of employment, demographic and housing change, notably the amount of housing needed to sustain a labour force (and therefore number of jobs) assuming certain characteristics around commuting and unemployment.
- 5.19 Ensuring a sufficient supply of homes within easy access of employment represents a central facet of an efficiently functioning economy and can help to minimise housing market pressures and unsustainable levels of commuting (and therefore congestion and carbon emissions). If the objective of employment growth is to be realised then it will generally need to be supported by an adequate supply of suitable housing.

Scenario D: Past Trends

5.20 Assuming a continuation in the previous rate of job decline (equivalent to -304 jobs per annum between 1997 and 2014), then the Borough would see total job losses over the period to 2030 of 5,464. There would need to be in-migration of 4,299 to support this past trend, which is below the level of in-migration projected by the 2012-based Sub National Population Projections scenario and result in a dwelling requirement of 413 dpa. This indicates that the provision of housing in line with population growth as projected in the 2012 Sub National Population Projections would result in fewer job losses than past trends.

Scenario E: Job Stabilisation

5.21 This scenario assumes that the number of jobs in Sefton remains at its current level over the projection period. It indicates the level of housing growth which

²² Given that the economic forecasts utilised in this report end in 2030, in order to model scenarios to 2030, the job growth figure (for 2029-30) has been trended in order to obtain estimates up to 2031-2035 to allow for modelling over this period.

would result in neither job loss nor net additional growth over the projection period.

5.22 Over the period to 2030, due to the ageing population, there would need to be substantial in-migration of 15,883. This would support the current number of jobs, assuming commuting levels remain constant and taking into account changes in unemployment. The result would be population increase of 10,114 and a need for 12,825 dwellings, equivalent to 712 dpa.

Scenario F: LEP Baseline Job Growth

5.23 Based on the job decline as forecast in the LEP Baseline scenario, which suggests 2,500 fewer jobs will be based in the Borough to 2030, the labour force would decline over the period by 2,730. Under this scenario, total population growth would be 4,248, of which migration would account for 10,366. This would generate a need for 10,463 dwellings, equivalent to 581 dpa.

Scenario G: LEP 'Policy' On Job Growth

5.24 This scenario uses the LEP's 'Policy On' job growth forecast of +900 (gross²³) over the period to 2030. To support this level of job growth, there would need to be in-migration of 17,291 residents which would result in population growth of 12,908. This would equate to a need for 13,980 dwellings, or 777 dpa.

Scenario H: 'Blended' Job Growth

5.25 Separate economic forecasts often result in a wide variation in job growth. This is due to the data sources, level of data 'cleansing' and assumptions made in each forecast. Three forecasts for Sefton are presented in Figure 5.2 from Oxford Economics [OE], Cambridge Econometrics [CE] and Experian. The total number of jobs and the levels of (net) job growth forecast vary according to each projection, ranging from a level of +8,758 (Oxford Economics) to a high of +13,100 (Cambridge Econometrics). This is shown in Table 5.5.

²³ Note – the net job growth figure under the LEP Policy On scenario is zero over the plan period, an outcome which has already been modelled under Scenario E



Figure 5.2 Total Jobs and Forecasts – Sefton Borough

Source: Oxford Economics, Cambridge Econometrics, Experian, NLP

Table 5.5 Average Net Job Growth Forecasts

	2012	2030	Growth
Experian	97,510	108,951	+11,441
Cambridge Econometrics	97,255	110,355	+13,100
Oxford Economics	99,250	108,008	+8,758
Average	98,005	109,105	+11,100
Blended Average Excluding CE	98,380	108,479	+10,099

Source: NLP based on Experian (May 2015), Cambridge Econometrics (April 2015), Oxford Economics (May 2015)

5.26 There are considerable differences across all three forecasts, with the CE projections indicating levels of growth almost 50% higher than the OE equivalents over the same timeframe. All three projections have been used to inform Sefton Council's emerging Employment Land Review [ELR], undertaken by BE Group. As part of this work, BE Group analysed the sectoral growth of each of the three forecasts to test whether there were any anomalies in the data, and supplemented this analysis with the findings of a 2015 business survey of 800 companies across Sefton.

5.27 BE Group found that there were anomalies for all three forecasts. For example, all three used different base figures in 2012. Furthermore, whilst OE and Experian showed a significant increase in the construction industry (of 1,500-1,700 jobs), CE was more modest with a 600 job increase. All three forecasters indicated growth in professional, finance and business services, as well as transportation and storage. The manufacturing sector was forecast to decline or see a minimal increase for all three, from -500 for CE and OE, to a 200 job increase for Experian.

- 5.28 BE Group concluded that these figures were reflected to a degree in their business survey, with construction performing particularly well alongside growth confidence in the storage and distribution sectors. The manufacturing sector did not reflect any confidence for growth.
- 5.29 However, the key sectoral difference between the three forecasts relates to growth in the public sector. OE forecast no growth in this sector over the plan period, whilst Experian projected a growth of 900 jobs. However, CE forecast a substantial increase in this sector, of 4,000 jobs. Given that the Government are implementing continuing and deep cuts to the public sector for the foreseeable future, BE Group considered that in the absence of any robust evidence to the contrary from the business survey or recent trends in the BRES data²⁴, it was highly unlikely that Sefton would experience strong growth in this sector as projected by CE.
- 5.30 On this basis, BE Group considered that the Experian and OE forecasts were likely to be more representative of Sefton Borough's economic prospects than the CE forecasts, and that this will be reflected in the economic modelling used to underpin their ELR.
- 5.31 A blended average of the Experian/OE forecasts, excluding CE's projection, was therefore used to inform this scenario, resulting in 10,099 job growth 2012-2030.
- 5.32 To support this 'blended' level of job growth in Sefton, the economically active labour force would need to increase by 14,394. The level of population which would be needed to support this increase in the labour force is 35,652; of which 36,941 is through net migration (natural change is negative, at -839). This population would form 22,071 households with a total dwelling need between 2012 and 2030 of 23,147, equivalent to 1,286 dpa.
- 5.33 Table 5.6 shows the dwelling outputs under each of the employment-led scenarios.

²⁴ The Business Register and Employment Survey [BRES] is the official source of employee and employment estimates by detailed geography and industry. It is also used to update the Inter-Departmental Business Register, the main sampling frame for business surveys conducted by the Office for National Statistics, with information on the structure of businesses in the UK.

Table 5.6	Dwelling Outputs - Employment-led Scenarios	
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	Dwelling Outputs				
	2012-30	p.a.	2012-35	p.a.	
Scenario D: Past Job Trend	7,431	+413	9,441	+410	
Scenario E: Job Stabilisation	12,825	+712	16,491	+717	
Scenario F: LEP Baseline Job Growth	10,463	+581	13,002	+565	
Scenario G: LEP 'Policy on' Job Growth	13,980	+777	16,574	+721	
Scenario H: 'Blended' Job Growth	23,147	+1,286			

Source: NLP using PopGroup

Supply-Led Scenario

5.34 The supply led scenario tests the implications of delivering a certain level of development (i.e. a set number of dwellings) based on the given parameters of various scenarios. We recognise that the Objective Assessment of Need [OAN] cannot be founded on supply led scenarios as per the Practice Guidance, but they nevertheless remain useful comparators to assess a range of outcomes under hypothetical scenarios.

615 Dwellings per Annum (2012-2030)

- 5.35 The December 2014 HEaDROOM update produced by NLP concluded on a broad range OAN of between 600 and 800 dwellings per annum between 2012 and 2030, with 615 being considered the most appropriate in terms of a housing requirement. This scenario tests the outcomes under this level of housing provision in Sefton, in light of the updated data which was not available at the time of writing the previous report.
- 5.36 This level of housing provision would allow for population growth of 5,813, of which net in-migration totals 10,937. This level of population would result in a decline in the labour force of 2,107 and the loss of 2,042 jobs (or 113 per annum).

Affordable Housing Needs

- 5.37 The most recent Sefton SHMA was published in 2014. This concluded that there was a shortfall of 7,815 affordable homes in the Borough over the period from 2012-30, equivalent to 434 dpa. The report stated that the level of housing need shown by the analysis supports a target of 30% as contained in the draft Local Plan. To address the 434 dpa affordable housing need, at a typical rate of around 30% of total housing provision, would lead to a need for 1,447 dpa. This is above the 'Job Stabilisation' and 'LEP Policy On' Scenarios; however it is still lower than the housing need under the blended job forecast.
- 5.38 The Practice Guidance is clear that assessing housing development needs should be proportionate and does not require consideration of purely hypothetical future scenarios, *"only future scenarios that could reasonably be expected to occur"* [Planning Practice Guidance Section: 2a-003-20140306].

5.39 Furthermore the SHMA is clear that not all of this need has to be met by the provision of affordable housing on new sites, as a significant element in any shortfall between need and supply will:

"be met by the Private Rented Sector which currently has over 10,000 individual claimants for Local Housing Allowance."

- 5.40 NLP ordinarily takes the view that as the PRS is not a designated form of affordable housing it should not be netted-off the overall affordable housing requirement; it is unlikely to ensure that the affordable housing needs of the community are addressed.
- 5.41 The extent to which Sefton Council wishes to see this situation continue over the course of the Plan period is a policy intervention issue for the Council to consider, and one that is beyond the scope of this study. Nevertheless, the high level of affordable housing need provides added justification for uplifting the level of housing provision. This is in line with the Planning Practice Guidance, which states that there should be uplift to the housing target in the Local Plan where this could help to meet affordable housing needs.

Summary

5.42 A summary of the key model outputs for the demographic and economic-led scenarios are shown overleaf. Following the market signals analysis in Section 6.0, these scenarios form the basis for the full, objectively assessed needs for housing, in line with the requirements of the Framework/Practice Guidance.

	Demographic-Led					E	Economic-leo	ł		
	Scenario A: 2012 SNPP, 2012 Headship Rates	Scenario Ai: 2012 SNPP, Partial Catch-up to 2008 Headship Rates	Scenario Aii: Reduction in Dwelling Vacancy	Scenario B: 5 Year Migration Trend	Scenario C: 10 Year Migration Trend	Scenario D: Past Job Trend	Scenario E: Job Stabilisation (0 Jobs)	Scenario F: LEP Baseline	Scenario G: LEP Policy On	Scenario H: Blended Jobs (Experian, OE)
Population Change	+4,961	+4,961	+4,961	-3,494	-7,823	-3,236	+10,114	+4,248	+12,908	+35,652
of which natural change	-5,650	-5,650	-5,650	-6,075	-6,704	-7,535	-5,768	-6,087	-4,383	-839
of which net migration	+10,611	+10,611	+10,611	+2,581	-1,119	+4,299	+15,883	+10,336	+17,291	+36,491
Household Change	+10,368	+10,766	+10,368	+7,055	+5,172	+7,086	+12,229	+9,976	+13,330	+22,071
Dwelling Change	+10,874	+11,291	+10,300	+7,399	+5,424	+7,431	+12,825	+10,463	+13,980	+23,147
Dwellings p.a. to 2030	+604	+627	+572	+411	+301	+413	+712	+581	+777	+1,286
Labour Force	-2,922	-2,922	-2,922	-7,217	-9,940	-6,757	+668	-2,730	+1,891	+14,394
Jobs	-2,642	-2,642	-2,642	-5,801	-7,805	-5,464	+0	-2,500	+900	+10,099
Jobs p.a.	-147	-147	-147	-322	-434	-304	+0	-139	+50	+561

 Table 5.7
 Key Model Outputs - Demographic and Economic Led Scenarios

Source: NLP using PopGroup

6.0 Market Signals

- 6.1 This section provides analysis of the necessary market signals (in line with the Practice Guidance) in light of new data for 2014/2015 (including on house prices and rents) which gives an up-to-date indication of how these signals perform in Sefton and the extent to which they may impact upon the full objectively assessed need for housing in the Borough. In the case of some indicators, such as Land Prices and overcrowding, no new data is available and hence the commentary is the same as for the December 2014 Study.
- 6.2 The Planning Practice Guidance indicates that once an assessment of housing need based upon demographic projections is established, this should be adjusted to reflect appropriate market signals and indicators of the balance between the demand for and supply of housing. The guidance explicitly sets out six market signals (paragraph 2a-019):
 - 1 Land Prices;
 - 2 House Prices;
 - 3 Rents;
 - 4 Affordability;
 - 5 Rate of Development; and,
 - 6 Overcrowding.
- 6.3 It states that appropriate comparisons of these signals should be made, with an upward adjustment made where such market signals indicate an imbalance in supply and demand, and the need to increase housing supply to meet demand and tackle affordability issues (paragraph 2a-020);

"This includes comparison with longer term trends (both in absolute and relative levels and rates of change) in the housing market area; similar demographic and economic areas; and nationally. A worsening trend in any of these indicators will require upward adjustment to planned housing numbers based solely on household projections...

In areas where upward adjustment is required, plan makers should set this adjustment at a level that is reasonable. The more significant the affordability constraints....the larger the improvement in affordability needed and therefore, the larger the additional supply response should be."

6.4 Each of the housing market indicators is explored for Sefton, and compared with the equivalent indicators for Merseyside (County) and England.

Land Prices

6.5 The most readily available and nationally consistent data on unequipped agricultural land values or residential building land prices for Sefton is available from the Value Office Agency (VOA). The VOA is an executive agency of HM Revenue & Customs (HMRC) that provides the Government with the valuations and property advice to support taxation and benefits.

- 6.6 The VOA data only covered major centres or areas which generate sufficient activity to determine market patterns hence data for smaller neighbouring authorities is not available. In Sefton, land values are $\pounds 0.56m$ per hectare in 2010. The data shows that the average bulk²⁵ residential land values in Sefton have increased by 12% since 2001. The national average bulk residential building land prices were £1.77m per hectare in 2010 which demonstrates that land values in Sefton itself are relatively low when compared to the national average.
- 6.7 The above values are illustrative rather than definitive and represent typical levels of value for sites without abnormal site constraints and a residential planning permission of a type generally found within the area²⁶. Although it is now five years out of date, it is considered that the VOA data is still valid as it represents a consistent comparison of data between different areas.

House Prices

- 6.8 The Planning Practice Guidance identifies that longer term changes in house prices may indicate an imbalance between the demand for and supply of housing. Although it suggests using mix-adjusted prices, this data is not available at the Local Authority level. However, house price indices and price paid data are available at all three geographies (Local Authority, County and nationally), and hence analysed in the context of this report.
- 6.9 Figure 6.1 shows the average median house prices in Sefton, Merseyside and England over the last 15 years. The median house price in Sefton is currently £146,000; higher than Merseyside (£125,000) but lower than nationally (£195,000). In neighbouring West Lancashire, house prices are higher at £160,000; however, Sefton remains more expensive than Liverpool, which has a median house price of £115,000.
- In Sefton this represents an increase of 146% since 1999 (equivalent to £87,000). By comparison, at a national level, median house prices have increased 164% whilst house prices in Merseyside have increased by 148%. House prices in both Sefton and Merseyside have remained relatively stable over recent years and are currently lower than their peaks (in 2007 and 2010). In contrast, nationally house prices have continued to rise steadily in recent years and are currently at their highest-ever point.

²⁵ Sites in excess of 2 hectares

²⁶ This data is sourced from VOA and comes with the caveat that the land values provided are not the results of statistical analyses of actual land transactions. They are hypothetical prices attached to a 'typical' site for the area in question, with planning consent for residential development and serviced to the site boundary. The figures take account of affordable housing provision in line with local trends, as well as situations where supply is mostly brownfield.

As these are hypothetical prices, they are not required to be in line with RICS Valuation Standards. They should be treated as illustrative of local land market conditions. They are not definitive figures and should not be applied to specific sites, which will have individual characteristics that will affect value, such as location, servicing or planning status.



Figure 6.1 Average (Median) House Price 1999-2014

Source: CLG Live Table 586 (1999-2012), Land Registry (2013-2014)

- 6.11 In addition to price paid data, it is possible to track house price indices over a period of time. This allows for further comparison of how house prices in an area have changed over time (relatively) without taking into account the absolute cost. As advocated in the Planning Practice Guidance, house prices rising faster than the local and/or national average may be an indicator of pressure on the local housing supply.
- 6.12 This house price index²⁷ is produced by HM Land Registry and is shown for the relevant area in Figure 6.2 (with the data also included in Table 6.1). As of December 2014, the house price index in Sefton was 198.3, i.e. house prices were 1.983 times higher than in 1995. Across Merseyside, the house price index is currently 196.9 whilst across England the index is 286.0. This suggests that while house prices in Sefton have not increased to the extent of national house prices, they have increased at a higher rate than elsewhere in Merseyside.

²⁷ The house prices index is calculated based on the average *mean* house price, hence differs from the price paid data (which is based on median house prices).







	Average House Price (2014)		Change (%	Change (%) 1999-2014		Change (£) 1999-2014		
	Cost	Rank (out of 326)	Change	Rank	Change	Rank	(1995=100)	
Sefton	£145,875	242	+146%	273	+£86,625	247	198.3	
Merseyside	£125,000	~	+148%	~	+£74,500	~	196.9	
England	£195,000	~	+164%	~	+£121,000	~	286.0*	

Source: CLG Live Table 586/Land Registry *Refers to England and Wales.

Affordability

- 6.13 Assessing affordability involves comparing the cost of housing with households' ability to pay, with the indicators for this lower quartile house prices and lower quartile earnings. Together, they form an affordability ratio which can be tracked over time. Further to looking at absolute house price change over time, this indicator also takes into account local earnings, which may vary between areas and impact upon how affordable housing is for certain groups of people and to what extent affordability might be considered a particular pressure in a local area.
- 6.14 As of 2014, the lower quartile affordability ratio in Sefton was 6.34; i.e. lower quartile house prices in Sefton are 6.34 times lower quartile earnings. This is significantly higher than in Merseyside (4.73) and slightly lower than England (6.88). However, this 6.34 figure is lower than the peak in affordability seen just before the start of the recession, where the lower quartile affordability ratio in Sefton was at its highest, at 7.3 in 2006.
- 6.15 The affordability ratio in Sefton in 2014 thus represents a 69% rise over the past 15 years. Over the same period, affordability in England rose 87% and in Merseyside, 71%. Figure 6.3 illustrates the affordability ratio for each of the

areas over time, indicating that affordability in Sefton has been more in line with national trends over the time period rather than Merseyside.

6.16 The worsening affordability in Sefton (as well as nationally) is indicative that house prices have far outstripped wage growth, resulting in house prices now over 6-times income levels, compared to 15 years ago when house prices were lower than 4-times income levels.







Table 6.2Affordability Data 1999-2014

	LQ Affordability Ratio (2014)		Change (%) 1999-2014	Change (abs 20	solute) 1999- 14
	Ratio	Rank*	Change	Rank*	Change	Rank*
Sefton	6.34	236	+69%	267	+2.6	254
Merseyside	4.73	~	+71%	~	+2.0	~
England	6.88	~	+87%	~	+3.2	~

Source: CLG Live Table 576/Land Registry/ASHE *Ranks are out of 326

Rents

- 6.17 High and increasing costs of rent are another indicator of a shortfall in this type of housing, which may indicate a need for an uplift on demographic-led needs. Although data for this is only available for the last three years, trends are still apparent. It can also provide an indication of how rental costs within Sefton currently sit in the context of the wider area and nationally.
- 6.18 As of Q3 2014, the average rental cost in Sefton was £550 and ranged from £425 for a 1-bed dwelling to £850 for a 4-bed dwelling. Nationally, the average rental cost is £595 and in Merseyside £477. This is shown in Figure 6.4.

Over the last three years, average rents in Sefton have not changed; however, rents across Merseyside declined by 4.3%. Across England, average rental costs rose 4.4% over the same period, indicating that pressures on the rental market in Sefton are less significant compared to England.



Figure 6.4 Average (Median) Monthly Rent

Source: VOA Private Rental Market Statistics 2011-2014

Rate of Development

The rate of development is intended to be a supply-side indicator of previous under-delivery. The Planning Practice Guidance states that:

"if the historic rate of development shows that actual supply falls below planned supply, future supply should be increased to reflect the likelihood of under-delivery of a plan" [paragraph 2a-019-20140306]

6.21 The rate of development is therefore a market signal relating to the quantity of past under-supply, which will need to be made up. In Sefton the relevant 'planned supply' figure is 500 dpa which was dictated by the requirement within the North West Regional Strategy [RS].

Table 6.3	Net Annual Household	Requirement by	Local Planning A	Authority 2003-2021
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Improvement Scenario								
	Lowest	Highest						
Sefton	66	1,414						
Knowsley	40	744						
West Lancashire	311	617						
St Helen's	55	861						
Wirral	150	1,421						
Halton	-8	667						
Liverpool	-111	2,656						

Source: North West Household Growth Estimates Study [6 August 2005]

6.20

6.19

- 6.22 Table 6.3 demonstrates that although the highest net annual household requirement figure for Sefton generated by the 2005 study is more than three times the housing requirement ultimately adopted in the RS, the adopted requirement, of 500 dpa, for Sefton is more than 7-times greater than the lowest requirement identified.
- 6.23 In 2006, NLP was instructed by NWRA to update the 2005 study and consider the impact of the CLG's 2003-based household projections, published in March 2006. The study was undertaken at regional and sub-regional levels, rather than by authority area. The NLP study report, published in September 2006, indicated that the 2003-based projections forecast a higher level of indigenous households in the North West by 2021 than the previous projections.
- 6.24 In its September 2006 briefing paper, the NWRA Panel indicated that the NLP figures provided a 'demand side' base to be considered alongside other relevant information when determining the suggested housing figures for inclusion in the RS [paragraph 2.5] and that supply-side issues and policy direction emerging from the RS process must also inform the RS requirements. This is an approach that is materially different to that which is now required by the Framework.
- 6.25 Table 6.4 illustrates housing backlog in Sefton since 2003/04 against the RS target, as well as the backlog that has accrued following under-delivery of the target.

Year	New Build	Conversions	Demolitions	Delivery (net completions)	Target (RS)	Backlog
2003/04	469	63	53	479	500	-21
2004/05	308	157	78	387	500	-134
2005/06	425	102	101	426	500	-208
2006/07	475	46	243	278	500	-430
2007/08	703	156	295	564	500	-366
2008/09	424	176	336	264	500	-602
2009/10	429	131	159	401	500	-701
2010/11	247	242	222	267	500	-934
2011/12	471	138	137	472	500	-962
2012/13	372	86	53	405	500	-1,057
2013/14	274	49	11	312	500	-1,245

Table 6.4 Rate of Delivery

Source: Sefton Council/NLP Analysis

6.26 The implication is that the rate of delivery in Sefton has fallen short of planned supply with the exception of the year 2007/08 where net delivery peaked at 564. The scale of demolitions associated with Housing Market Renewal [HMR] initiatives in Sefton has influenced the net delivery figures significantly. The total number of demolitions across the three years 2006/07 to 2008/09 totalled 874.

- It should be noted that the Borough's housing restraint policy (which operated 6.27 from 2003 to 2008²⁸), constrained the number of dwellings built during this period. This may have contributed towards the other housing market signals which indicate that there has been some stress in the housing market as a product of demand not being met. This is particularly evident in the affordability ratio, which is significantly higher in Sefton than the Merseyside average, as well as relatively high house prices and average rents when compared to other Merseyside authorities.
- The number of property demolitions has dramatically tailed off since 2011 due 6.28 to the cessation of the HMR programme (with the exception of the planned demolition of about 500 dwellings to take place in 2015 as part of regeneration proposals for the 'Klondyke and Canal Corridor' areas in Bootle²⁹).
- In summary, the total under-delivery of dwellings for Sefton Borough when set 6.29 against the RS target requirement of 500 dpa over the period 2003/04-2011/12 (the base date of the PopGroup modelling period) was 962 dwellings. Spread across the 18-year plan period (2012 to 2030), this would equate to an additional 53 dpa to address this past under-provision for Sefton.

Overcrowding/Homelessness

Indicators on overcrowding, concealed families, shared households and 6.30 homelessness demonstrate unmet need for housing within an area. The Planning Practice Guidance suggests that long-term increases in the number of such households may be a signal that planned housing requirements need to be increase [paragraph 2a-019].

Overcrowding

- The 2001 and 2011 Censuses provide data on both household occupancy (i.e. 6.31 an indicator of overcrowding) and the number of concealed families within an area. Occupancy ratings are calculated based on the relationship between people in a household and the number of rooms in a household's accommodation. An occupancy rating of -1 or less implies that a household has one [or more] fewer rooms than required (i.e. overcrowded), a rating of +1 or more indicates a household has more rooms than is required.
- Table 6.5 presents overcrowding against the occupancy rating in Sefton (2011 6.32 data) and indicates that just 4.1% of households are living in a dwelling that is too small for their household size and composition. This is not particularly high when compared to 8.74% nationally and 6.24% in the North West. Overcrowding in Sefton has actually decreased since 2001, from 4.79% to 4.10%, whereas the opposite trend has occurred nationally and across the North West where overcrowding has become more prevalent.

²⁸Policy H3 of the Sefton UDP applied a housing restraint mechanism when the number of homes built exceeds Sefton's target by 20% over a three-year period. The housing restraint mechanism was relaxed in December 2008, due to the NWRS increasing the housing target for Sefton from 350 a year to 500 a year from 2003 to 2021, meaning that there no longer was an over-supply of new housing compared to the housing target. ²⁹ However, any future regeneration scheme is likely to require some demolition work.

		2001		2011				
	Total Households	-1 room occupancy or less	-1 room occupancy or less (%)	Total Households	-1 room occupancy or less	-1 room occupancy or less (%)		
England	20,451,427	1,457,512	7.13%	22,063,368	1,928,596	8.74%		
North West	2,812,789	152,248	5.41%	3,009,549	187,816	6.24%		
Sefton	116,846	5,594	4.79%	75,736	3,102	4.10%		

Table 6.5 Overcrowding: Household Room Occupancy Rating

Source: Census 2001, Census 2011

6.33

The declining levels of overcrowding could be linked to the ageing population in Sefton, with older residents ending to occupy smaller households. It could also be a symptom associated with fewer residents of child bearing age which results in fewer large families living within the Borough.

- 6.34 In addition, the declining (and relatively low level of) overcrowding may also be a function of relatively low private rents in Sefton which, although slightly higher than the Merseyside average, is below neighbouring authorities such as Cheshire West & Chester and West Lancashire and also the national average. House prices are relatively high in Sefton when compared to median house price across Merseyside, but cheaper again than in other adjoining authorities beyond.
- 6.35 Table 6.6 shows the percentage of families³⁰ which were 'concealed'³¹. As recorded by the 2001 and 2011 Censuses.

		2001		2011				
	Families	Concealed Families	%	Families	Concealed Families	%		
England	13,846,114	161,254	1.16%	14,885,145	275,954	1.85%		
North West	1,898,882	21,162	1.11%	1,985,879	32,128	1.62%		
Sefton	79,981	956	1.20%	78,912	1,174	1.49%		

Table 6.6Concealed Families

Source: Census 2001, Census 2011

^{6.36} Across England, this indicator has seen a rise from 1.16% to 1.85% of all families living in the Borough. Similarly, the North West has seen an increase in the percentage of concealed families, from 21,162 to 32,128. In Sefton the percentage of concealed families increased from 1.20% to 1.49%, an increase of 218 families, despite the fact that the total number of families in Sefton has actually declined by 1,069 over this ten year period. Despite an overall decline in overcrowding in Sefton, it is likely that this increase in concealed families is at least partly due to younger couples/families moving in with their parents. This is particularly so given that the population of Sefton has gradually aged over recent years, with this ageing projected to accelerate in future years.

³⁰ ONS defines a 'Family' as; a married, same-sex civil partnership, or cohabiting couple, with or without child(ren), a lone parent with child(ren), a married, same-sex civil partnership or cohabiting couple with grandchild(ren) but no children present from the intervening generation, or a single grandparent with child(ren) but no children present from the intervening generation.
³¹ A concealed family is one living in a multiple family household in addition to the primary family, such as a young couple living with parents.

Homelessness

- CLG publish data on the number of households in Local Authorities which are 6.37 in both priority need and in temporary accommodation. At a rate per 1,000 households within each area, this can be tracked over time to compare how Sefton compares to Merseyside and England.
- The number of household in priority need is shown in Table 6.7. In 2004/05, 6.38 Sefton had a higher rate of households in priority need than Merseyside; however, since then Sefton has seen a substantial decline in this rate (of 89%) which is a greater level of decline than seen nationally and across Merseyside as a whole.

	200	04/05	20 [.]	Change in		
	Households in Priority Need	/1,000 Household	Households in Priority Need	/1,000 Household	Rate	
England	120,860	5.73	52,250	2.32	-60%	
Merseyside	2,803	2.30	492	0.81	-85%	
Sefton	437	3.70	47	0.39	-89%	

Table 6.7	Homelessness:	Household in	Priority	Need
	110111010000110000,		1 money	14000

CLG Live Table 784/P1e Returns Source:

Table 6.8 presents this data for households living in temporary accommodation. It shows a similar pattern for Sefton, with consistently lower rates of homeless households than across the County and nationally. Although the rate of decline has not been as great as for Merseyside (-50% compared to -75%), the rate in Sefton was already substantially lower. Notwithstanding, as of 2013/14 Sefton has one of the lowest rates in the Country of households in temporary accommodation.

Table 6.8	Homelessness: Households in Temporar	Accommodation
1 4010 0.0		, , , , , , , , , , , , , , , , , , , ,

	20	04/05	20 ⁻			
	Households in Temporary Accommodation	/1,000 Household	Households in Temporary Accommodation	/1,000 Household	Rate	
England	101,070	4.79	58,410	2.59	-46%	
Merseyside	302	0.54	82	0.14	-75%	
Sefton	12	0.10	6	0.05	-50%	
Source: C	LG Live Table 784	/P1e Returns				

Synthesis of Market Signals

6.40

6.39

Drawing together the market signals analysis above allows us to build a picture of the current housing market in and around Sefton; the extent to which demand for housing is not being met; and the outcomes occurring because of this.

Sefton Housing Market Indicators – A Comparative Overview

It is clear from the analysis that the Sefton housing market faces some 6.41 challenges. The market signals point towards a housing market which, to a limited extent, is struggling to match demand with supply, with lower levels of affordability compared to other authorities in Merseyside. In Sefton, housing

delivery figures have fallen each year since 2011 and, as a result of high levels of demolitions, the net delivery rate has failed to meet the previous 500 dpa RS target.

- 6.42 The peak supply in 2007/08 in Sefton and subsequent decline broadly correlates with adverse market signals such as worsening affordability. Sefton has seen a consistently higher affordability ratio than Merseyside and also the highest absolute increase across the sub-region. With house prices in Sefton amongst the lowest 25% in the country (recognising that there is significant variation across the Borough), resident incomes are likely to be a significant factor in this worsening affordability. An increase in incomes would be expected to show noticeable improvements to affordability. There are already some signs of improving affordability however, with the ratio between LQ house prices to LQ earnings lower than at its 2006 peak.
- 6.43 In order to draw meaningful conclusions regarding the extent to which such market signals indicate housing market stress in Sefton, the Planning Practice Guidance suggests that comparisons of both absolute levels, and absolute and relative rates of change should be made with similar economic/demographic areas, areas with housing market linkages and nationally.
- 6.44 In this respect, Sefton has been compared and ranked against other nearby local authorities and the overall indicators for England. These nearby centres have been chosen as they constitute areas which border Sefton and/or have some connection through migration and commuting as previously described:
 - 1 West Lancashire;
 - 2 Liverpool;
 - 3 Knowsley;
 - 4 St Helens;
 - 5 Wirral;
 - 6 Cheshire East³²;
 - 7 Cheshire West and Chester;
 - 8 Warrington;
 - 9 Halton; and,
 - 10 Wigan.
- 6.45 Table 6.9 overleaf shows how Sefton compares to these authorities across the range of market signals discussed. A higher ranking in this table indicates a comparatively worse performing market signal.

³² Due to the recent formation of Cheshire East and Cheshire West & Chester, some historic data is not available for these authorities, and hence the table is incomplete in some areas. Similarly, some Local Authorities are missing data on homelessness.

Table 6.9 Market Signals Comparator Table

	House Prices			Affordability			Rents		Overcrowded Households			Households in Priority Need			Land Prices		
Rank	Median (2014)	% Change (1999- 2014)	Absolute Change (1999- 2014)	Ratio (2014)	% Change (1999- 2014)	Absolute Change (1999- 2014)	Median (Q3 2014)	% Change (Q2 2011- Q3 2014)	Absolute Change (Q2 2011- Q3 2014)	Overcrowded Households, % (2011)	Change (%) (2001- 2011)	Change (percentage points) (2001- 2011)	Households in Priority Need, per 1,000 Households (2013/14)	% Change (2004/05- 2013/14)	Absolute Change (2004/05- 2013/14)	Bulk Residential (£/Ha) (2010)	Change (%) (2001- 2010)
1	England	Wirral	England	England	Wirral	England	England	West Lancashire	West Lancashire	Liverpool	Liverpool	Liverpool	England	England	West Lancashire	Cheshire West and Chester UA	Cheshire East UA
2	Cheshire East UA	England	Warrington UA	Cheshire East UA	England	Sefton	Cheshire East UA	Warrington UA	England	England	England	England	Wigan	St Helens	Cheshire West and Chester UA	Warrington UA	Knowsley
3	Cheshire West and Chester UA	Warrington UA	West Lancashire	Cheshire West and Chester UA	St Helens	Wirral	Cheshire West and Chester UA	Cheshire East UA	Cheshire East UA	Knowsley	Cheshire East UA	Cheshire East UA	Warrington UA	West Lancashire	Cheshire East UA	England	Wigan
4	West Lancashire	Liverpool	Wirral	West Lancashire	Liverpool	West Lancashire	Sefton	Cheshire West and Chester UA	Cheshire West and Chester UA	Halton UA	Wirral	Wigan	St Helens	Wirral	Sefton	Cheshire East UA	Warrington UA
5	Warrington UA	Wigan	Sefton	Sefton	Wigan	Warrington UA	West Lancashire	England	Warrington UA	St Helens	Wigan	Wirral	Knowsley	Cheshire East UA	England	Wigan	Cheshire West and Chester UA
6	Sefton	Halton UA	Halton UA	Warrington UA	Warrington UA	St Helens	Knowsley	Halton UA	Halton UA	Warrington UA	Cheshire West and Chester UA	Cheshire West and Chester UA	Wirral	Halton UA	Liverpool	Liverpool	England
7	Wirral	St Helens	St Helens	Wirral	Sefton	Wigan	Wirral	Sefton	Sefton	Wigan	Warrington UA	Warrington UA	Halton UA	Liverpool	Wirral	Knowsley	Liverpool
8	Halton UA	Sefton	Liverpool	Wigan	Halton UA	Liverpool	Warrington UA	Wirral	Wirral	Cheshire West and Chester UA	Sefton	St Helens	West Lancashire	Cheshire West and Chester UA	St Helens	Sefton	Sefton
9	St Helens	West Lancashire	Wigan	St Helens	West Lancashire	Halton UA	Halton UA	Wigan	Wigan	Sefton	West Lancashire	West Lancashire	Liverpool	Knowsley	Halton UA		
10	Wigan	Knowsley	Knowsley	Halton UA	Knowsley	Knowsley	St Helens	Knowsley	Knowsley	Wirral	Halton UA	Halton UA	Cheshire East UA	Wigan	Knowsley		
11	Liverpool			Liverpool			Wigan	St Helens	St Helens	Cheshire East UA	St Helens	Sefton	Cheshire West and Chester UA	Sefton	Wigan		
12	Knowsley			Knowsley			Liverpool	Liverpool	Liverpool	West Lancashire	Knowsley	Knowsley	Sefton				
Source:	CLG Live Table 586/Land Registry	CLG Live Table 586/Land Registry	CLG Live Table 586/Land Registry	CLG Live Table 576/Land Registry/A SHE	CLG Live Table 576/Land Registry/A SHE	CLG Live Table 576/Land Registry/A SHE	VOA Private Rental Market Statistics	VOA Private Rental Market Statistics	VOA Private Rental Market Statistics	Census 2011	Census 2001, Census 2011	Census 2001, Census 2011	CLG Live Table 784 (P1e Returns)	CLG Live Table 784 (P1e Returns)	CLG Live Table 784 (P1e Returns)	VOA Property Market Reports	VOA Property Market Reports

- 6.46 Current median house prices in Sefton sit around the middle of the rankings compared to the other areas. The Affordability Ratio in Sefton is relatively high (as of 2014) compared to other areas, and has increased at a faster rate than most of the comparator areas (albeit a relatively low percentage increase). Average rental levels in Sefton are relatively high; however, they have stabilised in recent years. In terms of overcrowding and homelessness, Sefton performs well against both the other authorities and against the national rate for these indicators. Although Sefton has not seen as high a decline in the absolute rate of households in priority need as elsewhere, this is likely to have been constrained by the fact that this rate (per 1,000 households) was already far lower in Sefton than in England in 2004/05.
- 6.47 Nevertheless, the analysis has indicated that there are over 3,100 overcrowded households these are real people currently in sub-optimal living conditions who will wish to move when market conditions allow. Similarly, there are 1,174 concealed families in Sefton, indicative of households who are sharing dwellings. There has also been a substantial backlog of housing built up in recent years, equal to 962 dwellings. This supports the presumption of household formation rates to return to a 'catch-up' to longer term trends and providing additional dwellings to allow households which have been forced into shared/sub-optimal dwellings to move into more suitable accommodation.

Conclusion

- 6.48 The extent to which the demographic 'starting point' for identifying full objectively assessed need for housing should be boosted to address market signals is necessarily an areas of judgement. The Planning Practice Guidance is clear that the more significant the affordability constraints and the stronger other indicators of high demand, the larger the improvement in affordability needed and therefore the larger the additional supply response should be.
- 6.49 It is considered that some modest upward adjustment could be necessary, given how Sefton ranks compared to adjoining areas (notably elsewhere in Merseyside), particularly because of the under-delivery of housing in recent years.
- 6.50 In terms of what would constitute a reasonable level of uplift, it is suggested that the application of a nominal 10% uplift would be appropriate in this instance. This would align with the conclusions of a number of recent Inspector's reports at Local Plan EiPs that have helped to clarify the issue. A more detailed justification for this is provided in paragraphs 7.25 to 7.28.

7.0 Conclusion

Introduction

- 7.1 This report has been prepared to present the findings of updated demographic analysis regarding the level of housing that may be appropriate for Sefton to plan for in light of the Depart for Communities and Local Government's 2012based Sub-National Household Projections. These comprise the latest set of household projections over a full 25-year period and fully take into account the 2011 Census. These update the 2011-based (Interim) household projections (which only covered a ten year period) and the 2008-based household projections, which did not incorporate the Census 2011 data.
- 7.2 The 2012-based household projections were based on the 2012-based Sub-National Population Projections which projected higher levels of population growth within Sefton than previous iterations. The 2012-based household projections also project higher household formation rates than the 2011-based (Interim) SNHP (albeit lower than the 2008-based equivalents). The cumulative impact of these has meant that the 2012-based SNHP (in terms of the headline household growth figures) represent a substantial increase on previous household projections for Sefton.
- 7.3 A number of scenarios have been modelled using a range of demographic and economic assumptions, including sensitivity testing for headship rates and dwelling vacancy rates. This final section draws together the analysis of each potential scenario to provide a basis for identifying a robust housing requirement figure to inform the Council's emerging Local Plan. The scenarios indicate a wide range of figures for the period 2012-2030 (and to 2035) and these are summarised in Figure 3.1.
- 7.4 In defining objectively assessed needs, full reference has been made to the Planning Practice Guidance, which clarifies the position on how the National Planning Policy Framework (the Framework) should be interpreted and applied. It confirms that an assessment of need must fulfil the following criteria:
 - Be based on facts and unbiased evidence. Plan makers should not apply constraints to the overall assessment of need;
 - Up-to-date household projections published by CLG should provide the starting point estimate of overall housing need; and,
 - The housing need number suggested by household projections (the starting point) should be adjusted to reflect local demographic factors, employment trends as well as appropriate "market signals" including "market indicator" of the balance between the demand for and supply of dwellings.



Figure 7.1 Updated Model Outputs; Dwellings per Annum 2012-2030

Source: NLP using PopGroup

- 7.5 The approach taken to setting housing requirements must therefore be grounded in the background evidence of 'need' within an area, and this evidence must be sound and robust to inform the strategy making process, which will identify the housing 'requirement'.
- 7.6 The Framework identifies that local authorities should use their evidence base to define the full, objectively assessed, needs for both business and housing in their area, and then seek to ensure that their Local Plan meets these needs.
- 7.7 This is further reiterated in the tests of soundness which the Framework sets for the examination of local plans. In addition to ensuring the plan is justified, being the most appropriate strategy based on proportionate evidence, the plan should be:

"Positively prepared... based on a strategy which seeks to meet objectively assessed development and infrastructure requirements, including meeting unmet requirements from neighbouring authorities where it is reasonable to do so..." [paragraph 182]

7.8 The Framework [paragraph 159] outlines the evidence required to underpin a local housing target identifying that Councils should:

"Prepare a Strategic Housing Market Assessment to assess their full housing needs... 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 needs for all types of housing, including affordable housing...; and
- Caters for housing demand and the scale of housing supply necessary to meet this demand."
- 7.9 In practice, applying the Framework requires the following key steps in order to arrive at a robustly evidenced housing target:

The starting point for Local Plans is to meet the full objectively assessed development needs of an area [paragraphs 47 and 156].

An objective assessment of housing need must be a level of housing delivery which meets the needs associated with population and household growth, addresses the need for all types of housing including affordable and caters for housing demand [paragraph 159].

Furthermore, 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 affordability [paragraph 17].

In choosing a housing requirement which would not meet objectively assessed development needs, it must be evidenced that the adverse impacts of meeting needs would significantly and demonstrably outweigh the benefits, when assessed against the policies within the Framework [paragraph 14].

Where an authority is unable to meet its objectively assessed development needs or it is not the most appropriate strategy to do so, it must be demonstrated under the statutory duty-to-cooperate that the unmet need is to be met in another local authority area in order to fully meet development requirements across housing market areas [paragraph 179 and paragraph 182 bullet point 1].

7.10 It is against these requirements of the Framework which the Council's housing requirement will be identified. This has been brought into sharp focus following the high court judgement '(1) Gallagher Homes Limited and (2) Lioncourt Homes Limited v Solihull Metropolitan Borough Council [2014] EWHC 1283' which reiterates the imperative need to firstly identify full objectively assessed need for housing and then define a strategy which seeks to meet it, consistent with the Framework.

Future Housing Need

- 7.11 As shown in Figure 7.2, the overall quantum of housing need over the plan period will vary considerably depending upon the demographic or economic scenarios adopted for the Borough. Projected dwelling needs range from 301 dpa under a 10-year trend (i.e. projecting migration based on the last 10 years of trends; this is the population projection which actually aligns most closely to past trends in population growth) and up to 1,286 dpa under the blended job growth³³ scenario.
- 7.12 The population growth figures are clearly highly variable across the scenarios, with the economic-led scenarios resulting in particularly high levels of population growth, and the demographic-led scenario resulting in low population growth or even decline (albeit these are still above past trends in population decline). The trend line provides an indication as to how realistic each of the projections are. Over the thirty-year period 1981-2011, population decline in Sefton has been around -650 every year. Were this to continue over the plan period, there would be further decline in population to about 260,000 by 2030. This is far below all other modelled scenarios, including those based on past migration trends and the latest government projections.

³³ Blended job growth refers to using range of job growth figures for Sefton from various forecasts.



Figure 7.2 Population Projections for Sefton - 2012-2030



- 7.13 The most pronounced divergence from this long term trend relates to the economic-led scenarios, which are based on large levels of net in-migration in order to sustain the labour force and support the number of jobs forecast. This casts doubt upon the achievability of some of these scenarios, given that future job forecasts should also take into account likely changes in the size of the labour force, i.e. that arising from demographic change, indicated by the demographic-led scenarios.
- 7.14 Figure 7.3 demonstrates how much of the population change under each scenario is attributable to natural change or net migration. Natural change is the result of births and deaths in the population (with negative natural change indicating there have been more deaths than births, and vice versa) while net migration comprises the difference between people moving into or out of an area.



Figure 7.3 Natural Change, Net Migration and Overall Population Change (to 2030)

Source: NLP

- 7.15 Across almost all scenarios, natural change is negative. The demographic scenarios show that there is projected to be significant ageing within the local population, which contributes to natural decline. In Scenario H, the high levels of in-migration help to partially offset much of the natural decline given that many of the in-migrants are of child-bearing age and contribute to an increased number of births.
- 7.16 Migration patterns vary significantly across the scenarios, ranging from -1,100 under a ten-year trend, to around 36,000 over 18 years under the blended job growth scenario. The 2012 SNPP projects net migration to Sefton to increase compared to historic levels (for the reasons explored in Section 3.0); however, net migration still only totals 10,600 over the period to 2031 (i.e. around 30% of that required under the blended job growth scenario).
- 7.17 The economic led scenarios inflate migration to a level which, alongside natural change, leads to population growth of a level which supports the given level of job growth, taking into account economic activity rates, unemployment rates and the commuting ratio. These are aspects that will be considered further by the Council. Due to ageing in the local population, and the resulting decline in the labour force, this is why the economic-led scenarios rely on such high levels of net in-migration (and overall population growth) in order to support the given level of job change. Scenario E (job stabilisation) indicates the 'tipping point' between a decline and an increase in the number of jobs. In migration of 16,000 is required just to maintain the number of jobs at its current level.

7.18 As noted in the previous update, Sefton will continue to be an attractive destination for migrants, in particular those with higher levels of disposable income nearing, or at, retirement age, and this cannot be changed simply by restricting the supply of housing. The current pattern of out migration among younger people is a result of a number of factors, including the employment opportunities in Liverpool, Manchester and elsewhere; the affordability of housing in adjoining districts; and a combination of personal reasons. Were housing delivery to be restricted, then the result could potentially be an exacerbation of current affordability problems (given Sefton already has worse levels of affordability compared to Merseyside, with particular hotspots of (un)affordability in places such as Southport and Formby). This is because the imbalance of demand and supply serves to increase house prices to the detriment of those who already find it hard to access, or move up, the local housing ladder.

Appropriateness of Scenarios

Demographic Scenarios (A to C)

- 7.19 Section 5.0 set out an analysis of the various demographic and economic-led scenarios (paragraphs 5.4 to 5.36). In line with Planning Practice Guidance, the starting point for appropriately assessing full objectively assessed need for housing is the latest government household projections. Since the release of the 2012-based household projections, this means that the starting point for considering future housing need is that indicated by Scenario A, which considers the household growth projected in the 2012-based projections (576 hpa) and applies a vacancy rate to arrive at a need of 604 dpa over the period 2012-30. This represents an increase compared to previous household projections as they are based on a higher level of population growth and different headship rates.
- 7.20 As also noted in the Planning Practice Guidance, household projections may require adjustment to reflect factors affecting local demographic and household formation not captured in past trends. It is considered justified to apply 'partial catch-up' headship rates, given that the 2012-based projections still fall short of the 2008-based projections which were produced pre-recession and represent an increase in household formation in line with longer term trends. This is particularly the case in younger adult age groups, and hence this 'partial catch-up' is applied to those age groups. It is assumed that over time, as economic conditions improve, pent up demand in the population will be released and result in higher levels of demand for housing. This assumption results in an increase in the housing need from 604 dpa to 627 dpa.
- 7.21 A further sensitivity (which utilises the baseline headship rates) models the implications of bringing empty homes back into use over the plan period. By ensuring that a proportion of housing need is addressed through the existing stock (modelled through a reduction in the vacancy rate over time) then the housing need decreases from 604 dpa to 572 dpa. While interesting as a comparator, in this instance it would be inappropriate to give this scenario

weight in considering the full, objectively assessed housing needs, given that the assessment should exclude any policy considerations. To incorporate this scenario would lead the analysis towards becoming a housing 'requirement', shaped by the policies which the Council seeks to adopt and justify. It is nevertheless an option open to Sefton Council to pursue should the evidence be there to show it can be achieved.

7.22 Given the extent to which the 2012 SNPP projects net migration flows to increase, and how this is very different to longer term trends in Sefton, it was deemed appropriate to also consider the population change resulting from past migration trends experienced over the past five and ten years. The five and ten year scenarios indicate a housing need of 411 dpa and 311 dpa respectively and highlight the impact that adopting different migration assumptions for Sefton will have on the final level of housing need. However, it is important to note that ONS's model for calculating future migration change is complex and internally consistent across authorities. A detailed analysis of how the migration figures have been derived by ONS supports their approach and suggests that the prime driver in Sefton's uplift has been Liverpool's growth, and changes to the composition of the various age cohorts and their propensity to move out of/in to the Borough.

Demographic Conclusions

- 7.23 In summary, the new demographic starting point for considering housing need in Sefton equates to 604 dpa between 2012 and 2030. NLP has also examined the implications of applying these new household formation rates to alternative projections of the population, namely five and ten year migration trends, as described. When considering housing needs in the context of these past trends this would indicate a much lower housing need than the 2012based household projections of between 411 and 301 dwellings per annum, however it is clear from the analysis in Section 3.0 that projecting forward these past gross trends might fail to account for changes in migration patterns as a result of ageing and population growth in the wider region. On this basis, it was concluded that more weight could be attached to the latest ONS 2012based SNPP migration calculations than the long term/short term trends scenarios.
- 7.24 As a result of further sensitivity testing which assumes that younger age household formation will return to a level more reflective of demand, there would be a small increase in the level of housing need, from 604 dpa to 627 dpa. This is a relatively small increase, and is testament to the population age structure in Sefton, which is characterised by a larger percent in the oldest age groups and a relatively small number of residents in these younger, householdforming age groups.
- 7.25 The market signals analysis also indicates that some uplift in housing supply is required. Although indicators for Sefton show relatively low house prices, low land values, low levels of overcrowding, etc., the Borough's housing is becoming less affordable due to stagnant household incomes. There are

particular issues over concealed families, overcrowding and the Borough has also seen past under-delivery of housing against targets.

- In line with the previous update, whilst acknowledging that an element of 7.26 judgement is required when considering market signals uplift (i.e. the increase in supply over and above the demographic needs modelled in Scenarios A to C to help address demand issues), it is considered that the market signals pressure faced in Sefton would suggest that a modest moderate upward adjustment could be justified.
- In terms of what would constitute a reasonable level of uplift, a number of 7.27 recent Inspector's reports at Local Plan EiPs have helped to clarify the issue. For example, in November 2014 the Inspector examining the Eastleigh Borough Local Plan published his preliminary conclusions on Housing Needs and Supply and economic growth. In that document, the Eastleigh Inspector concluded that overall, market signals justified upward adjustment above the housing need derived from demographic projections:

"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 wider HMA. Exploration of an uplift of, say, 10% would be compatible with the "modest" pressure of market signals recognised in the SHMA itself." [Paragraph 36].

- In addition, the Inspector at the Examination of the Uttlesford Local Plan 7.28 recently published his summarised conclusion³⁴, which also concluded that the application of a nominal 10% uplift would be appropriate in that instance. Applying similar logic to the Sefton market signals, which also suggest that a modest uplift could be required to the demographic baseline, would indicate that a similar 10% uplift would be appropriate in this instance. Such an increase would address the worsening market signals, go some way to meeting the affordable housing needs (as well as past under-delivery) and would also significantly boost the supply of housing in line with the requirements of the Framework.
- Such an approach would equate to a demographically-driven housing OAN 7.29 figure (meeting demands of population growth with the addition of a supply uplift to help address market signals) of **690 dpa** for the period 2012-2030.

Employment-Led Projections (Scenarios D to H)

The Planning Practice Guidance requires plan makers to "make an 7.30 assessment of the likely change in job number based on past trends and/or economic forecasts as appropriate and also having regard to the growth of the working age population...³⁵. It notes that where the projected number of jobs is likely to be higher than the number of economically active people, then this might lead to unsustainable commuting patterns and plan makers should

³⁴ Examination of the Uttlesford Local Plan (ULP) Summarised conclusions of the Inspector after the hearing session on 3 December 2014 ³⁵ Paragraph 2a-018-20140306

consider how the location of new housing or infrastructure development could help address these problems.

- 7.31 Recognising the importance of achieving a strategy that is internally consistent, it is evident that the objectively assessed housing need should seek to consider both demographic and economic implications to avoid any unsustainable outcomes, not just for Sefton but also for neighbouring authorities (i.e. an increase in commuting and congestion resulting from an imbalance between the provision of new jobs and homes). This means that it can only be done in the context of sub-regional work.
- 7.32 Helping to stem the decline of working age residents in Sefton would achieve a more balanced population structure and reduce potential future economic difficulties, the demands of services associated with an ageing population and a more limited supply of labour. The housing need figure for the Borough should not only rely on demographic data but (in accordance with the Framework and Planning Practice Guidance) should also align with economic and employment growth need.
- A number of scenarios have been modelled (Scenarios D to H) to demonstrate the impact of a range of likely growth scenarios based on past trends, job stabilisation, Local Enterprise Partnership [LEP] baseline/'policy on' job growth and 'blended' job growth, based on utilising a range of economic forecasts for the Borough. Figure 7.1, Figure 7.2 and Figure 7.3 indicate the clear divergence between the trend-based jobs-led scenario and the more aspirational scenarios (using forecast job growth) for the Borough.
- 7.34 All of the demographic projections would result in the local labour supply declining, from -2,922 under the 2012 SNPP to -9,940 under the ten year migration scenario. Under past job trends and the LEP baseline scenario, there would also be a decline in the number of jobs.
- 7.35 However, even the 2012 SNPP indicates that future projected population growth would support more jobs than indicated by the past trends. Population growth of 4,961 and the provision of 604 dpa in Sefton would result in job decline of 147 per annum, which is below the job decline experienced in recent years (304 per annum). This indicates that future job growth above past trends is within the realistic boundaries of population growth in the Borough based on the 2012 SNPP.
- The job stabilisation scenario indicates the 'tipping point' between job growth and decline, showing a need for 712 dpa 2012-30 to maintain the number of jobs in the Borough at 2012 levels. A level of provision below this would likely lead to job decline (as there is insufficient in-migration to support jobs) with provision in excess of this likely to lead to job growth. The LEP 'policy on' scenario, which would see total job growth of 900 over the plan period, indicates a need for 777 dpa.
- 7.37 To sustain the level of job growth forecast by the blended job growth scenario there would need to be a very substantial amount of in-migration to the
Borough, up to around 36,000 over the plan period. It is likely that a significant proportion of these in-migrants would come from neighbouring authorities, which could potentially have very serious implications for Liverpool in terms of population and workforce losses. The analysis in Section 3.0 has already indicated that the 2012-based population projections project a significant increase on migration based on past trends, equating to 10,611 over the plan period (2012-30) and this accounts for population growth and ageing in the wider region. Therefore, to project an increase in migration to a level around four times higher than this would be very challenging in terms of local market and cross boundary implications, the impact on local services and the scale and pace of change required over the period to 2030. This work has to be done sub-regionally to ensure a comprehensive and workable outcome.

7.38 Ordinarily, it may be considered that when compared with the other economic and demographic scenarios (LEP, past trends and stabilisation), Scenario H could be viewed as an outlier. A similar conclusion was reached by the Inspector at the Lichfield District Local Plan³⁶. However, in the case of Sefton, the emerging Employment Land Review [ELR] incorporates the Oxford Economics and Experian projections into the modelling work to inform the employment land requirement. A failure to link the employment land needs of the ELR with the housing OAN identified in this Update Note could result in the two documents failing to align.

7.39 Hence an economically-driven housing OAN range would equate to between 710 dpa and 1,290 dpa.

- 7.40 It should also be noted that whilst there is not a direct causal relationship between job growth and housing, the two are nevertheless fundamentally related. The only alternatives to a significant reversal of migratory trends necessary to underpin job growth at the scale forecast by the blended job growth scenario would be through:
 - a change in commuting patterns, by clawing back local residents currently commuting out to adjoining boroughs;
 - increasing economic activity rates/reducing unemployment; and,
 - planning for a mix of housing and employment which encourage the retention of residents of an economically active age, or which encouraged younger, economically active people to move to the Borough.
- 7.41 These approaches would be policy choices for the Council to make.

Conclusions on Objectively Assessed Need

7.42 The Framework requires Local Planning Authorities to 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 elsewhere in that document [paragraph 47].

³⁶ Lichfield District Council Local Plan: Strategy Examination, Inspector's Letter dated 3rd September 2013

However, recent High Court Judgements³⁷ have clarified that the full objectively assessed need is not necessarily the same as the 'Housing Requirement' figure ultimately taken forward in a Local Plan. The full objectively assessed need sets aside policy considerations and is closely linked to the relevant household projections (although it is not necessarily the same). The Housing Requirement figure meanwhile, reflects not only the assessed need for housing, but also any policy considerations that might require that figure to be adjusted in the light of capacity constraints.

This report provides an update to objectively assessed housing needs for 7.43 Sefton, taking into account the latest 2012-based government household projections released in February 2015. These needs are primarily considered over the period 2012-30; however, outputs over the longer period to 2035 have also been provided (where possible) for contextual purposes. Ultimately, the derivation of a 'housing requirement' figure is a matter for the Council.

- The definition of full objectively assessed need is 'not an exact science' and an 7.44 element of judgement is necessary, based upon reasonable assumptions. The scenarios also need to be balanced alongside what is realistic and is likely to happen in the future, and align with other elements of the Council's evidence base.
- In practice, applying the Framework and Planning Practice Guidance to arrive 7.45 at a robust and evidenced objective assessment of housing need is a staged and logical process. An objective assessment of housing need must be a level of housing delivery which meets the needs associated with population and household growth, addresses the need for all types of housing including affordable and caters for housing demand [the Framework, paragraph 159]. Furthermore, a planned level of housing to meet full objectively assessed need must respond positively to wider opportunities for growth and should take account of market signals, including affordability [the Framework, paragraph 17].
- Due to the various factors and assumptions which feed into the assessment of 7.46 future needs, there is not a single figure which can be definitively identified as the Borough's objectively assessed housing needs. This is noted in the former CLG Strategic Housing Market Assessment Guidance³⁸ which identifies that estimates of need may be expressed either as a single number or as a range.
- Taking into account the range of evidence reviewed above, it is considered 7.47 that the appropriate stepped approach within the Planning Practice Guidance should be applied to Sefton's full objectively assessed need for housing is as follows:
 - 1 The starting point: Household Projections published by CLG provide the 'starting point' estimate for overall housing need. The most recent

³⁷ Between Gallagher Homes Limited / Lioncourt Homes Limited and Solihull Metropolitan Borough Council 30/04/2014 Case No. CO/17668/2013 ³⁸ Department for Communities and Local Government (August 2007): Strategic Housing Market Assessments Practice

Guidance, Version 2

CLG household projections (2012-based) indicate a need for **604 dpa** (taking account of dwelling vacancy rates).

- 2 **Justification for adjusting the demographic projections:** Although the most recent projections indicate more optimistic headship rate growth than the 2011-based (Interim) projections, they are still below the 2008based equivalents. Allowing for an increase in household formation to reflect the 'pent-up' demand in these age groups indicates a slightly higher level of need of **627 dpa**.
- 3 **Upwards adjustment in response to market signals:** A slight worsening of some of the market signals, and particularly past under delivery of dwellings, provides an indication that there may be tightening demand and suggests that there needs to be some increase in supply to stabilise the worsening affordability. This would justify a modest uplift to the figures identified as the demographic starting point. It is NLPs judgement that, balancing the various key market indicators (and considering that the Planning Practice Guidance states that a worsening trend in any of the indicators justifies uplift), an uplift of around 10% on the demographic led needs of 627 dpa would be reasonable, equivalent to a need of **690 dpa**. This is the demographically driven figure.
- 4 However, even at this level of provision, the overall level of job growth would still be negative over the plan period a figure of 712 dpa would be needed to prevent the local economy from declining.
- 5 **Alignment with economic and employment-led growth needs:** Some of the employment-led scenarios indicate a level of housing need and population growth which could be considered difficult to achieve in the context of past trends and the future population of the Borough. In particular, the Oxford Economic and Experian projections would require extremely high levels of in-migration to support job growth, resulting in a complete reversal of past trends (which show steady population decline). It is necessary that an assessment of housing need is based on scenarios that could "*reasonably be expected to occur*"³⁹ and that future assessments of job growth should be considered in the context of the likely future change in the labour force.
- In this context, it would not be unreasonable for the Borough to plan for a job growth target which aims at stabilising the current number of jobs. Indeed, the 2012 SNPP scenario indicates that the projected population growth would still result in job losses (albeit at a slower rate than past trends), with **712 dpa** the point at which sufficient housing is provided to maintain the current number of jobs in the Borough. Provision of **777 dpa** would deliver enough housing to support job growth in line with the Local Enterprise Partnership's 'Policy On' job growth forecast for the Borough (job growth of +900 to 2030).
- 7 However, the LEP's forecasts of job change in the Borough are more modest and achievable than the Experian, Oxford Economics [OE] or the

³⁹ Planning Practice Guidance paragraph ID2a-003-20140306

Cambridge Econometrics [CE] forecasts, which project job growth of between 8,758 and 13,100 jobs additional jobs between 2012 and 2030. On the grounds that over 30% of the job growth forecast by CE was attributable to the public sector, which is considered unlikely given ongoing Government cutbacks in the sector, this scenario was excluded as an outlier and a 'blended average' of the Experian and OE forecasts (+10,099 jobs) was modelled. Providing this level of jobs would require **1,286 dpa**. It is considered that, whilst high, it would be appropriate to use this scenario to inform the top end of the housing OAN range. It is recognised that some of this job growth could be 'absorbed' through changes in the economic activity levels of the existing resident workforce, through a reduction in unemployment levels or a reversal in current trends in out commuting. If successful, these interventions could justify a lower housing requirement, although this would need to be fully justified by the Council and supported in policy terms.

7.48 On the above basis it was considered that based on the staged approach to identifying the objectively assessed needs as set out in the Planning Practice Guidance, the demographically-driven housing OAN would equate to 690 dpa, whilst to address economic needs and to align with the ELR, the economic-led OAN range would be higher, at around 710 dpa – 1,290 dpa.

7.49

This range has been derived on the basis of the above methodology, with the range representing the following:

- The demographically driven housing OAN, at **690 dpa**, represents the outcome of the staged approach to identifying the housing OAN as set out in the Planning Practice Guidance. It takes the CLG's latest household projections as its starting point (576 households pa, 604 dwellings pa over the plan period 2012-2030), adjusts this to 627 dpa to accelerate the household formation rate of the younger age groups, and finally uplifts this figure by 10% to address worsening market signals and past underdelivery.
- Such an approach meets Sefton Council's demographic requirements in full; represents a substantial boost on the amount of housing that has been delivered in the past (387 dpa over the past 11 years) and exceeds the Local Enterprise Partnership's baseline projection of job growth. However, it is recognised that due to the demographic challenges facing the Borough (with a very substantial ageing of the population and the propensity of younger residents to leave the Borough), even this level of dwelling provision would lead to a decline in the total number of jobs between 2012 and 2030.
- Taking an economically-driven housing OAN approach which doesn't lead to a decline in jobs over time, a figure of **710 dpa** would effectively stabilise the economy and ensure that at the very least the number of jobs based in the Borough stabilises over the coming years.

- Moving upward, a figure of 780 dpa would align with the current Local Enterprise Partnership's 'Policy On' growth aspirations (+900 jobs), whilst at the very top end of any economically-driven housing OAN range, a figure of **1,290 dpa** would align with the 'blended average' of the Experian and Oxford Economic job growth projections in the Borough, equivalent to an additional 10,099 jobs by 2030.
- 7.50 The economically-driven housing need is significantly higher than the previously identified range of objectively assessed housing needs, which was 600-800 dpa, to reflect the substantially higher CLG household projections and the stronger economic growth forecasts.
- 7.51 In general, whilst recognising that this would be very challenging to deliver, it is considered that greater weight could be attached to a housing need figure towards the upper end of the 710 dpa 1,290 dpa economically driven OAN range. This would reflect the most recent economic projections for the Borough.
- 7.52 It is further noted that in terms of translating this objectively assessed need into a Local Plan housing requirement, Sefton Council will also be obliged to take into account affordable housing needs. It is recognised that these are identified on a different evidential basis, with the data focussing on household's ability to pay, rather than demographic change and economic growth. Sefton Council will need to exercise their policy choice to test whether the delivery of 434 affordable dpa would require an uplift to the Local Plan housing requirement on the basis of whether this would be economically realistic, based upon a variety of considerations including deliverability and viability.
- 7.53 The Strategic Housing Market Assessment (JG Consulting 2014) also concludes that the significant shortfall between the need for and supply for affordable housing is largely being met by the Private Rented Sector. NLP ordinarily considers that as the PRS is not a designated form of affordable housing it should not be netted-off the overall affordable housing requirement this however is (again) a policy choice for Sefton Council to make.
- 7.54 Whilst this is the OAN that Sefton Council should consider, it is of course recognised that the housing requirement figure it ultimately chooses to take forward in its emerging Local Plan may be different (if justified in accordance with the Framework and the Planning Practice Guidance).
- 7.55 There are significant implications of a high OAN in terms of Sefton Borough's ability to accommodate such growth and the knock on implications for neighbouring local authorities and their regeneration strategies and housing delivery programmes.
- An OAN of the scale identified by the economically-driven range particularly at the top end of the range - is likely to be very challenging to deliver and may raise planning issues, particularly for Liverpool City where a significant proportion of the in-migrants to Sefton are likely to be drawn. Given the major issues likely to arise in adjoining districts, Sefton's full housing OAN can only

be addressed in the context of a sub-regional assessment of housing need and supply.

Housing Need 2030-35

- 7.57 Whilst the focus of this report has been upon identifying the objectively assessed need for housing in Sefton Borough for the years 2012-2030 to align with the Council's emerging Local Plan, Sefton Council has requested that NLP provides some indication of likely requirements between 2030 and 2035 in order that they may understand the extent of safeguarded land that may be required post 2030.
- 7.58 There are a number of issues with planning for development needs so far into the future, not least the fact that trend-based data becomes less reliable (particularly at a local area level) the further one goes from the base date. However, the 2012-based SNHP represent an improvement on the analysis contained within the previous update, given that they cover the period to 2037, i.e. beyond the end date of the projection period. This brief analysis indicates the level of housing need between 2030 and 2035.
- 7.59 Figure 7.4 shows the annual dwelling need under the 2012-based population and household projections. As discussed, the average dwelling need over the period 2012-30 under this scenario is 604 dpa. However, beyond 2030, there is a significant decline in the annual number of dwellings needed because of declining population growth. Over this five year period, the annual average dwelling need is 444 dpa. As a result, looking at the longer term average (i.e. the period 2012-35 as opposed to 2012-30), the total average need would fall to 569 dpa.



Figure 7.4 Dwellings per Annum to 2035 (2012 SNPP Scenarios)

Glossary

ASMigR (Age Specific Migration Rate)	Average number of migrants per 1,000 people by year of age.
Base Year	Starting year for assessment. Currently 2012 due to data availability.
Blended Job Growth	A job growth forecast using the forecast average job change in the Borough based on a combination of the latest projections produced by the Experian and Oxford Economics [OE] forecasting houses. This equated to +10,099 jobs over the modelling period.
BRES	The Business Register and Employment Survey. BRES is the definitive source of official employee statistics and can be used to derive employment estimates at varying industrial and geographical levels.
CLG	Department for Communities and Local Government
Concealed Households	A household that neither owns nor rents the dwelling within which they reside <u>AND</u> which wants to move into their own accommodation and form a separate household.
Derived Forecast Model	New development in the PopGroup suite of software that incorporates the previous features of HouseGroup and LabGroup. The DF model allows data to be entered for any variable that is closely related to the age-sex structure of the population as forecast by PopGroup or independently, including household structure, economic activity rates and disability projections, and to prepare projections from these data sources. In specific respect of this analysis, the DF model projects future household levels and resultant dwelling requirements and future economic activity and the number of jobs likely to be sustained in a particular area.
Dpa	Dwellings per annum.
Economic Activity Rate	The % of population (both employed and unemployed) that constitutes the manpower supply of the labour market.
HEaDROOM	NLP housing requirement framework which takes account of demographic, housing and economic factors as well as policy and delivery matters to set out future housing requirements.
Household Headship	Head of a household expressed as % of each age – sex population category. For married/cohabiting couples, males are taken as heads of household.
Household to Dwelling Conversion Factor	Factor for conversion of number of households to the number of dwellings. It takes account of transactional and long term vacancies and 2nd/holiday homes.
Intornal Migration	Migration to from another part of LIV
Internal Migration	inigration to/from another part of UK.

International Migration	Migration to/from another country.
Labour Force / Employment Conversion Rate	Factor for conversion of number of workers to number of jobs in an area it takes account of economic activity and commuting levels calculated by # workers in area ÷ # jobs in area over time, an objective would be to move towards a ratio of 1 = self-containment
LEP	Local Enterprise Partnerships are partnerships between local authorities and businesses. They decide what the priorities should be for investment in roads, buildings and facilities in the area. Sefton is located within the Liverpool City Region LEP, which also includes the nearby local authority areas of Wirral, Liverpool, St Helens, Halton and Knowsley.
LEP Baseline	A modelled scenario which explored the housing implications of planning for a loss of 2,500 jobs based in the Borough to 2030. This was based on the LEP's baseline model (2014).
LEP Policy On	A modelled scenario which explored the housing implications of planning for a gain of 900 jobs (gross) based in the Borough by 2030. This was based on the LEP's more aspirational 'policy on' model
MYE	Mid Year Estimates
Natural Change	The difference (in any given time period) between the number of births and the number of deaths. A natural change projection ignores migration and shows the future population where any births and deaths affect it.
NOMIS	NOMIS, an acronym for 'National Online Manpower Information System' is a service provided by the Office for National Statistics to provide free access to detailed and up-to-date UK labour market statistics from official sources.
PopGroup	Forecasting model to project future population levels, based upon assumptions regarding fertility, mortality and migration when used in conjunction with HouseGroup and LabGroup it will also project the future dwelling requirements associated with the population change and the economic activity/job effects of change.
SMR (Standard Mortality Rate)	Number of deaths per 1,000 population per year.
Special Populations	Particular groups within the wider population that exhibit particular demographic characteristics (e.g. students/school boarders/armed forces/prisoners).
Sub-Groups	Individual areas to be tested that collectively form part of a broader study area.
TFR (Total Fertility Rate)	Average number of children that would be born to a woman over her lifetime if she were to experience the exact current age specific fertility rates (ASFR) through her lifetime and if she were to survive from birth to the end of her productive life.
ONS	Office of National Statistics

SHLAA	Strategic Housing Land Availability Assessment
SHMA	Strategic Housing Market Assessment
SNPP	Sub-National Population Projections. Population projections provide an indication of the size and age/sex structure of the future population if specified assumptions about future fertility, mortality and migration were to be realised. SNPPs are produced by ONS for local authority areas in <u>England</u> . They are not forecasts and do not attempt to predict the impact that future government policies, changing economic circumstances or other factors (whether in the UK or overseas) might have on demographic behaviour.
SNHP	Sub-National Household Projections . Household projections are trend-based and indicate the number of additional households that would form if recent demographic trends continue. They are produced by CLG and are underpinned by the equivalent SNPP.

Appendix 1 Inputs and Assumptions

DEMOGRAPH IC	Scenario A: 2012-based SNHP (Scenario Ai – Partial Catch Up Sensitivity; Scenario Aii – Reduction in Vacancy Rates)	Scenario B – Short Term Migration Trends	Scenario C – Long Term Migration Trends
Population			
Baseline Population	A 2012 baseline population is taken from the 2012 Mid-year population estimates for sensitivities, the populations for 2012-35 are constrained to the 2012-based SNPP for	Sefton Borough, split by age co the Borough, by age and sex.	hort and gender. For Scenario A and the
Births	Future change assumed in the Total Fertility Rate [TFR] uses the birth projections fror projected TFRs through PopGroup.	n the ONS 2012-based Interim	SNPP. This in turn is used to derive future
Deaths	Future change assumed in the SMR uses the death projections from the ONS 2012-ba PopGroup.	ased Interim SNPP. This in tur	n is used to derive future projected SMRs through
Internal Migration	Gross domestic in and out migration flows are adopted based on forecast migration into the Borough from the ONS 2012-based SNPP for the actual internal migration flows 2012-2031. This is the sum of internal migration (elsewhere in England) and cross-border migration (elsewhere in the UK) (SNPP Table 5).	Gross domestic internal mig past trends for the past 5/10 migration were used with the	ration flows are adopted based on average gross) years. In 2012/13, the mid-year estimates of e trend applied 2013/14 onwards.
International Migration	Gross international in and out migration flows are adopted based on forecast migration in Sefton Borough from the ONS 2012-based SNPP for the actual internal migration flows 2012-2031.	As above, but for internation	nal rather than internal migration.
Propensity to Migrate (Age Specific Migration Rates)	Age Specific Migration Rates (ASMigR) for both in and out migration is based upon th SNPP. These identify a migration rate for each age cohort within the Borough (for bot an Age Specific Migration Rate. This then drives the demographic profile of those peo	e age profile of migrants to and th in and out flows separately) v ople moving into and out of the	I from the Borough projected in the 2012-based which is applied to each individual age providing Borough (but not the total numbers of migrants).
Housing			
Headship Rates	Headship rates that are specific to Sefton are applied in the modelling. These are take 2015 'Stage 1' outputs were available. These provided headship rates by age, sex and headship rates by sex and five year age group only are inputted into the modelling. Ap group who will form a head of household. For all scenarios except Ai, the rates as take For the 'partial catch-up' sensitivity scenario, the rates for young people in the age group 2008-based and 2012-based projections.	en from the 2012-based Sub-N Id relationship status. The rela oplied to the population, these of en directly from CLG are applie oups 15-19 to 30-34 are project	ational Household Projections, and as of July tionship statuses have been amalgamated so that determine the percent of people in a given age/sex ed. ed to reach, by 2033, half way between then
Population not in households	The number of population not in households (e.g. those in institutional care) is similarl number of people in each sex/five year age groups/relationship status in institutional c under scenarios which project a different population size and/or age structure to the 2 account when considering the number of elderly people likely to be in care home or ot	y taken from the 2012-based h are. Above age 75, these num 012 SNPP (which the CLG hou her non-household accommod	ousehold projections. CLG provide these by the bers have been converted into a rate; therefore isehold projections are based on) this is taken into ation.

DEMOGRAPH IC	Scenario A: 2012-based SNHP (Scenario Ai – Partial Catch Up Sensitivity; Scenario Aii – Reduction in Vacancy Rates)	Scenario B – Short Term Migration Trends	Scenario C – Long Term Migration Trends
Vacancy / 2nd Home Rate	A vacancy and second homes rate is applied to the number of households, representit housing market. This means that more dwellings than households are required to me based on the second home/vacancy rates in CLG Council Tax Base data for 2013/2010 gradually reduced to 4.294%.	ing the natural vacancies/not per et needs. The average vacance 14, held constant over the forec	ermanently occupied homes which occur within the cy/second home rate in Sefton Borough is 4.6% cast period. For Scenario Aii, the rate was
Economic			
Economic Activity Rate	Age and gender-specific Economic Activity Rates are used. The bases for these are the Force Projections [LFP] have been applied. In addition, allowances have been made 2020 and 2026-2028 (the equalisation of State Pension Age is already accounted for underestimated the economic activity rates. Therefore an alternative assumption has ONS LFP and a linear trend based on growth between 2001 and 2011, then held constructions and the economic activity between 2001 and 2011, then held constructions are the provided as the prov	he 2011 Census and for age gr (for age 65-69) for the increase in the ONS LFP). In the oldest been adopted, whereby rates a stant.	roups up to 65-69 the ONS 2006-based Labour es in State Pension Age which will occur in 2018- age groups (70+), the ONS LFP significantly are projected to reach a mid-point between the
Commuting Rate	A standard net commuting rate is inferred through the modelling using a Labour Force living in area ÷ (B) Number of workers who work in the area (number of jobs). For Sefton, data from the 2011 Census and BRES indicated a labour force ratio of 1.1	e Ratio which is worked out usir 85.	ng the formula: (A) Number of employed workers
Unemployme nt	To calculate the unemployment rate for Sefton Council, NLP took the January-Decem the equivalent 2013 figure (8.4%) to equate to 2013. NLP kept the former figure cons then gradually reduced the rate on a linear basis to the long term average (2004-13) or end of the forecasting period on the grounds that this is a better reflection of the long-	ber 2012 NOMIS (modelled) ur tant for 2014 and 2015 to reflec of 7.22% over a five-year time fi term trend than the current high	nemployment figure (8.5%) to equate to 2012 and ct initial stabilisation at the current high rate, and rame. This figure was then held constant to the n rate.

DEMOGRAP HIC	Scenario D: Past Trends Job Growth	Scenario E: Job Stabilisation	Scenario F: LEP Baseline Job Growth	Scenario G LEP 'Policy On' Job Growth	Scenario H. Blended Job Growth
Population					
Baseline Population	A 2012 baseline population is taken fro sensitivities, the populations for 2012-3	m the 2012 Mid-year population est 5 are constrained to the 2012-based	imates for Sefton Boroug d SNPP for the Borough,	h, split by age cohort and gender. by age and sex.	For Scenario A and the
Births	Future change assumed in the Total Fe projected TFRs through PopGroup.	ertility Rate [TFR] uses the birth proj	ections from the ONS 20 ⁻	12-based Interim SNPP. This in tu	Irn is used to derive future
Deaths	Future change assumed in the SMR us PopGroup.	es the death projections from the O	NS 2012-based Interim S	NPP. This in turn is used to deriv	e future projected SMRs through
Internal Migration	Internal in-migration and outmigration is flexed (inflated or deflated) to achieve the necessary number of economically active people to underpin the economy in the Borough for this employment scenario. This was based on taking forward forecast net job losses based on Past Trends 1997-2014 (-304 per annum).	Internal in-migration and outmigration is flexed (inflated or deflated) to achieve the necessary number of economically active people to underpin the economy in the Borough for this employment scenario. This was based on job stabilisation between 2012 and 2030/35.	This was based on taking forward forecast job growth based on LEP baseline projections (-2,500 jobs 2012- 2030).	As Scenario F, but with potential unconstrained employment growth (total jobs) in Sefton Borough of +900 between 2012 and 2030.	As Scenario F, but with potential unconstrained employment growth (total jobs) in Sefton Borough of +10,099 between 2012 and 2030 based on a combination of OE and Experian projections.
Internation al Migration	As above, but for international rather th	an internal migration.			
Propensity to Migrate (Age Specific Migration Rates)	Age Specific Migration Rates (ASMigR) SNPP. These identify a migration rate Age Specific Migration Rate. This then	for both in and out migration is bas for each age cohort within the Boron drives the demographic profile of th	ed upon the age profile o ugh (for both in and out fle nose people moving into a	f migrants to and from the Boroug ows separately) which is applied to and out of the Borough (but not the	h projected in the 2012-based o each individual age providing an o total numbers of migrants).

DEMOGRAP HIC	Scenario D: Past Trends Job Growth	Scenario E: Job Stabilisation	Scenario F: LEP Baseline Job Growth	Scenario G LEP 'Policy On' Job Growth	Scenario H. Blended Job Growth
Housing					
Headship Rates	Headship rates that are specific to Seft 'Stage 1' outputs were available. These headship rates by sex and five year age group who will form a head of househo For the 'partial catch-up' sensitivity scen based and 2012-based projections.	on are applied in the modelling. The provided headship rates by age, s group only are inputted into the m d. For all scenarios except Ai, the nario, the rates for young people in	ese are taken from the 20 sex and relationship status odelling. Applied to the p rates as taken directly from the age groups 15-19 to 3	012-based Sub-National Househol s. The relationship statuses have opulation, these determine the per m CLG are applied. 30-34 are projected to reach, by 20	d Projections, and as of July 2015 been amalgamated so that rcent of people in a given age/sex 033, half way between then 2008-
Population not in household s	The number of population not in housel number of people in each sex/five year under scenarios which project a differen account when considering the number	holds (e.g. those in institutional care age groups/relationship status in in ht population size and/or age structu of elderly people likely to be in care	e) is similarly taken from the stitutional care. Above ago ure to the 2012 SNPP (whe home or other non-house	ne 2012-based household projection ge 75, these numbers have been of hich the CLG household projection whold accommodation.	ons. CLG provide these by the converted into a rate; therefore s are based on) this is taken into
Vacancy / 2nd Home Rate	A vacancy and second homes rate is a housing market. This means that more based on the second home/vacancy ratereduced to 4.294%.	oplied to the number of households dwellings than households are req tes in CLG Council Tax Base data f	, representing the natural uired to meet needs. The or 2013/2014, held consta	vacancies/not permanently occup e average vacancy/second home ra ant over the forecast period. For S	ied homes which occur within the ate in Sefton Borough is 4.6% Scenario Aii, the rate was gradually
Economic					
Economic Activity Rate	Age and gender-specific Economic Act Force Projections [LFP] have been app 2020 and 2026-2028 (the equalisation underestimated the economic activity ra LFP and a linear trend based on growth	vity Rates are used. The bases for lied. In addition, allowances have b of State Pension Age is already acc ates. Therefore an alternative assu between 2001 and 2011, then hele	these are the 2011 Censi been made (for age 65-69 counted for in the ONS LF mption has been adopted d constant.	us and for age groups up to 65-69) for the increases in State Pensio P). In the oldest age groups (70+) I, whereby rates are projected to re	the ONS 2006-based Labour in Age which will occur in 2018-), the ONS LFP significantly each a mid-point between the ONS
Commuting Rate	A standard net commuting rate is inferr living in area ÷ (B) Number of workers v For Sefton, data from the 2011 Census	ed through the modelling using a La who work in the area (number of job and BRES indicated a labour force	abour Force Ratio which is os). e ratio of 1.185.	s worked out using the formula: (A) Number of employed workers
Unemploy ment	To calculate the unemployment rate for the equivalent 2013 figure (8.4%) to eq then gradually reduced the rate on a lin of the forecasting period on the ground	Sefton Council, NLP took the Janu uate to 2013. NLP kept the former ear basis to the long term average s that this is a better reflection of the	ary-December 2012 NOM figure constant for 2014 a (2004-13) of 7.22% over a e long-term trend than the	IIS (modelled) unemployment figu and 2015 to reflect initial stabilisation a five-year time frame. This figure a current high rate.	re (8.5%) to equate to 2012 and on at the current high rate, and was then held constant to the end

Appendix 2 PopGroup Output Sheets

Components of Population Change

Scenario A: 2012 SNPP, 2012 Headship Rates

	Year beginni	ng July 1s	t	015 16	016 17	2017 19	2019 10	2010.20	2020.24	2024.22	2022.22	2022.24	2024.25	2025.26	2026.27	2027.29	2028.20	2020.20	
Births	2012-13 2	013-14	2014-15 2	2015-10 2	2010-17	2017-16	2018-19	2019-20	2020=21	2021-22	2022-23	2023-24	2024-25	2023-20	2020-27	2027-28	2028-29	2029=30	
Male	1,410	1,425	1,430	1,425	1,422	1,427	1,425	1,422	1,415	1,407	1,399	1,389	1,378	1,366	1,354	1,342	2 1,331	1,321	
Female	1,343	1,357	1,362	1,357	1,355	1,359	1,358	1,354	1,348	1,340	1,333	1,323	1,312	1,301	1,289	1,278	3 1,268	1,258	
All Births	2,754	2,782	2,792	2,783	2,777	2,786	2,783	2,776	2,763	2,748	2,732	2,712	2,690	2,666	2,643	2,620	2,599	2,579	
Births input	•	•	•	•	•	•	•	•	•	•	•	*	•	•	*	•	• 1.04	•	
Deaths	1 521	1 459	1 454	1 448	1 445	1 446	1 448	1 448	1 454	1 461	1.468	1.476	1 486	1 490	1.511	1 523	3 1.536	1 552	
Female	1,693	1,455	1,534	1,537	1,537	1,440	1,533	1,440	1,434	1,538	1,538	1,543	1,546	1,488	1,517	1,568	3 1,535 3 1,575	1,583	
All deaths	3,214	3,013	2,989	2,986	2,981	2,986	2,981	2,981	2,991	2,999	3,007	3,019	3,032	3,049	3,068	3,091	1 3,111	3,135	
SMR: males	116.0	108.9	105.9	102.8	100.0	97.5	95.1	92.7	90.6	88.7	86.8	85.0	83.4	82.0	80.6	79.2	2 77.9	76.8	
SMR: female	E 111.3	101.0	97.8	96.1	94.2	92.5	90.2	88.3	86.6	84.8	83.0	81.5	79.9	78.4	77.2	76.0) 74.7	73.6	
Expectation of	(77.8	78.5	78.8	99.2 79.2	90.9 79.5	94.0 79.8	92.5	90.4 80.4	80.7	81.0	81.2	81.5	81.7	80.2	82.2	82.4	5 76.2 4 82.6	82.8	
Expectation of	82.5	83.4	83.7	83.9	84.1	84.4	84.6	84.8	85.0	85.3	85.5	85.7	85.9	86.1	86.3	86.5	5 86.7	86.8	
Expectation of	(80.3	81.2	81.5	81.7	82.0	82.3	82.5	82.8	83.0	83.3	83.5	83.7	84.0	84.2	84.4	84.6	6 84.7	84.9	
Deaths input	t ·											· · ·			· · ·			•	
In-migratio	on from the L	ж																	
Male	3,937	3,947	3,960	3,973	3,983	3,993	4,000	4,005	4,007	4,006	4,004	4,003	4,008	4,017	4,028	4,040	4,053	4,066	
Female	4,033	4,042	4,051	4,057	4,060	4,062	4,062	4,058	4,052	4,043	4,032	4,026	4,028	4,036	4,046	4,060	4,074	4,088	
All CMi=D:	7,970	7,989	8,012	8,030	8,043	8,054	8,062	8,063	8,059	8,049	8,036	8,029	8,036	8,053	8,074	8,100	0 8,127	8,154	
SMigR: fema	s 0.1 s 0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1 0.1	0.1	
Migrants inp		- + ¹	· ·	· ·	- ÷ -		1.1	- + ¹	· ·	· · ·	- ÷ 1	· · ·	- + ¹		· · ·	· · ·		•	
Out-migra	tion to the U	K	0.040	0.040	0.007	0.040	0 700	0.704	0.700	0.754	0 700	0.700		0.74	0.705	0.704		0.744	
Female	3,850	3,844 3,997	3,842 3,979	3,846 3,976	3,827	3,812 3,924	3,798 3.894	3,781	3,768 3.840	3,751	3,738	3,732	3,746	3,740	3,735	3,731	3,740 3.788	3,741 3.797	
All	7,855	7,841	7,821	7,822	7,775	7,736	7,692	7,652	7,608	7,576	7,551	7,524	7,524	7,529	7,520	7,514	4 7,528	7,537	
SMigR: male	29.6	29.5	29.5	29.6	29.5	29.5	29.5	29.5	29.5	29.5	29.6	29.6	29.8	29.8	29.8	29.7	7 29.8	29.7	
SMigR: fema	e 29.6	29.6	29.6	29.6	29.6	29.5	29.5	29.5	29.4	29.4	29.4	29.4	29.4	29.5	29.5	29.4	4 29.4	29.4	
wigrants inp	•										-			-		-			
In-migratio	on from Over	seas																	
Male	661	643	639	660	636	629	625	617	615	619	615	610	617	619	619	623	3 634	630	
Female	654	644	639	645	628	622	612	605	602	607	604	599	602	608	608	616	621	623	
SMigR: male	e 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: fema	a 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 inp			1.1	1.1	1.1	1.1	1.1				1.1	1.1	1.1		1.1		1.1		
Out-migra	tion to Overs	0.25																	
Male	584	565	561	563	552	542	547	539	536	540	536	531	538	541	541	545	5 556	552	
Female	554	543	538	531	523	515	512	505	502	506	503	498	501	508	507	516	5 521	523	
All	1,138	1,108	1,099	1,094	1,074	1,057	1,059	1,043	1,038	1,046	1,039	1,028	1,040	1,048	1,047	1,061	1 1,077	1,075	
SMigR: male	81.7	78.9	78.3	78.7	77.3	76.2	77.2	76.5	76.6	77.6	77.6	77.3	78.9	79.6	79.9	80.8	3 82.5	81.9	
Migrants inp	8 96.3 II	94.7	94.2	93.1	92.0	91.2	91.2	90.7	90.9	92.4	92.6	92.5	93.9	95.7	96.0	. 98.0) 99.2 •	. 99.8	
Migration	- Net Flows																		
UK	+115	+148	+191	+208	+268	+318	+370	+411	+451	+473	+485	+505	+512	+524	+553	+586	6 +598	+617	
Overseas	+1/6	+178	+178	+212	+190	+195	+179	+1/9	+1/9	+180	+180	+180	+180	+1/5	+179	+178	5 +1/8	+178	
Summary	of population	n change																	
Natural chan	n -460	-231	-197	-203	-204	-200	-198	-206	-228	-252	-274	-307	-343	-382	-425	-471	1 -513	-556	
Net migration	r +291	+326	+370	+419	+457	+513	+549	+590	+630	+652	+665	+685	+692	+704	+733	+764	4 +777	+795	
Crude Birth I	i 10.06	10.17	10.20	10.16	10.13	10.15	10.13	10.09	10.03	9.96	9.89	9.80	9.71	9.61	9.52	9.42	2 9.34	9.26	
Crude Death	n 11.75	11.01	10.92	10.90	10.88	10.88	10.85	10.84	10.86	10.87	10.88	10.91	10.94	10.99	11.05	11.12	2 11.18	11.25	
Crude Net M	1.07	1.19	1.35	1.53	1.67	1.87	2.00	2.14	2.29	2.36	2.41	2.48	2.50	2.54	2.64	2.75	5 2.79	2.85	
C	my of Dor																		
Summa			i estimat	eshored	20313														
	2012	2012	2014	2015	2016	2017	2018	2010	2020	2024	2022	2022	2024	2026	2026	2027	2 2020	2020	2020
0-4	14.651	14.644	14.670	14.547	14,437	14.417	14.454	14,458	14.446	14.425	14.393	14.339	14.267	14.181	14.085	13.981	1 13.871	13,760	13.652
5-10	16,812	17,026	17,283	17,678	18,097	18,259	18,279	18,321	18,379	18,289	18,193	18,177	18,211	18,208	18,183	18,145	5 18,094	18,017	17,922
11-15	15,583	14,952	14,550	14,264	14,093	14,127	14,361	14,634	14,875	15,286	15,540	15,627	15,647	15,706	15,637	15,558	3 15,535	15,574	15,579
16-17 18-59Eemak	6,788	6,789	6,637	6,290	6,064	5,881	5,740	5,613	5,614	5,624	5,764	6,020	6,130	6,139	6,268	6,415	5 6,370	6,258	6,232
60/65 -74	39,026	39,393	40,023	40,650	41,239	41,901	42,421	42,843	43,405	44,138	43,954	44,235	44,860	45,609	46,283	46,851	1 47,417	47,858	48,211
75-84	21,169	21,469	21,586	21,645	21,640	21,728	22,027	22,394	22,586	22,929	24,094	24,794	25,370	25,870	26,362	26,725	5 26,972	27,262	27,625
85+	7,894	8,099	8,375	8,733	9,142	9,498	9,818	10,214	10,573	10,930	11,345	11,800	12,102	12,396	12,671	12,979	9 13,412	13,929	14,298
I otal	273,697	273,528	273,624	273,796	274,012	274,266	274,579	274,929	275,314	275,715	276,116	276,506	276,885	277,234	277,555	277,862	2 278,155	278,419	278,658
Dependen	icy ratios, me	an age ar	nd sex ratio																
0-15 / 16-65	0.28	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.31	0.31	0.31	0.31	1 0.31	0.31	0.31
65+ / 16-65	0.35	0.36	0.37	0.38	0.38	0.39	0.40	0.41	0.41	0.42	0.43	0.44	0.45	0.47	0.48	0.49	9 0.50	0.52	0.53
0-15 and 65-	+ 0.63	0.64 42.5	0.65 42.8	43.0	0.67 43.2	0.68 43.4	0.69 43.5	0.70	0.71 43.5	0.72	0.74	43.4	0.76	0.77 43.6	0.79	43.8	0.81	0.83	0.84 44 1
Median age f	f 45.3	45.6	45.9	46.2	46.5	46.8	47.0	47.2	47.5	47.7	47.8	48.0	48.0	48.0	48.0	48.0	0 48.0	48.1	48.2
Sex ratio ma	a 92.0	92.2	92.3	92.4	92.6	92.7	92.8	92.9	93.1	93.2	93.3	93.4	93.5	93.6	93.7	93.8	3 93.9	94.0	94.0
Population	n impact of c	onstraint																	
Number of pe	ersons	-2	-1	+1	+1	+2	+2	+2	+3	+3	+3	+3	+4	+4	+3	+3	3 +2	+2	+2
Household	ds	140.000	440.040	100.051	100.015	404 577	400.00-	400.00-	400 400	407 40-	404.07	405.045	405 75-	400.000	400.00-	407.40	407.00-	400 100	400.047
Change in H	louseholds ovi	+432	+605	+639	+664	+662	+630	+630	+646	+623	+564	+542	+530	+535	+576	+580	+ 127,962 9 +508	+494	+487
Number of s	124,358	124,811	125,446	126,116	126,812	127,506	128,167	128,828	129,505	130,159	130,751	131,319	131,884	132,449	133,052	133,670) 134,203	134,721	135,232
Change in o	over previous ;	+453	+634	+670	+696	+694	+661	+661	+677	+654	+592	+569	+565	+564	+604	+618	3 +533	+518	+511
Labour Fo	orce																		
Number of L	131,601	137,219	137,056	136,860	136,643	136,306	135,888	135,665	135,410	134,628	133,796	132,947	132,097	131,327	130,605	130,148	3 129,736	129,144	128,679
Change in La	abour Force o	+5,618	-163	-196	-217	-337	-418	-222	-255	-782	-832	-849	-850	-770	-722	-457	7 -412	-592	-465
Number of si	97,321	97,447 ±106	100,436	100,357	100,272	100,089	99,846	99,756	99,632	99,057	98,445	97,820	97,194	96,628	96,097	95,760) 95,457 7 -202	95,022	94,680
Junango III U		+120	-2,000	-10	-03	-104	-2-43	-09	-124	-575	-012	-025	-020	-300	-001	-557	-303	-400	-042

Compo	onents of	Populat	ion Cha	nge			Scenari	o Ai: 20	12 SNPF	P, Partia	I Catch	-up to 2	008 Hea	dship F	ates				
	Year beginn	ing July 1st	2014-15 2	015-16	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	
Births	2012 10 1		201410 2	01010	2010 11	2017 10	2010 10	2010 20	2020 21	202722	LOLL LO	2020 24	202420	2020 20	2020 27	2027 20	2020 20	2020 00	
Male	1,410	1,425	1,430	1,425	1,422	1,427	1,425	1,422	1,415	1,407	1,399	9 1,389	1,378	3 1,36	6 1,35	4 1,34	2 1,331	1 1,321	
Female All Births	1,343	1,357	1,362	1,357	1,355	1,359	1,358	1,354	1,348	1,340	1,333	3 1,323 2 2,712	2,690	2 1,30	1 1,28 6 2.64	9 1,278 3 2.620	B 1,268 D 2,599	3 1,258 9 2.579	
TFR	1.84	1.86	1.86	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	5 1.85	1.85	5 1.8	5 1.8	4 1.84	4 1.84	4 1.84	
Births input	•		•		•		•					•		•	•	•	•	•	
Deaths																			
Male	1,521	1,459	1,454	1,448	1,445	1,446	1,448	1,448	1,454	1,461	1,468	3 1,476	1,486	5 1,49	9 1,51	1 1,523	3 1,536	6 1,552	
Female	1,693	1,554	1,534	1,537	1,537	1,540	1,533	1,533	1,537	1,538	1,538	3 1,543	1,546	5 1,54	9 1,55	7 1,56	B 1,575	5 1,583	
SMR: male	3,214 s 116.0	108.9	2,969	2,966	2,981	2,966	95.1	2,981	2,991	2,999 88.7	3,007 86.8	3 85.0	83.4	. 3,04 I 82	9 3,06 0 80.0	5 3,09 6 79.1	2 77.9	9 76.8	
SMR: fema	lı 111.3	101.0	97.8	96.1	94.2	92.5	90.2	88.3	86.6	84.8	83.0) 81.5	79.9	9 78	4 77.	2 76.0	0 74.7	7 73.6	
SMR: perso	x 113.4	104.7	101.6	99.2	96.9	94.8	92.5	90.4	88.5	86.6	84.8	3 83.2	81.6	i 80. 7 92	2 78.	B 77.5	5 76.2	2 75.1	
Expectation	82.5	83.4	83.7	83.9	84.1	84.4	84.6	84.8	85.0	85.3	85.5	5 85.7	85.9	86	1 86.	3 86.5	5 86.7	7 86.8	
Expectation	80.3	81.2	81.5	81.7	82.0	82.3	82.5	82.8	83.0	83.3	83.5	5 83.7	84.0	84	2 84.	4 84.6	6 84.7	7 84.9	
Deaths inpu	• 11	•	•		•	•		•	•	•	•					•	•	•	
In-migrati	ion from the l	ЈК																	
Male	3,937	3,947	3,960	3,973	3,983	3,993	4,000	4,005	4,007	4,006	4,004	4,003	4,008	3 4,01	7 4,02	в 4,040	0 4,053	4,066	
Female All	4,033	4,042	4,051 8.012	4,057	4,060 8.043	4,062	4,062	4,058 8.063	4,052	4,043 8.049	4,032 8.036	2 4,026 3 8.029	4,028	3 4,03 5 8.05	6 4,04 3 8.07	6 4,060 4 8,100	0 4,074 0 8,127	4 4,088 7 8.154	
SMigR: mal	le 0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	1 0.	1 0.1	1 0.1	1 0.1	
SMigR: fem	าะ 0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	1 0.	1 0.1	1 0.1	1 0.1	
Migrants inj	p •		- C	1.1			- C	1.1				1.1	- C	- C	- C				
Out-migra	ation to the U	к																	
Male	3,850	3,844	3,842	3,846	3,827	3,812	3,798	3,781	3,768	3,751	3,738	3 3,732	3,746	3,74	0 3,73	5 3,73	1 3,740	3,741	
⊢emale All	4,005	3,997	3,979 7 821	3,976 7 822	3,948	3,924	3,894	3,871	3,840	3,825	3,813	3,791	3,778	3,78 7 52	9 3,78	5 3,784 0 7,512	4 3,788 4 7,529	3 3,797 3 7,537	
SMigR: mal	l€ 29.6	29.5	29.5	29.6	29.5	29.5	29.5	29.5	29.5	29.5	29.6	5 29.6	29.8	3 29	8 29.	8 29.1	7 29.8	3 29.7	
SMigR: ferr	ni 29.6	29.6	29.6	29.6	29.6	29.5	29.5	29.5	29.4	29.4	29.4	1 29.4	29.4	29	5 29.	5 29.4	4 29.4	4 29.4	
Migrants in	р •		•		•	•			•	•	•		•			•	•	•	
In-migrati	ion from Over	seas																	
Male	661	643	639	660	636	629	625	617	615	619	615	5 610	617	61	9 61	9 62:	3 634	4 630	
Female	654	644	639	645	628	622	612	605	602	607	604	1 599 1 209	602	2 60	8 60	B 616	6 621	1 623	
SMigR: mal	l€ 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: ferr	n: 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.	D 0.0	0.0	0.0	
Migrants in	р •	•	•		•	•			•	•	•					•	•	•	
Out-migra	ation to Overs	seas																	
Male	584	565	561	563	552	542	547	539	536	540	536	5 531	538	3 54	1 54	1 545	5 556	5 552	
Female	554	543	538	531	523	515	512	505	502	506	503	3 498	501	50	8 50	7 516	6 521	1 523	
SMigR: mal	i,136 l€ 81.7	78.9	78.3	78.7	77.3	76.2	77.2	76.5	76.6	77.6	77.6	5 1,028 5 77.3	78.9	9 79	6 79.1	7 1,06 9 80.8	B 82.5	5 81.9	
SMigR: ferr	14 96.3	94.7	94.2	93.1	92.0	91.2	91.2	90.7	90.9	92.4	92.6	6 92.5	93.9	9 95	7 96.0	0 98.0	0 99.2	2 99.8	
Migrants in	р•	•	•		•	•	•		•	•	•	•		•		•	•	•	
Migration	- Net Flows																		
UK	+115	+148	+191	+208	+268	+318	+370	+411	+451	+473	+485	5 +505	+512	2 +52	4 +55	3 +58	6 +598	8 +617	
Overseas	+176	+178	+178	+212	+190	+195	+179	+179	+179	+180	+180) +180	+180) +17	9 +17	9 +178	8 +178	8 +178	
Summary	of populatio	n change																	
Natural cha	ır -460	-231	-197	-203	-204	-200	-198	-206	-228	-252	-274	-307	-343	3 -38	2 -42	5 -47	1 -513	-556	
Net migratio	D +291	+326	+370	+419	+457	+513	+549	+590	+630	+652	+665	5 +685	+692	2 +70	4 +73	3 +76	4 +777	7 +795	
Crude Birth	10.06	10.17	10.20	+216	+253	+313	10.13	+364	10.03	9.96	+390) +3/6) 9.80	9.71	9 +32 I 9.6	1 +30	5 +29. 2 9.42	5 +264 2 9.34	+239 4 9.26	
Crude Deat	11.75	11.01	10.92	10.90	10.88	10.88	10.85	10.84	10.86	10.87	10.88	3 10.91	10.94	10.9	9 11.0	5 11.12	2 11.18	3 11.25	
Crude Net I	V 1.07	1.19	1.35	1.53	1.67	1.87	2.00	2.14	2.29	2.36	2.41	2.48	2.50) 2.5	4 2.6	4 2.75	5 2.79	9 2.85	
Summa	arv of Por	oulation	estimate	es/fore	casts														
	Population a	at mid-year																	
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	202	5 2026	3 2027	2028	2029	2030
0-4	14,651	14,644	14,670	14,547	14,437	14,417	14,454	14,458	14,446	14,425	14,393	3 14,339	14,267	14,18	1 14,08	5 13,98	1 13,871	1 13,760	13,652
5-10 11-15	16,812	17,026	17,283	17,678	18,097	18,259	18,279	18,321	18,379	18,289	18,193	3 18,177	18,211	18,20	8 18,18 6 15,69	3 18,145 7 15.55	5 18,094 8 15,626	18,017 5 15.574	17,922
16-17	6,788	6,789	6,637	6,290	6,064	5,881	5,740	5,613	5,614	5,624	5,764	, 15,627 1 6,020	6,130) 6,13	9 6,26	B 6,415	5 6,370) 6,258	6,232
18-59Fema	b 151,774	151,156	150,498	149,989	149,300	148,455	147,479	146,453	145,436	144,095	142,833	3 141,515	140,296	5 139,12	3 138,06	6 137,209	9 136,485	5 135,762	135,139
60/65 -74 75-84	39,026	39,393	40,023	40,650	41,239	41,901	42,421	42,843	43,405	44,138	43,954	44,235 1 24.704	44,860) 45,60) 25.87	9 46,28 0 26.36	3 46,85 ⁻ 2 26.724	1 47,417 5 26.973	7 47,858	48,211
85+	7,894	8,099	8,375	8,733	9,142	9,498	9,818	10,214	10,573	10,930	<u>1</u> 1,345	5 <u>1</u> 1,800	12,102	20,07 2012,39	<u>6</u> 12,67	<u> </u>	9 <u>1</u> 3,412	<u>2,202</u> 2 <u>1</u> 3,929	14,298
Total	273,697	273,528	273,624	273,796	274,012	274,266	274,579	274,929	275,314	275,715	276,116	3 276,506	276,885	5 277,23	4 277,55	5 277,862	2 278,155	5 278,419	278,658
Depender	nov ration	an aco c-	d say ratic																
0-15 / 16-6	5 0.28	an aye an 0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.31	0.3	1 0.3	1 0.3	1 0.31	1 0.31	0.31
65+ / 16-65	0.35	0.36	0.37	0.38	0.38	0.39	0.40	0.41	0.41	0.42	0.43	3 0.44	0.45	5 0.4	7 0.4	B 0.49	9 0.50	0.52	0.53
0-15 and 65	5 0.63	0.64	0.65	0.66	0.67	0.68	0.69	0.70	0.71	0.72	0.74	0.75	0.76	6 0.7	7 0.7	9 0.80	0.81	1 0.83	0.84
Median age	42.3	42.5 45.6	42.8 45.9	43.0 46.2	43.2 46.5	43.4 46.8	43.5	43.5 47 2	43.5 47.5	43.5 47 7	43.4 47 F	+ 43.4 3 48.0	43.5) 43.) 48	o 43.' 0 48.'	/ 43.8 D 48.0	ь 43.9 D 48.0	9 44.0 D 48.1	44.1 48 2
Sex ratio m	a 92.0	92.2	92.3	92.4	92.6	92.7	92.8	92.9	93.1	93.2	93.3	3 93.4	93.5	5 93	6 93.	7 93.8	B 93.9	9 94.0	94.0
Populatio	n impact of c	onstraint																	
Number of p	persons	-2	-1	+1	+1	+2	+2	+2	+3	+3	+3	3 +3	+4	۱ ÷	4 +	3 +3	3 +2	2 +2	+2
Hausert -	-																		
Number of	us - 118.576	119 007	119 612	120 251	120.915	121 577	122 246	122 913	123 591	124 248	124 849	3 125 423	125.99/	126 54	0 127 15	9 127 77	0 128.303	7 128.824	129 345
Change in I	Households ov	+432	+605	+639	+664	+662	+669	+667	+678	+657	+600) +574	+572	2 +56	6 +59	9 +61	1 +537	7 +517	+518
Number of	s 124,358	124,811	125,446	126,116	126,812	127,506	128,207	128,907	129,618	130,307	130,937	7 131,539	132,138	3 132,73	2 133,36	0 134,00	1 134,564	4 135,106	135,650
Change in	over previous	+453	+634	+670	+696	+694	+702	+700	+711	+689	+630	+602	+599	+59	4 +62	5 +640	u +563	3 +542	+544
Labour Fo	orce																		
Number of Change in I	L 131,601 Labour Force (137,219 +5.618	-163	136,860 _10F	136,643	136,306	135,888	135,665	135,410	134,628	133,796	5 132,947	132,097	r 131,32	7 130,60	5 130,148 2 _4="	B 129,736 7 _41'	5 129,144 2 _502	128,679
Number of	s 97,321	97,447	100,436	100,357	100,272	100,089	99,846	99,756	99,632	99,057	98,445	5 97,820	97,194	96,62	8 96,09	7 95,760	95,457	7 95,022	94,680
Change in	over previous	+126	+2,989	-79	-85	-184	-243	-89	-124	-575	-612	2 -625	-626	6 -56	6 -53	1 -33	7 -303	3 -436	-342

Scenario Aii: Reduction in Dwelling Vacancy

Components of Population Change Year beginning July 1st

Births	2012-13 2	2013-14 2	2014-15	2015-16 2	016-17	2017-18 2	018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	
Male	1,410	1,425	1,430	1,425	1,422	1,427	1,425	1,422	1,415	1,407	1,399	1,389	1,378	1,36	6 1,354	1,342	1,331	1,321	
Female	1,343	1,357	1,362	1,357	1,355	1,359	1,358	1,354	1,348	1,340	1,333	1,323	1,312	1,30	1 1,289	1,278	1,268	1,258	
All Births	2,754	2,782	2,792	2,783	2,777	2,786	2,783	2,776	2,763	2,748	2,732	2,712	2,690	2,66	6 2,643	2,620	2,599	2,579	
IFR Births input	1.84	1.86	1.86	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.8	5 1.84 •	1.84	1.84	1.84	
Deaths																			
Male	1,521	1,459	1,454	1,448	1,445	1,446	1,448	1,448	1,454	1,461	1,468	1,476	1,486	1,49	9 1,511	1,523	1,536	1,552	
Female All deaths	1,693	1,554	2 080	2,086	1,537	2 986	2 081	2 081	1,537	1,538	1,538	1,543	1,546	1,54	9 1,557	1,568	3 1,5/5	1,583	
SMR: males	116.0	108.9	105.9	102.8	100.0	97.5	95.1	92.7	90.6	88.7	86.8	85.0	83.4	82.0	0 80.6	79.2	77.9	76.8	
SMR: female	111.3	101.0	97.8	96.1	94.2	92.5	90.2	88.3	86.6	84.8	83.0	81.5	79.9	78.	4 77.2	76.0	74.7	73.6	
SMR: persor	113.4	104.7	101.6	99.2	96.9	94.8	92.5	90.4	88.5	86.6	84.8	83.2	81.6	80.3	2 78.8	77.5	76.2	75.1	
Expectation	77.8	78.5	78.8	79.2	79.5	79.8	80.1	80.4	80.7	81.0	81.2	81.5	81.7	82.0	0 82.2	82.4	82.6	82.8	
Expectation	80.3	81.2	81.5	81.7	82.0	82.3	82.5	82.8	83.0	83.3	83.5	83.7	84.0	84.3	2 84.4	84.6	84.7	84.9	
Deaths input	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
In-migratio	n from the l	JK																	
Male	3,937	3,947	3,960	3,973	3,983	3,993	4,000	4,005	4,007	4,006	4,004	4,003	4,008	4,01	7 4,028	4,040	4,053	4,066	
All	4,033	7,989	8,012	4,057	8,043	4,062	4,062	4,058	4,052	4,043	4,032	4,028	4,028	4,03	3 8,074	4,080	8,127	4,068	
SMigR: male	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.	1 0.1	0.1	0.1	0.1	
SMigR: fema	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.	1 0.1	0.1	0.1	0.1	
Migrants inp		•			•	•	•	•	•	•	•	•	•		•				
Out-migrat	ion to the U	к																	
Male	3,850	3,844	3,842	3,846	3,827	3,812	3,798	3,781	3,768	3,751	3,738	3,732	3,746	3,74	3,735	3,731	3,740	3,741	
Female	4,005	3,997	3,979	3,976	3,948	3,924	3,894	3,871	3,840	3,825	3,813	3,791	3,778	3,78	9 3,786	3,784	3,788	3,797	
All	7,855	7,841	7,821	7,822	7,775	7,736	7,692	7,652	7,608	7,576	7,551	7,524	7,524	7,52	9 7,520	7,514	7,528	7,537	
SMigR: male	29.6	29.5	29.5	29.6	29.5 20.6	29.5	29.5	29.5	29.5	29.5	29.6	29.6	29.8	29.	5 29.8 5 20.5	29.7	29.8	29.7	
Migrants inp	29.0	29.0	29.6	29.0	29.0	29.5	29.5	29.5	29.4	29.4	29.4	29.4	29.4	29.3	· 29.5	29.4	. 29.4	29.4	
In-migratio	n from Over	rseas																	
Male	661	643	639	660	636	629	625	617	615	619	615	610	617	61	9 619	623	634	630	
remaie All	1 315	1 286	1 277	1 306	1 264	1 252	1 237	1 223	1 217	1 226	1 210	1 208	1 220	1 22	5 608 8 1.227	1 230	1 255	1 253	
SMigR: male	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: fema	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 inp		•			•	•	•	•	•	•	•		•		•	•	•		
Out-migrat	ion to Overs	eas																	
Male	584	565	561	563	552	542	547	539	536	540	536	531	538	54	1 541	545	556	552	
Female	554	543	538	531	523	515	512	505	502	506	503	498	501	50	B 507	516	521	523	
All	1,138	1,108	1,099	1,094	1,074	1,057	1,059	1,043	1,038	1,046	1,039	1,028	1,040	1,04	B 1,047	1,061	1,077	1,075	
SMigR: male	81.7	78.9	78.3	78.7	77.3	76.2	77.2	76.5	76.6	77.6	77.6	77.3	78.9	79.0	5 79.9 7 06.0	80.8	82.5	81.9	
Migrants inp	90.5	. 94.7	94.2		92.0	91.2	. 91.2		• 90.9	92.4	92.0	92.5	• •		· 96.0	• 90.0	. 99.2		
Migration -	Net Flows																		
UK	+115	+148	+191	+208	+268	+318	+370	+411	+451	+473	+485	+505	+512	+52	4 +553	+586	+598	+617	
Overseas	41/0	+170	4170	7212	+150	+185	+175	+1/5	+175	+100	+100	+100	+100	+17	5 1 175	+170	41/0	+170	
Summary of	of populatio	n change																	
Natural char	-460	-231	-197	-203	-204	-200	-198	-206	-228	-252	-274	-307	-343	-38	2 -425	-471	-513	-556	
Net migratio	+291	+326	+370	+419	+457	+513	+549	+590	+630	+652	+665	+685	+692	+70-	4 +733	+764	+777	+795	
Crude Birth	-169	+95	+172	+216	+253	+313	+351	+384	+402	+401 9.96	+390	+378	+349	+32	1 +308 1 9.52	+293	9.34	+239	
Crude Death	11.75	11.01	10.92	10.90	10.88	10.88	10.85	10.84	10.86	10.87	10.88	10.91	10.94	10.9	9 11.05	11.12	11.18	11.25	
Crude Net N	1.07	1.19	1.35	1.53	1.67	1.87	2.00	2.14	2.29	2.36	2.41	2.48	2.50	2.5	4 2.64	2.75	2.79	2.85	
•					• -														
Summa	ry of Pop	bulation	estima	tes/fored	asts														
	Population a	at mid-year																	
0.4	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	5 2026	2027	2028	2029	2030
5-10	16,812	17.026	17,283	17.678	18.097	18,259	18,279	18,321	18,379	18,289	18,193	18,177	18,207	14,10	8 18.183	18,145	18.094	18,017	17,922
11-15	15,583	14,952	14,550	14,264	14,093	14,127	14,361	14,634	14,875	15,286	15,540	15,627	15,647	15,70	6 15,637	15,558	15,535	15,574	15,579
16-17	6,788	6,789	6,637	6,290	6,064	5,881	5,740	5,613	5,614	5,624	5,764	6,020	6,130	6,13	9 6,268	6,415	6,370	6,258	6,232
18-59Femal	151,774	151,156	150,498	149,989	149,300	148,455	147,479	146,453	145,436	144,095	142,833	141,515	140,296	139,12	3 138,066	137,209	136,485	135,762	135,139
75-84	39,026	39,393 21,469	40,023	40,650	41,239	41,901 21.728	42,421 22.027	42,843	43,405	44,138	43,954	44,235 24,794	44,860 25.370	45,60	9 46,283 0 26,362	46,851 26,725	47,417	47,858	48,211 27.625
85+	7,894	8,099	8,375	8,733	9,142	9,498	9,818	10,214	10,573	10,930	11,345	11,800	12,102	12,39	6 12,671	12,979	13,412	13,929	14,298
Total	273,697	273,528	273,624	273,796	274,012	274,266	274,579	274,929	275,314	275,715	276,116	276,506	276,885	277,23	4 277,555	277,862	278,155	278,419	278,658
Dependent	cy ratios, me	ean age and	d sex ratio	0.28	0.28	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.21	0.2	0.21	0.21	0.21	0.21	0.21
65+/16-65	0.35	0.36	0.37	0.38	0.38	0.39	0.40	0.41	0.41	0.42	0.43	0.44	0.45	0.4	7 0.48	0.49	0.50	0.52	0.53
0-15 and 65	0.63	0.64	0.65	0.66	0.67	0.68	0.69	0.70	0.71	0.72	0.74	0.75	0.76	0.7	7 0.79	0.80	0.81	0.83	0.84
Median age	42.3	42.5	42.8	43.0	43.2	43.4	43.5	43.5	43.5	43.5	43.4	43.4	43.5	43.	6 43.7	43.8	43.9	44.0	44.1
Median age	45.3	45.6	45.9	46.2	46.5	46.8	47.0	47.2	47.5	47.7	47.8	48.0	48.0	48.	0 48.0	48.0	48.0	48.1	48.2
Sex ratio ma	92.0	92.2	92.3	92.4	92.6	92.7	92.8	92.9	93.1	93.2	93.3	93.4	93.5	93.0	5 93.7	93.8	93.9	94.0	94.0
Population	impact of c	onstraint																	
Number of pe	rsons	-2	-1	+1	+1	+2	+2	+2	+3	+3	+3	+3	+4	+-	4 +3	+3	+2	+2	+2
Household	s																		
Number of H	- 118,576	119,008	119,612	120,251	120,915	121,577	122,207	122,837	123,483	124,107	124,671	125,213	125,752	126,29	0 126,865	127,454	127,962	128,457	128,944
Change in Ho	ouseholds ov	+432	+605	+639	+664	+662	+630	+630	+646	+623	+564	+542	+539	+53	B +576	+589	+508	+494	+487
Number of s	124,424	124,864	125,327	125,971	126,639	127,319	127,952	128,585	129,248	129,873	130,436	130,990	131,526	132,07	5 132,649	133,237	133,754	134,243	134,723
Change in or	ver previous	+440	+464	+643	+669	+679	+633	+633	+663	+625	+563	+553	+536	+54	9 +574	+588	+517	+489	+481
Labour For	ce																		
Number of L	131,601	137,219	137,056	136,860	136,643	136,306	135,888	135,665	135,410	134,628	133,796	132,947	132,097	131,32	7 130,605	130,148	129,736	129,144	128,679
Change in La	bour Force (+5,618	-163	-196	-217	-337	-418	-222	-255	-782	-832	-849	-850	-77	0 -722	-457	-412	-592	-465
Change in or	97,321 ver previous	97,447 +126	+2.989	-79	-85	-184	99,846 -243	99,756 -89	99,632	99,057	98,445 -612	97,820	97,194 -626	96,62	96,097 6 -531	95,760	95,457	95,022	94,680 -342
e																			

Compone	ents of I	Populati	on Char	nge			Scenario	9 B: 5 Ye	ear Migra	ation Tr	end								
Ye	ear beginnii	ng July 1st .			0040.47	017.10					0.000 0.0	0000.04	000405	0005.00	0.000 07	0007.00	0000.00	0000.00	
20 Births	12-13 20)13-14 2	014-15 2	015-16	2016-17 2	017-18	2018-19 2	019-20 2	2020-21 2	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	
Male	1,455	1,421	1,424	1,418	1,412	1,413	1,407	1,400	1,388	1,376	1,363	1,348	1,332	1,316	1,300	1,284	1,268	1,253	
Female	1,385	1,353	1,356	1,350	1,345	1,346	1,340	1,333	1,322	1,310	1,298	1,284	1,269	1,254	1,238	1,223	1,208	1,193	
All Births	2,840	2,774	2,781	2,768	2,757	2,759	2,748	2,732	2,710	2,686	2,661	2,632	2,601	2,570	2,538	2,506	2,476	2,446	
Births input	1.90	1.86	1.86	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.84	1.84	1.84	1.84	
Deaths	1 507																		
Male Female	1,537	1,454	1,447	1,439	1,434	1,433	1,435	1,433	1,437	1,442	1,447	1,452	1,460	1,471	1,480	1,490 1535	1,500	1,514	
All deaths	3,320	2,998	2,971	2,966	2,960	2,963	2,957	2,955	2,961	2,965	2,967	2,974	2,982	2,993	3,007	3,024	3,039	3,058	
SMR: males	117.2	108.9	105.9	102.8	100.0	97.5	95.1	92.7	90.6	88.7	86.8	85.0	83.4	82.0	80.6	5 79.2	77.9	76.8	
SMR: female	117.2	101.0	97.8	96.1	94.2	92.5	90.2	88.3	86.6	84.8	83.0	81.5	79.9	78.4	77.2	76.0	74.7	73.6	
SMR: persor	117.2	104.7	101.6	99.2	96.9	94.8	92.5	90.4	88.5	86.6	84.8	83.2	81.6	80.1	78.8	5 77.5 1 92.5	92.7	75.1	
Expectation	81.7	83.4	83.7	83.9	84.2	84.4	84.6	84.9	85.1	85.3	85.6	85.8	86.0	86.2	86.4	86.6	86.8	86.9	
Expectation	79.8	81.2	81.5	81.8	82.1	82.3	82.6	82.9	83.1	83.4	83.6	83.9	84.1	84.3	84.5	6 84.7	84.9	85.0	
Deaths input	•																		
In-migration f	from the U	к																	
Vale	3,994	3,856	3,858	3,861	3,865	3,869	3,872	3,877	3,880	3,884	3,888	3,891	3,892	3,893	3,893	3,892	3,892	3,892	
emale	4,091	3,948	3,946	3,943	3,939	3,935	3,932	3,928	3,924	3,920	3,916	3,913	3,912	3,911	3,911	3,912	3,912	3,913	
4//	8,085	7,804	7,804	7,804	7,804	7,804	7,804	7,804	7,804	7,804	7,804	7,804	7,804	7,804	7,804	7,804	7,804	7,804	
SMigR: male	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Migrants inp	• 0.1	• 0.1	• 0.1	• 0.1	• 0.1	• 0.1	• 0.1	• 0.1	• 0.1	• 0.1	• 0.1	• 0.1	• 0.1	• 0.1	•	• 0.1	• 0.1	• 0.1	
Out-migration	n to the UM	í .																	
Aale amol-	3,964	3,881	3,889	3,892	3,897	3,901	3,909	3,912	3,921	3,919	3,919	3,927	3,941	3,932	3,931	3,930	3,933	3,929	
emalê M	4,122 8,086	4,035 7,916	4,027	4,024 7 916	4,020	4,015 7,916	4,008 7 916	4,004	3,996	3,997	3,997	3,989	3,976	3,984	3,985	3,986	3,983	3,988 7 916	
MigR: male	30.4	29.8	29.9	29.9	30.0	30.2	30.4	30.6	30.9	31.1	31.3	31.5	31.8	31.9	32.0	32.0	32.1	32.1	
MigR: fema	30.4	29.9	29.9	30.0	30.1	30.3	30.5	30.7	30.9	31.1	31.4	31.5	31.6	31.8	31.9	32.0	32.0	32.1	
figrants inp	•	•				•		1.1		•	•	1.1	•	•	•	1.1		•	
n-migration (from Over	eas																	
Aale	330	413	412	414	413	413	412	412	412	412	412	412	412	412	412	412	412	412	
emale	291	363	363	361	363	362	363	363	363	363	363	363	363	363	363	363	363	363	
A <i>ll</i>	621	776	776	776	776	776	776	776	776	776	776	776	776	776	776	5 776	776	776	
MigR: male	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	
MigR: tema Migrante inn	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	
ngranta mp																			
Out-migration	n to Overs	eas																	
fale	350	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	
emale	271	224	224	224	224	224	224	224	224	224	224	224	224	224	224	224	224	224	
MigR: male	621 48.9	512 40.3	512 40.2	512 40 3	512 40.4	512 40.5	512 40.7	512	512 41 3	512	512 42.0	512 42.4	512	512 43.1	512 43.4	: 512 . 43.6	512	512 44.0	
SMigR: fema	47.1	39.0	39.1	39.2	39.4	39.7	40.0	40.4	40.8	41.3	41.8	42.3	42.8	43.3	43.7	44.0	44.2	44.5	
Migrants inp	· •	· ·	•		· · ·	•	· · ·	· ·	· ·	•			•	•	· ·	· · ·	· · ·	•	
Migration - No	et Flows	112	112	112	112	112	112	112	112	112	112	112	112	112	112	142	112	112	
Overseas	-0	+264	+264	+264	+264	+264	+264	+264	+264	+264	+264	+264	+264	+264	+264	+264	+264	+264	
Summary of	population	change																	
Natural char	-480	-224	-191	-198	-204	-204	-209	-222	-250	-279	-306	-342	-381	-423	-468	-518	-564	-612	
let change	-481	+152	+152	+152	-52	+152	+152	+152	-99	+152	-154	+152	+152	+152	+152	· +152	-412	+152	
Crude Birth	10.39	10.15	10.18	10.14	10.10	10.11	10.07	10.01	9.94	9.85	9.77	9.67	9.56	9.45	9.34	9.24	9.14	9.05	
Crude Death	12.14	10.97	10.88	10.86	10.84	10.86	10.83	10.83	10.85	10.87	10.89	10.92	10.96	11.01	11.07	11.15	11.22	11.31	
Crude Net N	0.00	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	6 0.56	0.56	0.56	
Summarv		ulation	estimate	es/fore	casts														
Pr		mid-vear	connan	00/10/10	04010														
	2012	2013	2014	2015	2016	2017	2018	2010	2020	2021	2022	2022	2024	2025	2026	20.97	2029	2020	
-4	14,651	14,718	14,724	14,578	14,445	14,395	14,325	14,290	14,233	14,165	14,085	13,982	13,862	13,729	13,587	13,436	13,278	13,120	
-10	16,812	17,015	17,257	17,626	18,014	18,143	18,203	18,206	18,220	18,079	17,934	17,867	17,782	17,720	17,633	17,532	17,417	17,276	1
1-15	15,583	14,887	14,478	14,193	14,013	14,043	14,255	14,508	14,720	15,098	15,316	15,370	15,415	15,427	15,312	15,189	15,122	15,053	1
0-1/ 8-59Ecmol	6,788	6,616	6,333	5,936	5,703	5,519	5,377	5,255	5,254	5,260	5,383	5,605	5,695	5,698	5,811	5,927	5,855	5,784	
0/65 -74	39,026	39,386	40,020	40,649	41,233	41,882	42,402	42,825	43,402	44,138	43.957	44.227	44.838	45.564	46.219	46.762	47.296	47,681	15
5-84	21,169	21,417	21,510	21,538	21,498	21,559	21,829	22,177	22,355	22,686	23,838	24,530	25,094	25,577	26,042	26,379	26,611	26,898	-
5+	7,894	8,025	8,306	8,663	9,074	9,429	9,740	10,112	10,432	10,743	11,104	11,507	11,768	12,028	12,272	12,558	12,963	13,452	1
otal	273,697	273,216	273,144	273,105	273,059	273,008	272,955	272,898	272,827	272,729	272,602	272,448	272,257	272,029	271,758	271,441	271,075	270,663	27
ependency	ratios. me	an age and	sex ratio																
	0.28	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.30	0.31	0.31	0.31	0.31	0.31	
-15 / 16-65		0.26	0.37	0.38	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.47	0.49	0.50	0.51	0.53	
-15 / 16-65 5+ / 16-65	0.35	0.50	0.05	0.66	0.67	0.68	0.69	0.70	0.71	0.73	0.74	0.75	0.76	0.78	0.79	0.81	0.82	0.84	
15 / 16-65 5+ / 16-65 15 and 65	0.35 0.63	0.64	0.65			42.4	43.5	43.6	43.6	43.6	43.7	43.7	43.8	43.9	44.0	44.2	44.3	44.5	
15 / 16-65 + / 16-65 15 and 65 edian age	0.35 0.63 42.3	0.64 42.5	42.8	43.0	43.2	43.4		a 7 A	47.6	47.9	48.1	48.3	48.5	48.6 93.6	48.6	48.7	48.7	48.9	
15 / 16-65 5+ / 16-65 15 and 65 edian age edian age	0.35 0.63 42.3 45.3 92.0	0.64 42.5 45.6	42.8 45.9 92.3	43.0 46.2	43.2 46.5 92.6	46.8	47.1	97.9	03.1	03.2	03.3	0.2 %				. 0.50	02.0	0.4.0	
15 / 16-65 5+ / 16-65 15 and 65 edian age edian age ax ratio ma	0.35 0.63 42.3 45.3 92.0	0.64 42.5 45.6 92.2	42.8 45.9 92.3	43.0 46.2 92.5	43.2 46.5 92.6	46.8 92.7	47.1 92.9	93.0	93.1	93.2	93.3	93.4	93.6		93.7	93.8	93.9	94.0	
-15 / 16-65 5+ / 16-65 -15 and 65 ledian age ledian age ex ratio ma	0.35 0.63 42.3 45.3 92.0	0.64 42.5 45.6 92.2	42.8 45.9 92.3	43.0 46.2 92.5	43.2 46.5 92.6	46.8 92.7	47.1 92.9	93.0	93.1	93.2	93.3	93.4	93.6		93.7	93.8	93.9	94.0	
-15 / 16-65 5+ / 16-65 -15 and 65 ledian age ledian age ex ratio ma	0.35 0.63 42.3 45.3 92.0	0.64 42.5 45.6 92.2	0.65 42.8 45.9 92.3	43.0 46.2 92.5	43.2 46.5 92.6	43.4 46.8 92.7	47.1 92.9	93.0	93.1	93.2	93.3	93.4	93.0		93.7	93.8	93.9	94.0	
-15 / 16-65 5+ / 16-65 -15 and 65 ledian age ledian age ex ratio ma opulation in umber of perso	0.35 0.63 42.3 45.3 92.0	0.64 42.5 45.6 92.2	0.65 42.8 45.9 92.3	43.0 46.2 92.5	43.2 46.5 92.6	46.8 92.7	47.1 92.9	93.0	93.1	93.2	93.3	93.4	93.6		93.7	° 93.8	93.9	94.0	
15 / 16-65 5+ / 16-65 15 and 65 ledian age ledian age ex ratio ma opulation in umber of perso ouseholds	0.35 0.63 42.3 45.3 92.0	0.64 42.5 45.6 92.2	0.65 42.8 45.9 92.3	43.0 46.2 92.5	43.2 46.5 92.6	45.4 46.8 92.7	47.1 92.9	93.0	93.1	93.2	93.3	93.4	93.0		93.7	° 93.8	93.9	94.0	
15 / 16-65 5+ / 16-65 15 and 65 edian age edian age edian age eax ratio ma opulation in umber of perso ouseholds umber of H	0.35 0.63 42.3 45.3 92.0 mpact of co	0.64 42.5 45.6 92.2 onstraint	0.65 42.8 45.9 92.3 119,370	43.0 46.2 92.5 119,922	43.2 46.5 92.6 120,448	45.4 46.8 92.7 120,958	47.1 92.9 121,435	93.0 121,935	93.1	93.2	93.3 123,182	93.4	123,862	124,194	124,550	93.8	93.9	94.0	1
15 / 16-65 5+ / 16-65 15 and 65 declan age ledian age ex ratio ma opulation in umber of perso ouseholds umber of H hange in Hous	0.35 0.63 42.3 45.3 92.0 npact of co ms	0.64 42.5 45.6 92.2 onstraint 118,806 +230	0.65 42.8 45.9 92.3 119,370 +564	43.0 46.2 92.5 119,922 +552	43.2 46.5 92.6 120,448 +526	45.4 46.8 92.7 120,958 +510	47.1 92.9 121,435 +477	93.0 121,935 +501	93.1 122,412 +476	93.2 122,829 +418	93.3 123,182 +352	93.4 123,517 +335	93.6 123,862 +346	124,194 +332	93.7 124,550 +355	93.8) 124,899 ; +350	93.9 125,161 +261	94.0 125,406 +246	1
15 / 16-65 5+ / 16-65 15 and 65 edian age edian age ex ratio ma opulation in umber of perso ouseholds umber of k	0.35 0.63 42.3 45.3 92.0 npact of co nns 118,576 seholds ov 124,358	0.64 42.5 45.6 92.2 onstraint 118,806 +230 124,600	0.65 42.8 45.9 92.3 119,370 +564 125,192	43.0 46.2 92.5 119,922 +552 125,771	43.2 46.5 92.6 120,448 +526 126,322	43.4 46.8 92.7 120,958 +510 126,857	47.1 92.9 121,435 +477 127,357	121,935 +501 127,882	93.1 122,412 +476 128,381	93.2 122,829 +418 128,819	93.3 123,182 +352 129,189	93.4 123,517 +335 129,540	93.6 123,862 +346 129,903	124,194 +332 130,251	124,550 +355 130,624	93.8) 124,899 ; +350 ; 130,990	93.9 125,161 +261 131,264	94.0 125,406 +246 131,522	1
15 / 16-65 14 / 16-65 15 and 65 adian agei acratio ma acration in amber of person ouseholds amber of F anage in Hous anage in over	0.35 0.63 42.3 45.3 92.0 mpact of co ons 118,576 seholds ov 124,358 previous	0.64 0.64 42.5 45.6 92.2 onstraint 118,806 +230 124,600 +241	0.65 42.8 45.9 92.3 119,370 +564 125,192 +592	43.0 46.2 92.5 119,922 +552 125,771 +579	43.2 46.5 92.6 120,448 +526 126,322 +552	43.4 46.8 92.7 120,958 +510 126,857 +535	47.1 92.9 121,435 +477 127,357 +500	121,935 +501 127,882 +525	93.1 122,412 +476 128,381 +499	93.2 122,829 +418 128,819 +438	93.3 123,182 +352 129,189 +370	93.4 123,517 +335 129,540 +351	93.6 123,862 +346 129,903 +362	124,194 +332 130,251 +348	93.7 124,550 +355 130,624 +373	93.8) 124,899 5 +350 1 130,990 8 +367	93.9 125,161 +261 131,264 +274	94.0 125,406 +246 131,522 +258	
15 / 16-65 5 - / 16-65 15 and 65 edian age ax ratio ma opulation in umber of perso ouseholds umber of I- nange in Hous umber of s	0.35 0.63 42.3 45.3 92.0 mpact of co ms 118,576 seholds ov 124,358 r previous	0.64 42.5 45.6 92.2 onstraint 118,806 +230 124,600 +241	0.65 42.8 45.9 92.3 119,370 +564 125,192 +592	43.0 46.2 92.5 119,922 +552 125,771 +579	43.2 46.5 92.6 120,448 +526 126,322 +552	43.4 46.8 92.7 120,9558 +510 126,857 +535	47.1 92.9 121,435 +477 127,357 +500	121,935 +501 127,882 +525	93.1 122,412 +476 128,381 +499	93.2 122,829 +418 128,819 +438	93.3 123,182 +352 129,189 +370	93.4 123,517 +335 129,540 +351	93.8 123,862 +346 129,903 +362	124,194 +332 130,251 +348	124,550 +355 130,624 +373	93.8) 124,899 ; +350 ; 130,990 ; +367	93.9 125,161 +261 131,264 +274	94.0 125,406 +246 131,522 +258	1
15 / 16-65 5+ / 16-65 15 and 65 edian age edian age edian age ex ratio ma oppulation in umber of perso ouseholds umber of I- hange in Hous umber of s hange in over abour Force	0.35 0.63 42.3 45.3 92.0 mpact of co mas 118,576 seholds ov 124,358 r previous	0.64 42.5 45.6 92.2 mostraint 118.806 +230 124,600 +241	0.65 42.8 45.9 92.3 119,370 +564 125,192 +592	43.0 46.2 92.5 119,922 +552 125,771 +579	43.2 46.5 92.6 120,448 +526 126,322 +552	46.8 92.7 120,958 +510 126,857 +535	47.1 92.9 121,435 +477 127,357 +500	121,935 +501 127,882 +525	93.1 122,412 +476 128,381 +499	93.2 122,829 +418 128,819 +438	93.3 123,182 +352 129,189 +370	93.4 123,517 +335 129,540 +351	93.8 123,862 +346 129,903 +362	124,194 +332 130,251 +348	124,550 +355 130,624 +373	93.8) 124,899 ; +350 ; 130,990 ; +367	93.9 125,161 +261 131,264 +274	94.0 125,406 +246 131,522 +258	1
15 / 16-65 5- / 16-65 15 and 65 edian age edian age edian age ex ratio ma opulation in umber of perso ouseholds umber of s hange in over abour Force unber of L	0.35 0.63 42.3 45.3 92.0 mpact of co ms 118,576 seholds ov 124,358 r previous	0.64 42.5 45.6 92.2 enstraint 118,806 +230 124,600 +241	0.65 42.8 45.9 92.3 119,370 +564 125,192 +592	43.0 46.2 92.5 119,922 +552 125,771 +579	43.2 46.5 92.6 120,448 +526 126,322 +552	46.8 92.7 120,958 +510 126,857 +535	47.1 92.9 121,435 +477 127,357 +500 135,218	121,935 +501 127,882 +525 134,779	93.1 122,412 +476 128,381 +499 134,283	93.2 122,829 +418 128,819 +438 133,239	93.3 123.182 +352 129.189 +370 132,127	93.4 123,517 +335 129,540 +351 130,992	123,862 +346 129,903 +362 129,841	124,194 +332 130,251 +348 128,771	124,550 +355 130,624 +373 127,737	93.8 124.899 5 +350 130,990 8 +367 7 126,943	93.9 125,161 +261 131,264 +274 126,195	94.0 125,406 +246 131,522 +258 125,235	1
-15 / 16-65 54 / 16-65 -15 and 65 tedian age tedian age exeratio ma 'opulation in lumber of perso louseholds umber of I- hange in lous umber of s hange in lous umber of L hange in Labo	0.35 0.63 42.3 92.0 npact of cc ons 118,576 seholds ov 124,358 previous 131,601 urr Force (07.0°	0.64 42.5 45.6 92.2 enstraint 118,806 +230 124,600 +241 137,006 +5,404	0.65 42.8 45.9 92.3 119,370 +564 125,192 +592 136,868 -138	43.0 46.2 92.5 119,922 +552 125,771 +579 136,646 -221	43.2 46.5 92.6 120,448 4526 126,322 4552 136,330 -317	46.8 92.7 120,958 +510 126,857 +535 135,840 -489 00 2**	47.1 92.9 121,435 +477 127,357 +500 135,218 -622 -0.014	121,935 +501 127,882 +525 134,779 -439 00 105	93.1 122,412 +476 128,381 +499 134,283 -496 8,900	93.2 122,829 +418 128,819 +438 133,239 -1,045	93.3 123.182 +352 129.189 +370 132.127 -1.111	93.4 123,517 +335 129,540 +351 130,992 -1,135	123,862 +346 129,903 +362 129,841 -1,150	124,194 +332 130,251 +348 128,771 -1,071	124,550 +355 130,624 +373 127,737 -1,034	93.8 9 124.899 5 +350 1 130,990 8 +367 7 126,943 4 -794	93.9 125.161 131.264 131.264 126.195 126.195	94.0 125,406 +246 131,522 +258 125,235 -960	1. 1: 1:

Compone	ents of	Populat	ion Char	nge			Scenario	C: 10 \	rear Mig	ration 1	rend								
Ye 20	ear beginni 112-13	ng July 1st 013-14 ?	014-15 2	015-16	2016-17	2017-18	2018-19 2	019-20	2020-21	021-22	2022-2.3	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	
irths		273-14 2	2.4-13 2	010-10	2010-17		2010-18 2	0.0-20 2		021-22		2023-24	2024-23	2023-20	2020-21	2027-20	2020-29	2020-30	
ale	1,455	1,421	1,421	1,412	1,403	1,401	1,393	1,382	1,368	1,353	1,338	1,320	1,302	1,284	1,266	1,248	1,231	1,215	
emale	1,385	1,353	1,354	1,345	1,336	1,335	1,326	1,316	1,303	1,289	1,274	1,258	1,240	1,223	1,206	5 1,189	1,173	1,157	
Births	2,840	2,774	2,775	2,756	2,740	2,736	2,719	2,698	2,671	2,642	2,612	2,578	2,543	2,507	2,472	2,437	2,404	2,372	
rths input	1.90	1.86	1.86	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.84	1.84	1.84	1.84	
eaths																			
ale	1,537	1,454	1,447	1,438	1,433	1,432	1,433	1,431	1,434	1,439	1,443	1,448	1,456	1,466	1,475	1,484	1,494	1,507	
male I doaths	1,783	1,544	1,524	1,526	1,526	1,529	1,521	1,521	1,523	1,521	1,518	1,520	1,519	1,519	1,523	1,531	1,536	1,540	
/R: males	3,320	2,998	2,971	2,965	2,959	2,961	2,954	2,952	2,957	2,961	2,902	2,900	2,975	2,965	2,990	5 3,015 5 79.2	77.9	76.8	
IR: female	117.2	101.0	97.8	96.1	94.2	92.5	90.2	88.3	86.6	84.8	83.0	81.5	79.9	78.4	77.2	76.0	74.7	73.6	
IR: persor	117.2	104.7	101.6	99.2	96.9	94.8	92.5	90.4	88.5	86.6	84.8	83.2	81.6	80.1	78.8	77.5	76.2	75.1	
pectation	77.7	78.6	78.9	79.3	79.6	79.9	80.2	80.6	80.8	81.1	81.4	81.6	81.9	82.1	82.3	82.5	82.7	82.9	
pectation	81.7	83.4	83.7	83.9	84.2	84.4	84.6	84.9	85.1	85.3	85.6	85.8	86.0	86.2	86.4	86.6	86.8	86.9	
aths input	79.8	81.2	81.5	81.8	82.1	82.3	82.6	82.9	83.1	83.4	83.6	83.9	84.1	84.3	84.5	i 84.7	84.9	85.1	
migration f	from the U	к																	
ale	3,994	3,844	3,846	3,849	3,853	3,857	3,861	3,865	3,868	3,873	3,877	3,880	3,881	3,882	3,881	3,881	3,880	3,880	
male	4,091	3,937	3,935	3,932	3,928	3,924	3,920	3,916	3,913	3,908	3,904	3,901	3,900	3,899	3,900	3,900	3,901	3,901	
ligR; mal4	0,085	0.1	7,781	7,781	7,781	/,/81	7,781	7,781	7,781	7,781	7,781	7,781	7,781	7,781	7,781	/,/81	1,781	7,781	
igR: fema	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
rants inp	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	
t-migratio	n to the UI	(
8	3,964	3,891	3,899	3,902	3,906	3,911	3,918	3,922	3,930	3,929	3,929	3,937	3,951	3,942	3,941	3,940	3,943	3,938	
ıdle	4,122	4,045	4,037	4,034 7 094	4,029	4,025 7 036	4,018	4,014 7 03¢	4,006	4,007 7 036	4,007	3,999	3,985	3,994	3,995	3,996	3,993	3,997	
gR: male	30.4	29.9	30.0	30.1	30.2	30.4	30.7	30.9	31.3	31.5	31.8	32 0	32.3	32.5	32.6	. ,	32.8	32.9	
gR: fem:	30.4	29.9	30.0	30.1	30.3	30.5	30.7	31.0	31.2	31.5	31.8	32.0	32.1	32.3	32.5	32.6	32.7	32.8	
ants inp		•		•	•	•	•	•	•	•			•	•	•	•	•	÷	
nigration f	from Over	seas	200	404	400	400	200	200	200	200	200	200	200	200	200		200	200	
nale	33U 201	400	399	401	400	400	399	399	399	399	399	399	399	399	399	, 399 . 350	399	399	
	621	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	751	
igR: male	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	
gR: fema	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	
ants inp			•	•	•	•		•	•	•		1	•	•		•	•	•	
-migratio	n to Overs	eas																	
ie nale	288	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	
ndle	224 540	292	292	292	292	292	292	292	292	292	292	292	292	292	292	292	292	292	
iαR: mal∉	40.2	52.6	52.6	52.8	53.0	53.3	53.7	54.1	54.6	55.2	55.8	56.4	56.9	57.4	57.9	58.3	58.6	58.9	
ligR: fema	38.8	50.9	51.1	51.4	51.7	52.2	52.7	53.3	54.0	54.6	55.4	56.2	56.9	57.6	58.2	58.7	59.1	59.5	
rants inp	· ·	•	•	•	•	•		•	•	•	•		•	•	•	•	•	•	
gration - N	et Flows																		
erseas	-1 +109	-155 +83	-155 +83	-155 +83	-155 +83	-155 +83	-155 +83	-155 +83	-155 +83	-155 +83	-155 +83	-155 +83	-155 +83	-155 +83	-155 +83	i -155 i +83	-155 +83	-155 +83	
mmary of	populatio	n change																	
tural char	-480	-224	-196	-208	-219	-225	-235	-253	-286	-319	-350	-391	-433	-478	-526	-578	-626	-676	
migratio	+108	-72	-72	-72	-72	-72	-72	-72	-72	-72	-72	-72	-72	-72	-72	-72	-72	-72	
i change ide Birth I	-372	-296	-268	-281	-291	-297	-307	-325	-358	-391	-423	-463	-505	-550	-599	9 -650	-698	-748	
ide Death	12.14	10.97	10.89	10.87	10.86	10.89	10.87	10.87	10.91	10.94	10.96	11.00	11.04	11.10	11.18	11.27	11.35	11.45	
ide Net N	0.40	-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	-0.27	-0.27	
ummary	of Pop	ulation	estimate	es/fore	casts														
Po	opulation a	t mid-year	2014	2015	2016	2017	2019	2010	2020	2021	2022	2022	2024	2025	2026	2027	2029	2020	
	2012	2013	2014	2015	2016	14.336	2018 14.242	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
0	16,812	17,017	17,253	17,615	17,994	18,113	18,164	18,155	18,154	17,993	17,825	17,732	17,617	17,522	17,401	17,267	17,119	16,948	
15	15,583	14,889	14,475	14,185	14,000	14,024	14,231	14,478	14,683	15,055	15,265	15,311	15,348	15,349	15,220	15,079	14,992	14,899	
17	6,788	6,618	6,330	5,931	5,696	5,509	5,366	5,241	5,238	5,242	5,363	5,581	5,669	5,669	5,780	5,891	5,816	5,741	
9Femal	151,774	151,246	150,424	149,643	148,611	147,383	145,978	144,491	142,990	141,152	139,391	137,582	135,839	134,138	132,551	131,144	129,834	128,517	
55 - 74 34	39,026 21,169	39,391 21 418	40,015	40,634 21 535	41,208	41,847 21 551	42,358 21 818	42,773 22 162	43,340 22 335	44,065 22 661	43,875 23.807	44,133	44,732 25.050	45,444 25.527	46,085	46,613	47,131	47,499 26.824	
	7,894	8,025	8,305	8,661	9,071	9,425	9,735	10,106	10,424	10,734	11,094	11,496	11,756	12,014	12,256	12,540	12,943	13,429	
1	273,697	273,325	273,029	272,761	272,481	272,189	271,892	271,585	271,259	270,901	270,510	270,087	269,625	269,120	268,570	267,971	267,321	266,622	
endency	ratios, me	an age and	l sex ratio	0.28	0.28	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.31	0.31	0.31	0.34	0.31	0.31	
/ 16-65	0.35	0.36	0.37	0.38	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.48	0.49	0.51	0.52	0.54	
and 65	0.63	0.64	0.65	0.66	0.67	0.68	0.69	0.70	0.72	0.73	0.74	0.76	0.77	0.78	0.80	0.81	0.83	0.85	
lian age	42.3	42.5	42.8	43.1	43.3	43.5	43.6	43.7	43.8	43.8	43.9	43.9	44.0	44.2	44.3	44.5	44.6	44.8	
ian age ratio ma	45.3 92.0	45.6 92.2	45.9 92.3	46.3 92.4	46.6 92.5	46.9 92.7	47.2 92.8	47.5 92.9	47.8 93.0	48.1 93.1	48.3 93.2	48.6 93.3	48.7 93.3	48.9 93.4	49.0 93.5) 49.1 i 93.5	49.1 93.6	49.3 93.6	
-																			
bulation in ther of perso	npact of com	onstraint																	
useholds																			
mber of F	118,576	118,852	119,328	119,787	120,217	120,627	121,000	121,393	121,758	122,062	122,298	122,515	122,739	122,948	123,178	123,401	123,535	123,652	
ange in Hous	seholds ov	+277	+476	+460	+430	+410	+373	+393	+365	+304	+236	+216	+224	+209	+231	+223	+134	+117	
ange in over	124,358 previous	124,648 +290	125,147 +499	125,629 +482	126,080	126,510 +430	126,901 +392	127,313 +412	127,696 +383	128,015 +319	128,263 +248	128,489 +227	128,725 +235	128,944 +219	129,185 +242	129,419 +234	129,560 +141	129,683 +123	
our Force	131 604	137 090	136 790	136 403	125.020	135.264	134 475	133 000	132 205	131.00.4	120 740	100.445	129 100	126 964	105 600	124 740	100 700	122 675	
nge in Labo	ur Force (+5,487	-300	-36,403	-483	-656	-789	-607	-663	-1,211	-1,277	-1,301	-1,315	-1,235	1∠0,668 -1,197	, 124,710 -958	-912	-1,123	
nher of s	97,321	97,354	100,240	100,021	99,742	99,324	98,808	98,435	98,010	97,118	96,179	95,221	94,254	93,345	92,464	91,760	91,088	90,262	
												0.57							

Ye 201 Vintha		Spulati	on ondi	.90			Joenaniu			onu								
	ar beginnii 12-13 21	ng July 1st . 013-14 2	014-15 2	015-16 2	016-17 3	2017-18 2	018-19 2	019-20 2	020-21 2	021-22 2	022-23 2	023-24 2	024-25 2	025-26 2	026-27 2	027-28 2	028-29 2	029-30
arths		2																
ale	1,410	1,414	1,331	1,319	1,309	1,308	1,305	1,296	1,287	1,288	1,292	1,295	1,297	1,299	1,301	1,298	1,295	1,294
emale	1,343	1,347	1,268	1,256	1,246	1,246	1,243	1,234	1,225	1,227	1,230	1,233	1,236	1,237	1,239	1,236	1,233	1,233
I Births	2,754	2,761	2,599	2,575	2,555	2,554	2,547	2,531	2,512	2,515	2,522	2,527	2,533	2,536	2,539	2,534	2,527	2,527
rths input	1.84	1.86	1.86	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.84	1.84	1.84	1.84
aths																		
ale	1,521	1,453	1,429	1,420	1,415	1,415	1,417	1,415	1,419	1,427	1,435	1,443	1,454	1,467	1,478	1,489	1,501	1,517
male	1,693	1,549	1,508	1,510	1,510	1,513	1,506	1,507	1,509	1,511	1,513	1,518	1,521	1,524	1,532	1,542	1,548	1,556
I deaths	3,214	3,002	2,937	2,931	2,924	2,928	2,923	2,922	2,928	2,939	2,947	2,961	2,975	2,991	3,010	3,031	3,049	3,072
IR: males	116.0	108.9	105.9	102.8	100.0	97.5	95.1	92.7	90.6	88.7	85.8	85.0	83.4 70.0	82.0	80.6 77.2	79.2	77.9	75.8
VIR: persor	113.4	104.7	101.6	99.2	96.9	94.8	92.5	90.4	88.5	86.6	84.8	83.2	81.6	80.1	78.8	77.5	76.2	75.1
pectation	77.8	78.6	78.9	79.3	79.6	79.9	80.2	80.6	80.8	81.1	81.4	81.6	81.9	82.1	82.3	82.5	82.7	82.9
pectation	82.3	83.4	83.7	83.9	84.2	84.4	84.6	84.9	85.1	85.3	85.6	85.8	86.0	86.2	86.4	86.6	86.8	86.9
pectation aths input	80.2	81.2	81.5	81.8	82.1	82.3	82.6	82.9	83.1	83.4	83.6	83.9	84.1	84.3	84.5	84.7	84.9	85.1
		v																
-migration fi	3,696	K 2,108	3,850	3,856	3,924	3,968	3,886	3,910	4,155	4,170	4,172	4,173	4,148	4,142	4,047	4,045	4,131	4,105
male	3,786	2,159	3,938	3,939	4,000	4,036	3,946	3,962	4,202	4,208	4,202	4,197	4,169	4,161	4,066	4,066	4,152	4,127
	7,481	4,267	7,788	7,795	7,924	8,004	7,833	7,872	8,357	8,378	8,374	8,370	8,317	8,302	8,113	8,111	8,283	8,232
/ligR: mal€	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
/ligR: fem: arants inp	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
ut-migration	4,090	5,670	3,952	3,962	3,886	3,837	3,911	3,875	3,620	3,588	3,571	3,563	3,606	3,616	3,715	3,725	3,662	3,702
male	4,254	5,894	4,093	4,096	4,008	3,950	4,010	3,967	3,690	3,659	3,642	3,619	3,637	3,663	3,766	3,778	3,709	3,757
1	8,344	11,564	8,045	8,058	7,894	7,787	7,921	7,842	7,310	7,246	7,212	7,183	7,243	7,279	7,481	7,503	7,372	7,459
MigR: male	31.4	43.7	31.8	32.0	31.5	31.2	31.9	31.8	29.9	29.6	29.4	29.3	29.6	29.6	30.3	30.4	29.8	30.0
igrants inp	31.4	43.8	32.1	32.2	31.7	•	32.1	31.9	29.9	29.7	29.5	29.2	29.3	29.4	30.1	30.2	29.6	29.9
migration f	rom Over	eas																
ale	387	388	387	406	393	396	386	386	386	386	386	386	386	386	386	386	386	386
emale	340	341	340	354	345	347	340	340	340	340	340	340	340	340	340	340	340	340
4	727	729	727	760	738	743	726	726	726	726	726	726	726	726	726	726	726	726
MigR: male	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
ngR: tem: arants inp	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
g																		
ut-migration	to Overs	as 200	210	200	210	210	210	210	210	210	210	210	210	210	210	210	210	210
male	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240
1	549	549	550	549	550	550	550	550	550	550	550	550	550	550	550	550	550	550
MigR: mal€	43.2	43.4	45.6	45.7	45.9	46.1	46.2	46.5	46.8	46.8	46.8	46.7	46.7	46.6	46.6	46.6	46.6	46.5
MigR: fema	41.7	42.1	44.7	44.9	45.3	45.6	45.8	46.2	46.6	46.6	46.6	46.7	46.7	46.7	46.7	46.8	46.8	46.8
igrano nip																		
ligration - Ne K	et Flows -863	-7,297	-257	-263	+29	+217	-88	+30	+1,046	+1,132	+1,162	+1,187	+1,074	+1,023	+632	+609	+912	+773
verseas	+178	+179	+177	+211	+188	+193	+176	+176	+176	+176	+176	+176	+176	+176	+176	+176	+176	+176
ummary of p	oopulation	change																
atural char	-460	-241	-338	-355	-369	-374	-376	-391	-416	-423	-425	-433	-442	-455	-471	-497	-522	-545
et migratio	-684	-7,118	-80	-52	+217	+410	+89	+206	+1,223	+1,308	+1,338	+1,363	+1,250	+1,199	+808	+785	+1,088	+949
et change	-1,145	-7,359	-418	-407	-152	+36	-287	-185	+806	+885	+913	+930	+808	+744	+337	+288	+566	+405
rude Death	11 77	11 17	11.08	11.08	11.06	11.08	11.07	11 07	11.08	11.09	11.08	11 10	11 11	11 14	11 19	11.25	11.30	11.37
ude Net N	-2.51	-26.47	-0.30	-0.20	0.82	1.55	0.34	0.78	4.63	4.94	5.03	5.11	4.67	4.47	3.00	2.91	4.03	3.51
ummary	of Pop	ulation	estimate	es/forec	asts													
Poj	pulation at	mid-year																
4	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
*	14,651	14,567	13,996	13,775	13,572	13,483	13,463	13,339	13,267	13,274	13,294	13,312	13,328	13,334	13,345	13,324	13,297	13,293
-15	15.583	14.862	14.200	13.912	13,716	13,731	13,931	14,157	14.343	14,708	14,910	14,942	14,907	14,942	14.821	14.687	14,623	14,631
-17	6,788	6,604	6,165	5,789	5,570	5,402	5,268	5,143	5,139	5,160	5,294	5,526	5,626	5,632	5,728	5,813	5,724	5,595
-59Femal	151,774	150,690	144,804	143,990	142,966	141,945	140,899	139,544	138,258	137,350	136,577	135,774	135,050	134,281	133,585	132,790	132,052	131,504
/65 -74	39,026	39,369	39,667	40,266	40,821	41,452	41,963	42,363	42,923	43,691	43,556	43,870	44,530	45,306	46,012	46,588	47,155	47,591
-84	21,169 7,894	21,429 8,058	21,340 8,198	21,369 8,552	21,331 8,960	21,398 9,317	21,676 9,637	22,021	22,197 10,335	22,552 10,676	23,725 11,069	24,439 11,505	25,027 11,800	25,529 12,090	26,012 12,363	26,354 12,665	26,591 13,086	26,893 13,600
tal	273,697	272,552	265,193	264,775	264,368	264,216	264,252	263,965	263,780	264,586	265,471	266,384	267,313	268,121	268,865	269,202	269,490	270,056
ependency r	atios, me	an age and	sex ratio															
15 / 16-65	0.28	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
L / 10 0F	0.63	0.64	0.66	0.67	0.39	0.40	0.41	0.42	0.43	0.73	0.45	0.46	0.76	0.78	0.79	0.50	0.52	0.53
i+ / 16-65 15 and 65	42.3	42.6	43.4	43.6	43.9	44.2	44.3	44.4	44.5	44.4	44.3	44.2	44.1	44.1	44.2	44.2	44.3	44.3
+ / 16-65 15 and 65 edian age	45.2	45.7	46.6	46.9	47.3	47.6	47.9	48.2	48.5	48.7	48.8	49.0	49.0	49.0	49.0	48.9	48.9	48.9
+ / 16-65 15 and 65 edian age edian age	40.0	92.2	92.2	92.3	92.4	92.5	92.7	92.8	92.9	93.0	93.1	93.3	93.4	93.5	93.6	93.7	93.8	93.9
+ / 16-65 15 and 65 edian age adian age x ratio ma	92.0																	
+ / 16-65 15 and 65 edian age edian age ex ratio ma	92.0						-101	-458	-381	+596	+659	+677	+682	+562	+499	+78		+313
+ / 16-65 15 and 65 edian age edian age ex ratio ma ex ratio ma opulation im imber of persor	92.0 pact of co	onstraint -978	-7,445	-449	-470	-238	101									110	+23	1010
i+ / 16-65 15 and 65 edian age edian age ex ratio ma oppulation im umber of persor abour Force	92.0 pact of co	onstraint -978	-7,445	-449	-470	-238	101										+23	1010
5+ / 16-65 15 and 65 edian age : edian age : ex ratio ma opulation im umber of persor abour Force umber of L	92.0 pact of co	978 -978	-7,445 131,977	-449 131,478	-470 130,967	-238 130,470	129,973	129,464	128,969	128,556	128,144	127,731	127,319	126,906	126,494	126,081	+23	125,256
5+ / 16-65 15 and 65 edian age : edian age : ex ratio ma opulation im umber of persor abour Force umber of L hange in Labou	92.0 92.0 10 131,601 11 11,601 11 11 10 11 10 10 10 10 10 10 10 10 1	-978 136,615 +5,013	-7,445 131,977 -4,638	-449 131,478 -498	-470 130,967 -512	-238 130,470 -497	129,973	129,464	128,969 -495	128,556 -413	128,144 -413	127,731 -413	127,319 -413	126,906 -413	126,494 -413	126,081	+23 125,669 -413	125,256
++ / 16-65 15 and 65 edian age : edian age : edian age : ex ratio ma amber of person abour Force umber of L hange in Labour umber of s	131,601 97,321	-978 136,615 +5,013 97,018	-7,445 131,977 -4,638 96,714	-449 131,478 -498 96,411	-470 130,967 -512 96,107	-238 130,470 -497 95,804	129,973 -496 95,500	129,464 -509 95,197	128,969 -495 94,893	128,556 -413 94,589	128,144 -413 94,286	127,731 -413 93,982	127,319 -413 93,679	126,906 -413 93,375	126,494 -413 93,072	126,081 -413 92,768	+23 125,669 -413 92,465	125,256 -413 92,161
+ / 16-65 15 and 65 didan age i adian age i ax ratio ma opulation im amber of person abour Force amber of L ange in Labou amber of s anage in over j	92.0 pact of co 131,601 ur Force (97,321 previous	-978 136,615 +5,013 97,018 -304	-7,445 131,977 -4,638 96,714 -304	-449 131,478 -498 96,411 -304	-470 130,967 -512 96,107 -304	-238 130,470 -497 95,804 -304	129,973 -496 95,500 -304	129,464 -509 95,197 -304	128,969 -495 94,893 -304	128,556 -413 94,589 -304	128,144 -413 94,286 -304	127,731 -413 93,982 -304	127,319 -413 93,679 -304	126,906 -413 93,375 -304	126,494 -413 93,072 -304	126,081 -413 92,768 -304	+23 125,669 -413 92,465 -304	125,256 -413 92,161 -304
++ / 16-65 15 and 65 dian age xx ratio ma opulation im imber of persor ibour Force imber of L iange in Labou imber of s ange in over p	43.3 92.0 pact of co 1s 131,601 ur Force (97,321 previous	-978 136,615 +5,013 97,018 -304	-7,445 131,977 -4,638 96,714 -304	-449 131,478 -498 96,411 -304	-470 130,967 -512 96,107 -304	-238 130,470 -497 95,804 -304	129,973 -496 95,500 -304	129,464 -509 95,197 -304	128,969 -495 94,893 -304	128,556 -413 94,589 -304	128,144 -413 94,286 -304	127,731 -413 93,982 -304	127,319 -413 93,679 -304	126,906 -413 93,375 -304	126,494 -413 93,072 -304	126,081 -413 92,768 -304	+23 125,669 -413 92,465 -304	125,256 -413 92,161 -304
+ / 16-65 15 and 65 dian age i adian age i xx ratio ma opulation im mmber of person abour Force imber of L anage in Labou imber of s anage in cover p ouseholds imber of F	43.3 92.0 pact of co ns 131,601 ur Force (97,321 previous 118,576	2005 Traint -978 136,615 +5,013 97,018 -304 118,639	-7,445 131,977 -4,638 96,714 -304 116,675	-449 131,478 -498 96,411 -304 117,028	-470 130,967 -512 96,107 -304 117,378	-238 130,470 -497 95,804 -304 117,808	129,973 -496 95,500 -304 118,275	129,464 -509 95,197 -304 118,650	128,969 -495 94,893 -304 119,038	128,556 -413 94,589 -304 119,752	128,144 -413 94,286 -304 120,457	127,731 -413 93,982 -304 121,173	127,319 -413 93,679 -304 121,924	126,906 -413 93,375 -304 122,634	126,494 -413 93,072 -304 123,372	126,081 -413 92,768 -304 123,978	+23 125,669 -413 92,465 -304 124,493	125,256 -413 92,161 -304 125,111
i+/16-65 15 and 65 didan age: edian age: exiratio ma oppulation im umber of persor abour Force umber of L hange in Labour umber of s hange in over j bouseholds umber of I- hange in House	92.0 pact of cc 131,601 ur Force (97,321 previous 118,576 eholds ov	-978 -978 +5,013 97,018 -304 118,639 +63	-7,445 131,977 -4,638 96,714 -304 116,675 -1,964	-449 131,478 -498 96,411 -304 117,028 +354	-470 130,967 -512 96,107 -304 117,378 +350	-238 130,470 -497 95,804 -304 117,808 +430	129,973 -496 95,500 -304 118,275 +467	129,464 -509 95,197 -304 118,650 +375	128,969 -495 94,893 -304 119,038 +388	128,556 -413 94,589 -304 119,752 +714	128,144 -413 94,286 -304 120,457 +705	127,731 -413 93,982 -304 121,173 +716	127,319 -413 93,679 -304 121,924 +751	126,906 -413 93,375 -304 122,634 +709	126,494 -413 93,072 -304 123,372 +738	126,081 -413 92,768 -304 123,978 +606	+23 125,669 -413 92,465 -304 124,493 +515	125,256 -413 92,161 -304 125,111 +618

Ye	ear beginni	ng July 1st .		3-															
20	012-13 2	013-14 2	014-15 20	015-16	2016-17	2017-18	2018-19 2	019-20 2	2020-21 2	021-22 2	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	
irths ale	1 440	4 400	4 947	1 040	1 9 44	1 240	4 954	4 959	4.054	4 200	4 071	4 00-	4 200	4 000			4 40-	4 44 **	
male	1,410	1,422	1,347	1,343	1,341	1,349	1,354	1,353	1,351	1,360	1,371	1,381	1,390	1,397	1,404	1,406	9 1,407 9 1,340	1,410	
Births	2,754	2,777	2,631	2,622	2,618	2,634	2,643	2,641	2,638	2,656	2,677	2,696	2,713	2,728	2,741	2,745	2,746	2,754	
R	1.84	1.86	1.86	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.84	1.84	1.84	1.84	
ths input																			
aths																			
e	1,521	1,455	1,432	1,425	1,421	1,423	1,426	1,426	1,431	1,441	1,450	1,460	1,472	1,487	1,500	1,513	3 1,527	1,544	
nale deaths	1,693	1,551	1,512	1,516	1,517	2 945	1,517	1,519	2 954	1,527	2 979	1,536	1,541	1,546	1,555	i 1,566	5 1,574 0 3,101	1,583	
R: males	116.0	108.9	105.9	102.8	100.0	97.5	95.1	92.7	90.6	88.7	2,575	2,550	83.4	82.0	80.6	5 79.2	2 77.9	76.8	
R: female	111.3	101.0	97.8	96.1	94.2	92.5	90.2	88.3	86.6	84.8	83.0	81.5	79.9	78.4	77.2	76.0	74.7	73.6	
R: persor	113.4	104.7	101.6	99.2	96.9	94.8	92.5	90.4	88.5	86.6	84.8	83.2	81.6	80.1	78.8	77.5	5 76.2	75.1	
ectation	77.8	78.6	78.9	79.3	79.6	79.9	80.2	80.6	80.8	81.1	81.4	81.6	81.9	82.1	82.3	82.5	5 82.7	82.9	
ectation	82.3	83.4	83.7	83.9	84.2 82.1	84.4 82.3	84.6	84.9 82.9	85.1	85.3	85.6 83.6	85.8	86.0	86.2	86.4	86.6	5 86.8 7 84.9	85.9	
aths input	00.2	01.2	01.0	01.0	02.1	02.0	02.0	02.0	00.1	00.4	00.0	00.0	04.1	04.0	04.0		04.0	00.0	
	(
nigration :	3 867	2 264	4 009	4 015	4 082	4 126	4 044	4 068	4 315	4.332	4 335	4.336	4 310	4 303	4 206	4 203	4 288	4 259	
nale	3,961	2,318	4,101	4,101	4,161	4,197	4,107	4,122	4,364	4,371	4,366	4,360	4,332	4,323	4,226	4,225	4,311	4,282	
	7,828	4,583	8,111	8,116	8,243	8,324	8,151	8,190	8,680	8,703	8,701	8,696	8,643	8,626	8,431	8,428	8,599	8,541	
igR: mal€	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
igR: fem:	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
rants inp	- C			1		1				- C		1.1				1.1			
t-migratio	n to the UI	‹																	
e.	3,920	5,515	3,793	3,804	3,729	3,679	3,754	3,718	3,460	3,427	3,409	3,401	3,443	3,455	3,557	3,568	3,506	3,548	
nale	4,077	5,733	3,928	3,932	3,846	3,787	3,849	3,806	3,527	3,495	3,477	3,455	3,474	3,501	3,606	3,618	3,551	3,602	
iaR: male	7,998 30-1	42 3	30.3	7,736 30.2	7,575 20.7	7,467 20.9	7,6U3 20.0	20.7	0,987 27.7	0,922	6,886 27.1	6,856 26 0	6,917 27.0	6,956 27 0	7,163 27 e	, /,186 ; 274	, 7,056	7,150	
ligR: fema	30.1	42.4	30.5	30.5	29.9	29.5	30.0	29.8	27.7	27.3	27.1	26.8	26.7	26.8	27.4	27.4	26.8	27.0	
grants inp	· •	•	•		•	· · ·	•	· •	•	· •	•	· · ·	•	•	•	1.1	•	•	
miarot'	from C	6036																	
ingration le	387	388 388	387	406	393	396	386	386	386	386	386	386	386	386	386	386	386	386	
male	340	341	340	354	345	347	340	340	340	340	340	340	340	340	340	340) 340	340	
1	727	729	727	760	738	743	726	726	726	726	726	726	726	726	726	5 726	5 726	726	
ligR: 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	
ligR: fema	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	
rants inp	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	
t-migratio	n to Overs	eas																	
le	309	309	310	309	310	310	310	310	310	310	310	310	310	310	310	310	310	310	
male	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	
f - D	549	549	550	549	550	550	550	550	550	550	550	550	550	550	550	550	550	550	
ligR: male ligR: fem:	43.2	43.2	45.2	45.1	45.1	45.1	45.0	45.1	45.2	45.0	44.8	44.7	44.5	44.3	44.1	44.0) 43.9 8 43.7	43.7	
grants inp	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
igration - N	170	6 665	1280	1280	.000	.057	- 549	. 666	11 602	1 792	-1 91E	11 940	1 725	1 670	1 260	1 242	1 5 4 2	1 201	
verseas	+178	+179	+177	+211	+188	+193	+176	+176	+1,035	+176	+176	+176	+1,725	+176	+176	+1,242 +176	5 +176	+176	
ummary of	population	n change																	
atural char	-460	-229	-314	-319	-320	-311	-300	-303	-316	-312	-302	-300	-300	-305	-314	-335	5 -354	-374	
et change	-452	-6,715	+252	+272	+536	+739	+424	+540	+1,552	+1,646	+1.689	+1.716	+1,602	+1.541	+1.131	+1.084	+1,713	+1,307	
ude Birth I	10.07	10.29	9.87	9.82	9.79	9.83	9.84	9.82	9.77	9.78	9.79	9.80	9.81	9.80	9.80	9.78	9.74	9.72	
rude Death	11.75	11.14	11.04	11.02	10.99	10.99	10.96	10.94	10.94	10.92	10.90	10.89	10.89	10.90	10.93	10.97	11.00	11.04	
ude Net N	0.03	-24.03	2.12	2.21	3.20	3.92	2.70	3.13	6.92	7.21	7.28	7.33	6.87	6.63	5.17	5.05	6.10	5.53	
ummary	of Pop	ulation	estimate	es/fore	casts														
P	opulation a	t mid-year																	
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	
\$	14,651	14,622	14,108	13,949	13,812	13,792	13,850	13,804	13,811	13,898	13,996	14,091	14,180	14,256	14,331	14,370	14,397	14,441	
10	16,812	17,010	16,898	17,243	17,604	17,719	17,704	17,743	17,747	17,683	17,637	17,693	17,818	17,873	17,963	18,035	5 18,107	18,182	
-15 -17	15,583	14,886	14,246 6 102	13,980	13,808	13,849	14,078	14,338	14,560	14,969	15,219	15,304	5 764	15,418	15,359	15,290	15,296	15,382	
-59Femal	151,774	151,190	145,763	145,419	144,864	144,306	143,722	142,822	141,990	141,538	141,223	140,876	140,608	140,296	140,054	139,710) 139,427	139,336	
/65 -74	39,026	39,401	39,729	40,361	40,951	41,619	42,169	42,609	43,212	44,026	43,935	44,298	45,012	45,844	46,610	47,247	47,876	48,376	
-84	21,169	21,446	21,372	21,416	21,392	21,474	21,767	22,128	22,320	22,693	23,889	24,627	25,238	25,764	26,272	26,640	26,902	27,231	
⊧ tal	7,894	8,071	8,223	8,589	9,009	9,379	9,711	268 753	10,435	10,790 270 846	272 402	274 190	275 800	12,262	270 020	280.170	281 254	13,837	_
	2.0,001	2.0,240		200,703	201,004	201,001	_00,000	200,700	_00,200	210,040	L, 1,402	±r4,100	210,000	L., , 400	2, 9,038	200,170	201,234	202,010	
ependency	ratios, me	an age and	sex ratio																
15 / 16-65	0.28	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.31	
15 and 65	0.35	0.36	86.U AA ()	0.38	0.39	04.U 93.0	0.40	0.41	0.42	0.43	0.44	0.45	0.45	0.46	0.47	U.49	, U.50) 0.80	0.51	
edian age	42.3	42.5	43.3	43.5	43.7	43.9	43.9	44.0	44.0	43.8	43.6	43.5	43.4	43.4	43.3	43.3	3 43.4	43.4	
adian age	45.3	45.7	46.5	46.8	47.1	47.3	47.5	47.8	48.0	48.1	48.2	48.2	48.1	48.0	47.9	47.8	3 47.7	47.7	
x ratio ma	92.0	92.2	92.2	92.3	92.4	92.6	92.7	92.9	93.0	93.1	93.3	93.4	93.6	93.7	93.8	93.9	94.0	94.1	
pulation in	npact of c	onstraint																	
mber of perso	ons	-285	-6,813	+198	+172	+401	+539	+178	+256	+1,242	+1,309	+1,330	+1,335	+1,214	+1,145	+715	+657	+944	
bour Form	e																		
Imber of I	131.601	137.042	132.805	132,720	132.621	132,537	132,452	132.354	132,269	132.269	132 269	132 269	132 269	132 269	132 269	132 260	132 269	132 269	
ange in Labo	our Force (+5,441	-4,237	-85	-99	-85	-85	-99	-84	-0	0	-0	+0	+0	+0) 0) 0	-0	
ange in Law	97,321	97,321	97,321	97,321	97,321	97,321	97,321	97,321	97,321	97,321	97,321	97,321	97,321	97,321	97,321	97,321	97,321	97,321	
mber of s	r previous	0	-0	0	+0	+0	0	+0	+0	-0	0	-0	+0	+0	+0) C	0 0	-0	
mber of s ange in over																			
mber of s ange in over																			
mber of s ange in over useholds																			
mber of s ange in over useholds mber of H	118,576	118,877	117,141	117,737	118,335	119,021	119,752	120,401	121,070	122,076	123,078	124,099	125,163	126,187	127,242	128,166	i 128,999	129,937	
useholds mber of F ange in over useholds mber of F ange in Hous	118,576 seholds ov	118,877 +301	117,141	117,737 +596	118,335 +598	119,021 +686	119,752 +732	120,401 +648	121,070 +669	122,076	123,078 +1,003	124,099 +1,021	125,163 +1,063	126,187 +1,024	127,242	128,166 +924	5 128,999 +833	129,937 +938	

	ents of l	ropulati	on Char	ige			scenario	F: LEP	Baselin	e								
20	012-13 2	013-14 2	014-15 20	015-16	2016-17 2	017-18 2	2018-19 2	019-20 2	020-21 2	021-22 2	022-23 2	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29 2	2029-30
irths																		
ale	1,410	1,452	1,376	1,365	1,355	1,355	1,354	1,350	1,348	1,354	1,361	1,362	1,363	1,362	1,363	1,357	1,351	1,347
emale	1,343	1,383	1,311	1,300	1,290	1,291	1,290	1,286	1,284	1,289	1,296	1,297	1,298	1,297	1,298	1,293	1,286	1,283
Births	2,754	2,835	2,687	2,664	2,645	2,646	2,644	2,636	2,631	2,643	2,657	2,660	2,661	2,660	2,662	2,650	2,637	2,630
R ths input	1.84	1.86	1.86	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.85	1.84	1.84	1.84	1.84
aths																		
ile	1,521	1,461	1,438	1,429	1,423	1,423	1,426	1,425	1,431	1,440	1,448	1,456	1,468	1,481	1,493	1,504	1,516	1,532
emale	1,693	1,559	1,518	1,520	1,519	1,522	1,516	1,517	1,521	1,525	1,527	1,532	1,535	1,538	1,546	1,556	1,562	1,569
II deatris MR · males	3,214	3,019	2,955	2,949	2,942	2,946	2,942	2,942	2,952	2,964	2,975	2,988	3,002	3,019	3,039	3,060	3,077	3,101
MR: female	111.3	101.0	97.8	96.1	94.2	92.5	90.2	88.3	86.6	84.8	83.0	81.5	79.9	78.4	77.2	76.0	74.7	73.6
MR: persor	113.4	104.7	101.6	99.2	96.9	94.8	92.5	90.4	88.5	86.6	84.8	83.2	81.6	80.1	78.8	77.5	76.2	75.1
xpectation	77.8	78.6	78.9	79.3	79.6	79.9	80.2	80.6	80.8	81.1	81.4	81.6	81.9	82.1	82.3	82.5	82.7	82.9
opectation	82.3	83.4	83.7	83.9	84.2	84.4	84.6	84.9	85.1	85.3	85.6	85.8	86.0	86.2	86.4	86.6	86.8	86.9
eaths input	80.2	81.2	81.5	81.8	82.1	82.3	82.6	82.9	83.1	83.4	83.6	83.9	84.1	84.3	84.5	84.7	84.9	85.1
-migration	from the U	к																
ale	4,487	2,228	3,838	3,851	3,921	4,021	3,993	4,072	4,262	4,279	4,169	4,170	4,144	4,194	4,039	4,041	4,122	4,151
emale	4,597	2,282	3,926	3,933	3,997	4,090	4,055	4,126	4,311	4,318	4,199	4,194	4,165	4,213	4,058	4,061	4,144	4,173
11	9,083	4,510	7,764	7,784	7,917	8,111	8,048	8,197	8,573	8,596	8,367	8,364	8,309	8,407	8,097	8,102	8,266	8,324
MigR: male	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
MigR: fema	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
igrants inp	•	•	•	÷	•	•	•	•	•	•	•	•	•	•		•	•	•
ut-migratio	n to the Uk	ĸ																
ale	3,305	5,550	3,964	3,967	3,889	3,784	3,805	3,715	3,513	3,480	3,574	3,566	3,609	3,564	3,723	3,729	3,671	3,656
	5,437	5,770	4,105	4,101 8 060	4,011	3,895	3,901	3,8UZ 7 517	3,581	3,549	3,645	3,622	3,641	3,611	3,174	3,782	3,718	3,711
MigR: male	25.4	42.0	31.2	0,009 31.9	008,1 30.8	7,079 30.1	30.3	20.7	7,094 28.2	7,U28 27.9	7,219 28 F	28.4	7,200	28.2	7,497 20.4	7,512 20 F	1,309	7,307 28.9
MigR: fema	25.4	42.0	31.4	31.5	30.6	30.1	30.5	29.8	28.2	27.0	28.5	28.3	28.4	28.1	29.4	29.5	29.0	28.6
ligrants inp	•	•	•	•	•	•	•	•	•	•		•	•	•	•		•	•
-migration	from Over	seas					-		-									
lale	387	388	387	406	393	396	386	386	386	386	386	386	386	386	386	386	386	386
emale	340	341	340	354	345	347	340	340	340	340	340	340	340	340	340	340	340	340
MiaDi moli	727	729	727	760	738	743	726	726	726	726	726	726	726	726	726	726	726	726
MigR: male	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
ligrants inp	•	•	•	•.0	• 0.0	•	•	•	•	•	•	• 0.0	• 0.0	• 0.0	• •	• 0.0	• 0.0	• 0.0
ut-miaratio	n to Overs	eas																
ale	309	309	310	309	310	310	310	310	310	310	310	310	310	310	310	310	310	310
emale	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240
П	549	549	550	549	550	550	550	550	550	550	550	550	550	550	550	550	550	550
MigR: male	43.2	42.5	44.5	44.6	44.8	45.0	45.0	45.2	45.3	45.2	45.1	45.1	45.1	45.1	45.1	45.1	45.2	45.1
MigR: fema	41.7	41.1	43.4	43.6	44.0	44.3	44.5	44.7	44.9	44.8	44.8	44.8	44.9	45.0	45.0	45.1	45.2	45.2
figrants inp	•	•			•	•		•	•	•	•	•	•	•	•	1	•	•
Aigration - N	let Flows																	
JK Overseas	+2,341 +178	-6,811 +179	-304 +177	-285 +211	+17 +188	+431 +193	+342 +176	+680 +176	+1,478 +176	+1,568 +176	+1,148 +176	+1,175 +176	+1,059 +176	+1,232 +176	+600 +176	+590 +176	+876 +176	+956 +176
ummary of	populatior	n change																
latural char	-460	-185	-269	-285	-297	-300	-298	-306	-321	-321	-318	-329	-341	-359	-377	-410	-440	-471
let migratio	+2,519	-6,631	-127	-74	+205	+624	+518	+857	+1,654	+1,744	+1,324	+1,351	+1,235	+1,408	+776	+766	+1,053	+1,133
let change	+2,059	-6,816	-396	-359	-92	+324	+220	+551	+1,334	+1,423	+1,007	+1,022	+894	+1,049	+399	+357	+612	+662
Crude Birth	10.02	10.41	10.00	9.93	9.86	9.86	9.85	9.80	9.75	9.74	9.75	9.73	9.70	9.66	9.64	9.58	9.52	9.47
Crude Death Crude Net N	11.70 9.17	11.09 -24.35	11.00 -0.47	10.99 -0.28	0.76	10.98 2.33	10.96 1.93	10.94 3.19	10.94 6.13	10.93 6.43	10.92 4.86	10.93 4.94	10.94 4.50	10.96 5.11	11.01 2.81	11.07 2.77	11.11 3.80	11.17 4.08
Summarv	/ of Pop	ulation	estimate	es/fore	casts													
P	opulation a	t mid-year																
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
-4	14,651	14,822	14,318	14,123	13,943	13,871	13,908	13,834	13,826	13,879	13,944	13,969	13,987	13,990	14,008	13,973	13,923	13,891
-10	16,812	17,142	17,039	17,366	17,707	17,801	17,755	17,791	17,799	17,721	17,656	17,660	17,745	17,734	17,764	17,759	17,752	17,744
1-15 6.17	15,583	14,975	14,328	14,041	13,850	13,873	14,091	14,345	14,576	14,986	15,239	15,308	15,291	15,360	15,282	15,179	15,148	15,205
8-59Femal	0,700	153 003	147 483	5,048 146 640	145 619	3,401 144 500	143 697	3,200 142 646	141 822	3,247 141 210	3,392	130 0.42	0,733 130 214	5,752 138.430	5,670 137 804	5,9/1	0,090 136 366	3,700
0/65 -74	39,026	39 515	39,842	40 449	41 011	41 651	42 182	42 612	43 214	44 017	43 914	44 243	44 917	45 709	46 443	47 0.36	47 619	48 071
5-84	21,169	21,508	21,428	21,453	21,411	21,476	21,759	22,118	22,312	22,681	23,873	24,592	25,185	25,694	26,190	26,538	26,781	27,089
5+	7,894	8,117	8,265	8,616	9,023	9,379	9,701	10,083	10,421	10,770	11,173	11,607	11,900	12,188	12,464	12,765	13,185	13,699
лаl	2/3,697	2/5,756	268,940	268,543	268,185	268,092	268,416	268,636	269,187	270,520	271,943	272,950	2/3,972	274,866	2/5,916	276,314	276,671	217,283
ependency -15 / 16-65	ratios, me 0.28	an age and 0.28	sex ratio 0.28	0.28	0.28	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.31
5+ / 16-65	0.35	0.36	0.37	0.38	0.39	0.40	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.52
-15 and 65	0.63	0.64	0.66	0.66	0.67	0.68	0.69	0.70	0.72	0.73	0.74	0.75	0.76	0.77	0.78	0.80	0.81	0.83
ledian age	42.3	42.3	43.1	43.4	43.6	43.8	43.9	44.0	44.0	43.8	43.7	43.6	43.6	43.6	43.6	43.7	43.8	43.8
-	45.3	45.5	46.3	46.6	47.0	47.3	47.5	47.8	48.0	48.1	48.2	48.3	48.3	48.3	48.2	48.2	48.2	48.2
edian age	92.0	92.2	92.2	92.3	92.5	92.6	92.7	92.9	93.0	93.1	93.3	93.4	93.5	93.6	93.7	93.8	93.9	94.0
edian age ex ratio ma		onstraint																
ledian age ex ratio ma opulation in	npact of co		-6,959	-496	-492	-251	+113	-28	+270	+1,028	+1,095	+663	+670	+547	+708	+46	+4	+278
ledian age ex ratio ma opulation in umber of perso	npact of co	+2,226																
edian age ex ratio ma opulation in umber of perso abour Force	npact of co ons e	+2,226																
edian age : ex ratio ma opulation in umber of perso abour Force umber of L	npact of co ons e 131,601	+2,226	134,306	133,811	133,303	132,809	132,452	132,218	132,133	131,997	131,862	131,454	131,046	130,638	130,366	129,959	129,551	129,143
edian age ex ratio ma opulation in umber of perso abour Force umber of L hange in Labo umber of s	npact of co ons e 131,601 bur Force (97.321	+2,226 138,591 +6,990 98,421	134,306 -4,285 98.421	133,811 -495 98 124	133,303 -509 97 821	132,809 -494 97 521	132,452 -357 97 321	132,218 -235 97 221	132,133 -84 97 221	131,997 -136 97 121	131,862 -136 97.021	131,454 -408 96 724	131,046 -408 96.421	130,638 -408 96 121	130,366 -272 95 924	129,959 -408 95.624	129,551 -408 95 321	129,143 -408 95.021
edian age : ax ratio ma opulation in umber of perso abour Force umber of L nange in Labo umber of s iange in over	npact of co ons 131,601 our Force (97,321 r previous	+2,226 138,591 +6,990 98,421 +1,100	134,306 -4,285 98,421 -0	133,811 -495 98,121 -300	133,303 -509 97,821 -300	132,809 -494 97,521 -300	132,452 -357 97,321 -200	132,218 -235 97,221 -100	132,133 -84 97,221 +0	131,997 -136 97,121 -100	131,862 -136 97,021 -100	131,454 -408 96,721 -300	131,046 -408 96,421 -300	130,638 -408 96,121 -300	130,366 -272 95,921 -200	129,959 -408 95,621 -300	129,551 -408 95,321 -300	129,143 -408 95,021 -300
edian age : x ratio ma pulation in mber of person mber of L ange in Labc mber of s ange in over	npact of co ons 131,601 our Force (97,321 r previous	+2,226 138,591 +6,990 98,421 +1,100	134,306 -4,285 98,421 -0	133,811 -495 98,121 -300	133,303 -509 97,821 -300	132,809 -494 97,521 -300	132,452 -357 97,321 -200	132,218 -235 97,221 -100	132,133 -84 97,221 +0	131,997 -136 97,121 -100	131,862 -136 97,021 -100	131,454 -408 96,721 -300	131,046 -408 96,421 -300	130,638 -408 96,121 -300	130,366 -272 95,921 -200	129,959 -408 95,621 -300	129,551 -408 95,321 -300	129,143 -408 95,021 -300
adian age xx ratio ma xx ratio min mber of person thour Force mber of L iange in Labo mber of s ange in over yuseholds mber of	npact of co ons 131,601 pur Force (97,321 r previous	+2,226 138,591 +6,990 98,421 +1,100	134,306 -4,285 98,421 -0	133,811 -495 98,121 -300	133,303 -509 97,821 -300	132,809 -494 97,521 -300	132,452 -357 97,321 -200	132,218 -235 97,221 -100	132,133 -84 97,221 +0	131,997 -136 97,121 -100	131,862 -136 97,021 -100	131,454 -408 96,721 -300	131,046 -408 96,421 -300	130,638 -408 96,121 -300	130,366 -272 95,921 -200	129,959 -408 95,621 -300	129,551 -408 95,321 -300	129,143 -408 95,021 -300
edian age : ex ratio ma opulation in umber of perso abour Force umber of L hange in Labo umber of s hange in over ouseholds umber of I- tange in fuer	npact of co ons e 131,601 our Force (97,321 r previous 118,576 seholds ou	+2,226 138,591 +6,990 98,421 +1,100 119,741 +1,165	134,306 -4,285 98,421 -0 117,990 -1,751	133,811 -495 98,121 -300 118,373 +383	133,303 -509 97,821 -300 -300	132,809 -494 97,521 -300 119,224 +466	132,452 -357 97,321 -200 119,807 +584	132,218 -235 97,221 -100 120,382 +575	132,133 -84 97,221 +0 121,049 +667	131,997 -136 97,121 -100 121,969 +919	131,862 -136 97,021 -100 122,882 +914	131,454 -408 96,721 -300 123,648 +766	131,046 -408 96,421 -300 124,450 +802	130,638 -408 96,121 -300 125,203 +753	130,366 -272 95,921 -200 126,063 +860	129,959 -408 95,621 -300 126,702 +640	129,551 -408 95,321 -300 127,252 +549	129,143 -408 95,021 -300 127,897 +645
fedian age i fex ratio ma Population in lumber of perso abour Force lumber of L shange in Labo lumber of s shange in over louseholds umber of F hange in Hou: umber of s	npact of co ons e 131,601 our Force (97,321 r previous 118,576 seholds ov 124,358	+2,226 138,591 +6,990 98,421 +1,100 119,741 +1,165 125,580	134,306 -4,285 98,421 -0 117,990 -1,751 123,744	133,811 -495 98,121 -300 118,373 +383 124,146	133,303 -509 97,821 -300 -300 118,757 +384 124,549	132,809 -494 97,521 -300 119,224 +466 125,038	132,452 -357 97,321 -200 119,807 +584 125,650	132,218 -235 97,221 -100 120,382 +575 126,253	132,133 -84 97,221 +0 121,049 +667 126,953	131,997 -136 97,121 -100 121,969 +919 127,917	131,862 -136 97,021 -100 122,882 +914 128,875	131,454 -408 96,721 -300 123,648 +766 129,678	131,046 -408 96,421 -300 124,450 +802 130,519	130,638 -408 96,121 -300 125,203 +753 131,309	130,366 -272 95,921 -200 126,063 +860 132,210	129,959 -408 95,621 -300 126,702 +640 132,881	129,551 -408 95,321 -300 127,252 +549 133,457	129,143 -408 95,021 -300 127,897 +645 134,134
tedian age : tex ratio ma Population in lumber of perso abour Force lumber of L change in Labc lumber of s change in over lumber of s change in over lumber of s change in over	npact of co ons e 131,601 bur Force (97,321 r previous 118,576 seholds ov 124,358 r previous	+2,226 138,591 +6,990 98,421 +1,100 119,741 +1,165 125,580 +1,222	134,306 -4,285 98,421 -0 117,990 -1,751 123,744 -1,837	133,811 -495 98,121 -300 118,373 +383 124,146 +402	133,303 5 -509 97,821 9 -300 5 118,757 5 +384 5 124,549 5 +403	132,809 -494 97,521 -300 119,224 +466 125,038 +489	132,452 -357 97,321 -200 119,807 +584 125,650 +612	132,218 -235 97,221 -100 120,382 +575 126,253 +603	132,133 -84 97,221 +0 121,049 +667 126,953 +700	131,997 -136 97,121 -100 121,969 +919 127,917 +964	131,862 -136 97,021 -100 122,882 +914 128,875 +958	131,454 -408 96,721 -300 123,648 +766 129,678 +803	131,046 -408 96,421 -300 124,450 +802 130,519 +841	130,638 -408 96,121 -300 125,203 +753 131,309 +790	130,366 -272 95,921 -200 126,063 +860 132,210 +902	129,959 -408 95,621 -300 126,702 +640 132,881 +671	129,551 -408 95,321 -300 127,252 +549 133,457 +576	129,143 -408 95,021 -300 127,897 +645 134,134 +677

Ye	ear beginni	ng July 1st		35															
20)12-13 2	013-14 2	014-15 2	015-16	2016-17	2017-18	2018-19 2	019-20 2	2020-21 2	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	
irths																			
e	1,410	1,452	1,397	1,409	1,408	1,417	1,421	1,423	1,423	1,433	1,440	1,444	1,446	1,445	1,445	1,440	1,432	1,414	
nale	1,343	1,383	1,331	1,342	1,340	1,349	1,354	1,355	1,355	1,365	1,371	1,376	1,377	1,376	1,376	5 1,371	1,363	1,346	
BirthS	2,754	2,835	2,728	2,751	2,748	2,766	2,775	2,778	2,778	2,798	2,811	2,820	2,822	2,820	2,821	2,811	2,795	2,760	
hs input	1.04	1.00	1.00	1.65	1.05	1.05	1.05	1.65	1.05	1.05	1.05	1.65	1.65	1.05	1.04	1.04	1.04	1.04	
aths																			
e	1,521	1,461	1,442	1,438	1,434	1,435	1,438	1,438	1,444	1,455	1,463	1,472	1,484	1,498	1,511	1,523	1,536	1,549	
nale de sub-s	1,693	1,559	1,524	1,531	1,531	1,536	1,530	1,532	1,537	1,541	1,542	1,549	1,551	1,555	1,563	1,574	1,580	1,585	
reatris R: males	3,214	3,019	2,966	2,969	2,965	2,971	2,969	2,970	2,981	2,995	3,005	3,021	3,035	3,053	3,074	3,097	3,116	3,134	
R: female	111.3	101.0	97.8	96.1	94.2	92.5	90.2	88.3	86.6	84.8	83.0	81.5	79.9	78.4	77.2	76.0	74.7	73.6	
R: persor	113.4	104.7	101.6	99.2	96.9	94.8	92.5	90.4	88.5	86.6	84.8	83.2	81.6	80.1	78.8	77.5	76.2	75.1	
ctation	77.8	78.6	78.9	79.3	79.6	79.9	80.2	80.6	80.8	81.1	81.4	81.6	81.9	82.1	82.3	82.5	82.7	82.9	
ctation	82.3	83.4	83.7	83.9	84.2	84.4	84.6	84.9	85.1	85.3	85.6	85.8	86.0	86.2	86.4	86.6	86.8	86.9	
ctation hs input	80.2	81.2	81.5	81.8	82.1	82.3	82.6	82.9	83.1	83.4	83.6	83.9	84.1	84.3	84.5	84.7	84.9	85.0	
nigration f	from the U	к																	
	4,487	2,666	4,319	3,997	4,072	4,120	4,093	4,117	4,367	4,273	4,278	4,222	4,195	4,244	4,143	4,085	3,882	4,143	
ale	4,597	2,730	4,418	4,082	4,151	4,191	4,156	4,171	4,417	4,312	4,309	4,246	4,217	4,263	4,162	4,105	3,902	4,166	
	9,083	5,395	8,737	8,079	8,223	8,311	8,248	8,288	8,785	8,585	8,587	8,468	8,412	8,506	8,305	8,190	7,783	8,309	
gR: male	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
R: fema	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
ants inp	•	•	•	•	•	•	•	•	•	•		1	•		•	•	•	•	
migratio	n to the Uk	(2 496	2 022	2 7 2 9	2 696	2 706	2 670	2 409	2 495	2 465	2 5 1 4	2 559	2 515	2 6 2 0	2020	2 011	2 664	
ale	3,437	5,319	3,610	3,951	3,856	3,794	3,706	3,757	3,400	3,554	3,534	3,514	3,589	3,561	3,669	. 3,060 3,738	3,961	3,718	
	6,742	10,435	7,096	7,773	7,595	7,479	7,505	7,426	6,882	7,039	7,000	7,084	7,147	7,075	7,289	7,424	7,872	7,382	
IR: mal€	25.4	38.7	27.2	29.5	28.9	28.5	28.7	28.4	26.4	26.9	26.7	27.0	27.3	26.9	27.5	28.0	29.6	27.8	
R: fem:	25.4	38.7	27.3	29.6	29.0	28.6	28.7	28.5	26.4	26.9	26.7	26.9	27.0	26.7	27.4	27.8	29.4	27.7	
ano mp	from 0																		
ingration f	387	388 388	387	406	393	396	386	386	386	386	386	386	386	386	386	386	386	386	
ale	340	341	340	4Ub 354	383	390	300	300	340	300	340	300	300	340	340	. 366) 3/10	300	340	
aio	727	729	727	760	738	743	726	726	726	726	726	726	726	726	726	5 726	726	726	
gR: 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	
R: 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	
ants inp	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	
-migratio	n to Overs	eas																	
	309	309	310	309	310	310	310	310	310	310	310	310	310	310	310	310	310	310	
ale	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	240	
Durali	549	549	550	549	550	550	550	550	550	550	550	550	550	550	550) 550	550	550	
R: male	43.2	42.5	43.9	43.5	43.5	43.5	43.5	43.6	43.6	43.5	43.4	43.4	43.3	43.3	43.3	43.3	43.3	43.5	
ants inp	41.7	41.1	42.8	42.4	42.5	42.6	42.7	42.8	43.0	42.8	42.8	42.8	42.9	43.0	•	• 43.0	43.1	43.5	
ration - Ne	et Flows																		
rseas	+2,341 +178	-5,039 +179	+1,641	+306 +211	+628	+831 +193	+743 +176	+862	+1,903	+1,546 +176	+1,588 +176	+1,384 +176	+1,265	+1,431 +176	+1,017 +176	+766 +176	-88 +176	+927 +176	
nmany of	nonulatio	change																	
ural char	-460	-185	-238	-217	-217	-205	-194	-192	-203	-197	-194	-201	-213	-233	-253	-286	-321	-374	
migratio	+2,519	-4,860	+1,818	+517	+816	+1,024	+920	+1,038	+2,079	+1,722	+1,764	+1,560	+1,441	+1,607	+1,193	+942	+88	+1,103	
change	+2,059	-5,045	+1,580	+299	+600	+819	+726	+846	+1,876	+1,525	+1,569	+1,360	+1,228	+1,375	+940	+656	-233	+729	
de Birth I	10.02	10.37	10.05	10.10	10.07	10.11	10.11	10.10	10.05	10.06	10.05	10.03	9.99	9.94	9.90	9.84	9.77	9.64	
de Death	11.70	11.05	10.92	10.90	10.86	10.86	10.82	10.80	10.78	10.77	10.74	10.74	10.74	10.76	10.79	10.84	10.90	10.95	
de Net N	9.17	-17.79	6.70	1.90	2.99	3.74	3.35	3.77	7.52	6.19	6.30	5.55	5.10	5.66	4.19	3.30	0.31	3.85	
Immary	of Pop	ulation	estimate	es/fore	ecasts														
Po	opulation a	t mid-year 2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2020	
	14,651	14,822	14,460	14,435	14,332	14,340	14,443	14,443	14,490	14,602	14,686	14,758	14,800	14,819	14,849	14,832	14,782	14,654	
	16,812	17,142	17,134	17,579	17,982	18,145	18,163	18,260	18,323	18,323	18,308	18,389	18,535	18,593	18,683	18,739	18,770	18,729	
5	15,583	14,975	14,390	14,168	13,999	14,050	14,293	14,577	14,830	15,280	15,563	15,686	15,718	15,835	15,801	15,759	15,779	15,845	
7	6,788	6,674	6,274	5,920	5,696	5,527	5,399	5,287	5,301	5,341	5,490	5,741	5,857	5,885	6,020	6,150	6,095	5,952	
9Femal	151,774	153,003	148,760	149,335	148,743	148,164	147,563	146,800	146,106	145,800	145,319	144,813	144,230	143,602	143,201	142,698	142,110	140,931	
5 -74	39,026	39,515	39,923	40,624	41,223	41,902	42,465	42,928	43,554	44,394	44,302	44,668	45,373	46,196	46,962	47,598	48,214	48,637	
4	21,169 7,894	21,508 8,117	21,473 8,299	21,544 8,688	21,513 9,105	21,590 9,472	21,881 9,801	22,249 10,191	22,448 10,530	22,830 10,887	24,028 11,286	24,766 11,730	25,371 12,026	25,892 12,317	26,402 12,596	26,771 12,906	27,028 13,331	27,312 13,815	
	273,697	275,756	270,711	272,292	272,591	273,191	274,009	274,735	275,581	277,457	278,982	280,551	281,911	283,139	284,514	285,453	286,109	285,876	_
endency	ratios, me	an age and	sex ratio	· · ·		e	A 99	0.00	0.00	<i>.</i>	0.00								
/ 16-65 / 16-65	0.28	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.30	0.31	0.31	0.31	0.31	0.31	
and 65	0.35	0.36	0.37	0.38	0.38	0.39	0.40	0.40	0.71	0.42	0.43	0.44	0.45	0.46	0.47	U.48	0.49	0.50	
an age	42.3	42.3	43.0	43.1	43.3	43.4	43.5	43.5	43.4	43.2	43.1	43.0	43.0	43.0	43.0	0.79) 43.1	43.1	43.3	
an age	45.3	45.5	46.1	46.3	46.6	46.9	47.1	47.3	47.4	47.5	47.6	47.6	47.5	47.4	47.3	47.2	47.3	47.4	
atio ma	92.0	92.2	92.3	92.4	92.5	92.7	92.8	93.0	93.1	93.2	93.4	93.5	93.7	93.8	93.9	94.0	94.1	94.2	
ulation in	npact of c	onstraint +2.226	-5.188	+1 450	+98	+361	+513	+373	+451	+1.452	+1 073	+1 103	+879	+753	+907	+463	+180	-687	
our Force	e	,	.,	.,						.,	.,								
ber of L	131,601	138,591	135,398	136,130	136,028	135,941	135,854	135,889	135,939	136,075	135,939	135,803	135,531	135,259	135,123	134,987	134,716	133,764	
nge in Labo	our Force (+6,990	-3,193	+732	-101	-87	-87	+35	+49	+136	-136	-136	-272	-272	-136	-136	-272	-951	
ber of s	97,321	98,421	99,221	99,821	99,821	99,821	99,821	99,921	100,021	100,121	100,021	99,921	99,721	99,521	99,421	99,321	99,121	98,421	
ige in over	previous	+1,100	+800	+600	-0	-0	+0	+100	+100	+100	-100	-100	-200	-200	-100	-100	-200	-700	
seholds																			
ber of F	118,576	119,741	118,602	119,686	120,325	121,057	121,839	122,620	123,421	124,560	125,531	126,517	127,460	128,352	129,347	130,198	130,871	131,220	
nge in Hous	seholds ov	+1,165	-1,139	+1,084	+639	+732	+782	+781	+801	+1,139	+971	+986	+942	+892	+995	+852	+672	+349	
nber of s	124,358	125,580	124,386	125,523	126,193	126,960	127,781	128,600	129,440	130,635	131,653	132,687	133,675	134,611	135,655	136,548	137,253	137,619	
inge in over	r previous	+1,222	-1,195	+1,137	+670	+768	+820	+819	+840	+1,194	+1,018	+1,034	+988	+936	+1,043	+893	+705	+366	

Scenario H: Blended Jobs (Experian, OE)

Components of Population Change Scenario H: Blended Jobs (Experian, OE) Year beginning July 1st																			
	Year begii 2012-13	nning July 2013-14	1st 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	
Births																			
Male	1,410	0 1,45	8 1,4	98 1,52	23 1,532	1,546	1,554	1,555	1,556	1,571	1,586	5 1,599	1,608	1,61	2 1,612	2 1,606	6 1,598	1,594	
All Births	2 754	3 1,38 4 2,84	9 1,4 7 2,9	27 1,45 25 2,97	51 1,459 74 2,991	1,473	1,480 3 034	1,481	1,482	1,497	1,511	1 1,523 7 3,122	3 139	1,53	5 1,535 7 3,148	5 1,525 8 3,135	9 1,522 5 3,121	3 112	
TFR	1.84	4 1.8	6 1.	86 1.8	35 1.85	1.85	i 1.85	1.85	1.85	1.85	1.85	5 1.85	1.85	i 1.8	5 1.84	4 1.84	4 1.84	1.84	
Births input																			
Doathe																			
Male	1,521	1 1,46	2 1,4	63 1,46	50 1,457	1,459	1,462	1,462	1,468	1,480	1,491	1,503	1,518	1,53	4 1,549	9 1,563	3 1,578	1,597	
Female	1,693	3 1,56	0 1,5	48 1,55	57 1,558	1,563	1,557	1,558	1,562	1,567	1,571	1,580	1,585	1,59	1 1,601	1 1,613	3 1,621	1,630	
All deaths	3,214	4 3,02	2 3,0	11 3,01	17 3,015	3,022	3,020	3,020	3,031	3,048	3,062	2 3,083	3,103	3,12	5 3,150	0 3,175	5 3,198	3,227	
SMR: males	s 116.0	D 108.	9 10	5.9 102	.8 100.0	97.5	95.1	92.7	90.6	88.7	86.8	3 85.0	83.4	82.	0 80.6	6 79.2 0 76.0	2 77.9	76.8	
SMR: perso	ar 113.4	4 104.	7 10	1.6 99	.1 96.9	94.8	92.5	90.4	88.5	86.6	84.8	3 83.2	81.6	80.	1 78.8	8 77.5	5 76.2	75.1	
Expectation	(77.8	B 78.	6 78	3.9 79	.3 79.6	79.9	80.2	80.6	80.8	81.1	81.4	81.6	81.9	82.	1 82.3	3 82.5	5 82.7	82.9	
Expectation	(82.3	3 83.	4 83	3.7 83	.9 84.2	84.4	84.6	84.9	85.1	85.3	85.6	6 85.8	86.0	86.	2 86.4	4 86.6	6 86.8	86.9	
Expectation Deaths inpu	(80.2 It	2 81.	2 8	1.5 81	.8 82.1	82.3	82.6	82.9	83.1	83.4	83.6	5 83.9	84.1	84.	3 84.5	5 84.7	7 84.9	85.0	
In-migrati	on from the	e UK																	
Male	4,620	0 4,63	7 4,5	31 4,14	44 4,124	4,147	4,068	4,164	4,512	4,519	4,524	4,496	4,425	4,37	5 4,265	5 4,262	2 4,352	4,300	
All	4,733	3 4,74 2 9.38	8 4,6 5 9.1	35 4,23 66 8.37	32 4,204 76 8.328	4,218	i 4,130 i 8,198	4,219 8,383	9.075	4,560	4,551	9.017	4,448	4,39 8.77	5 4,28 1 8.550	5 4,284 0 8.546	4,3/5 5 8.727	4,323	
SMigR: mal	e 0.1	1 0.	1 (0.1 0	.1 0.1	0.1	0.1	0.1	0.1	0.1	0.1	I 0.1	0.1	0.	1 0.1	1 0.1	1 0.1	0.1	
SMigR: fem	a 0.1	1 0.	1 (0.1 0	.1 0.1	0.1	0.1	0.1	0.1	0.1	0.1	I 0.1	0.1	0.	1 0.1	1 0.1	1 0.1	0.1	
Migrants inp	• וכ	1																	
Out-miars	ation to the	UK																	
Male	3,173	3 3,16	0 3,2	75 3,67	76 3,687	3,659	3,730	3,623	3,265	3,240	3,221	3,242	3,329	3,38	3 3,498	8 3,509	9 3,442	3,508	
Female	3,300	0 3,28	5 3,3	91 3,80	3,803	3,766	3,825	3,708	3,327	3,305	3,285	5 3,293	3,358	3,42	8 3,546	6 3,559	3,486	3,561	
All SMiaD: '	6,473	3 6,44	5 6,6	66 7,47	76 7,489	7,425	7,555	7,331	6,592	6,545	6,506	6,536	6,687	6,81	1 7,044	4 7,068	6,928	7,069	
SMigR: fem	o 24.4 € 24.4	+ 23. 4 23	0 24 8 24	1.2 26 1.2 26		26.7	27.3	26.6	24.0	23.6 23.6	23.3	, 23.3 3 23.7	23.8	24.	o 24.7 8 24.9	, 24.7 5 24.5	24.1 5 23.9	24.4	
Migrants inp		•	•	•	*	•	•	•	•	•	•	•	•	•	•	•	•	•	
In-migrati	on from Ov	verseas		07 4/	ne 202	206	200	200	200	200	200		206		e 200	e 200	206	200	
Female	340	/ 30 D 34	o 3 1 3	40 35	54 345	390	300	340	340	340	340) 340	340) 30) 34	0 340	0 340 0 340) 340	340	
All	727	7 72	9 7	27 76	50 738	743	726	726	726	726	726	5 726	726	5 72	6 726	6 726	5 726	726	
SMigR: mal	e 0.0	D 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 Migrante inr	e 0.0	D 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	
wigi di ita ili p																			
Out-migra	ation to Ove	erseas																	
Male	309	9 30	93	10 30	09 310	310	310	310	310	310	310	310	310	31	0 310	0 310	310	310	
Female All	240	0 24 9 54	0 2 9 5	40 24 50 54	40 240 49 550	240	240	240	240 550	240	240) 240) 550	240) 24) 55	0 240 0 550	0 240 0 550) 240) 550	550	
SMigR: mal	e 43.2	2 42.	4 4 [.]	1.6 41	.0 40.9	40.8	40.8	40.9	41.0	40.8	40.6	5 40.4	40.2	40.	0 39.9	9 39.9	9 39.8	39.6	
SMigR: fem	e 41.7	7 40.	9 40	0.1 39	.5 39.4	39.5	39.6	39.8	40.0	39.8	39.7	7 39.5	39.4	39.	3 39.3	3 39.3	3 39.3	39.1	
Migrants inp	• וכ	1.1			1.1				1.1	1.1	1.1	1.1	1.1		1.1		1.1	1.1	
Migration	- Net Flow	e																	
UK	+2,879	9 +2,94	0 +2,5	00 +90	00 +839	+941	+643	+1,052	+2,483	+2,535	+2,575	5 +2,481	+2,186	i +1,95	9 +1,506	6 +1,478	3 +1,799	+1,553	
Overseas	+178	B +17	9 +1	77 +21	11 +188	+193	+176	+176	+176	+176	+176	6 +176	+176	+17	6 +176	6 +176	6 +176	+176	
0			_																
Summary Natural char	n -460	10n cnange 0 -17	e 5 -	85 -4	43 -25	-3	+14	+15	+7	+20	+3!	5 +39	+36	i +2	2 -:	2 -40) -78	-115	
Net migratic	or +3,057	7 +3,11	9 +2,6	77 +1,11	11 +1,027	+1,134	+819	+1,228	+2,659	+2,711	+2,752	2 +2,657	+2,363	+2,13	6 +1,682	2 +1,654	4 +1,975	+1,730	
Net change	+2,597	7 +2,94	4 +2,5	91 +1,06	58 +1,002	+1,130	+833	+1,244	+2,666	+2,731	+2,787	+2,696	+2,399	+2,15	7 +1,680	0 +1,614	4 +1,897	+1,614	
Crude Birth	i 10.01	1 10.2	5 10.	43 10.5	53 10.55	10.61	10.63	10.60	10.53	10.54	10.54	10.52	10.49	10.4	4 10.37	7 10.28	3 10.17	10.09	
Crude Deal	M 11.12	9 10.8 2 11.2	8 10. 3 9.	73 10.6 54 3.9	39 10.64 33 3.62	3.98	2.87	4.29	9.22	9.31	9.36	5 8.96	7.90	10.3	8 5.55	5 5.42	2 6.44	5.61	
Summa	ary of Po	opulatio	on estin	nates/for	recasts														
	Population	n at mid-yea	ar																
	2012	201	3 20	14 201	5 2016	2017	2018	2019	2020	2021	2022	2023	2024	202	5 2026	6 2027	2028	2029	2030
0-4	14,651	1 14,86	5 15,1	45 15,26	50 15,277	15,369	15,542	15,642	15,740	15,923	16,101	16,260	16,391	16,48	0 16,543	3 16,549	9 16,527	16,511	16,464
11-15	15,583	2 17,17 3 14,99	4 14,6	95 16,14 85 14,48	40 18,657 88 14,350	14,429	14,703	15,013	15,307	15,842	19,62	19,645	16,640	16,84	2 20,574 3 16,915	4 20,716 5 16,976	5 20,836 6 17,104	17,326	20,995
16-17	6,788	8 6,68	6 6,4	55 6,08	5,852	5,670	5,540	5,426	5,449	5,509	5,689	5,974	6,121	6,17	7 6,356	6 6,541	6,533	6,458	6,477
18-59Femal	l€ 151,774	4 153,39	2 154,9	01 156,14	42 156,005	155,597	155,077	154,243	153,680	153,778	153,987	7 154,169	154,354	154,37	8 154,363	3 154,223	3 154,178	154,360	154,473
60/65 -74 75-84	39,026	6 39,53 9 21.52	9 40,3 1 21.6	16 41,07 84 21.76	75 41,725	42,440	43,034	43,518	44,179	45,076 23.084	45,054	45,500 7 25.107	46,299	47,21	0 48,047 2 26,864	7 48,755 4 27.263	5 49,457 3 27.557	27 920	50,504 28 354
85+	7,894	4 8,12	7 8,4	60 8,86	53 9,290	9,658	9,985	10,367	10,705	11,072	11,493	3 11,960	12,281	12,59	3 12,881	1 13,202	2 13,646	14,190	14,581
Total	273,697	7 276,29	4 279,2	38 281,83	30 282,898	283,900	285,030	285,863	287,107	289,773	292,504	295,291	297,987	300,38	5 302,543	3 304,223	3 305,838	307,735	309,349
Demondar				41 -															
0-15 / 16-65	1Cy ratios, 1 5 0.28	mean age	and sex ra	28 0.2	28 0.28	0.29	0.29	0.29	0.30	0.30	0.30	0.31	0.31	0.3	1 0.3	1 0.32	2 0.32	0.32	0.32
65+ / 16-65	0.35	5 0.3	6 0.	36 0.3	37 0.37	0.38	0.38	0.39	0.40	0.40	0.41	0.42	0.43	0.4	3 0.44	4 0.45	5 0.46	0.47	0.48
0-15 and 65	н 0.63	3 0.6	4 0.	64 0.6	65 0.65	0.66	0.67	0.69	0.70	0.71	0.72	2 0.73	0.74	0.7	5 0.76	6 0.77	7 0.78	0.79	0.81
Median age	1 42.3	3 42.	3 42	2.4 42	.4 42.5	42.5	42.5	42.5	42.4	42.2	42.0) 41.9	41.9	41.	9 41.9	9 41.9	9 42.0	42.1	42.2
Nedian age Sex ratio ma	1 45.3 a 02.0	3 45. n 92	4 45 2 02	5.5 45	.6 45.8	46.0) 46.2) 93.0	46.3	46.5	46.4	46.3	3 46.1 3 93.8	45.9	9 45. 9 94	7 45.t 1 94.3	6 45.t 2 0.4 3	5 45.6 3 04.4	94.5	45.6 94.6
COX IGEO III		J 02.	2 0.		.0 02.7	02.0		00.2		00.0	00.0	5 00.0					5 04.4	04.0	04.0
Populatio	n impact o	f constrain	it																
Number of p	rersons	+2,76	+4 +2,7	9Z +2,30	Jo +693	+571	+622	+273	+641	+2,033	+2,062	+2,090	+1,976	+1,67	o +1,435	ə +953	+892	+1,200	+936
Labour Fo	orce																		
Number of L	131,601	1 138,92	3 140,6	56 142,05	52 142,393	142,486	142,499	142,504	142,695	143,196	143,672	2 144,152	144,563	144,88	5 145,118	8 145,337	7 145,558	145,781	145,995
Change in L	abour Force	0 +7,32	2 +1,7	33 +1,39	95 +341	+93	+13	+5	+191	+501	+476	6 +479	+412	+32	2 +233	3 +219	+221	+223	+214
Change in	5 97,321 over previous	1 98,65 1 +1.33	7 103,0 6 +4.4	າວ 104,16 18 +1 ດຄ	2≈ 104,492 39 +3.28	104,627	104,703	104,785	104,993	105,361	105,712	106,064) +353	106,367	106,60	+ 106,775 7 +173	5 106,936 2 +161	5 107,099 1 +163	107,263	107,421
	provious	. +1,33		. +1,00	- +520	+135	+/6	+02	7200	+309	+33(+555	+503	+23	+1/2	+10	+103	+104	+15/
Househol	ds		e	F0 /77			*** **	10										405	
Change in F	n 118,576 Households ov	o 119,92 vi +1.35	o 121,5 0 +1 6	oz 123,05 26 +1.50	oo 124,013 01 +961	124,934	125,871 +936	126,739 +868	127,732	129,187	130,619	9 132,074 2 +1.455	133,536	134,89	o 136,211 0 +1.314	137,366 5 +1.154	5 138,419 5 +1.054	139,586	140,646
Number of s	s 124,358	B 125,77	5 127,4	79 129,05	54 130,061	131,027	132,009	132,919	133,961	135,487	136,989	9 138,514	140,048	141,47	4 142,853	3 144,065	5 145,170	146,393	147,506
Change in o	over previous	+1,41	6 +1,7	05 +1,57	75 +1,007	+966	+982	+910	+1,041	+1,526	+1,502	2 +1,526	+1,534	+1,42	6 +1,379	9 +1,211	1 +1,105	+1,223	+1,113

Compo	Components of Population Change 615 dpa																		
	Year beg	inning July 1	st																
Disting	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	
Births	1.41	0 1.42	2 1 42	7 1 42	1 1 1 1 1 1 1 1 1 1 1 1 1	1 422	1 420	1 42	4 141	6 1.40	0 1.402	1 204	1 200	: 197	E 196	4 1 26	2 1.24	. 1 227	
Female	1,41	0 1,43 3 1,36	2 1,43 4 1.36	7 1,43 B 1.36	1,420 3 1,360	1,432	1,430	2 1.35	4 1,41 7 1.34	6 1,40 9 1.34	9 1,403 2 1.336	5 1,390 5 1.329	1,30) 1,37	0 1.29	1,35 9 1,28	3 1,34: 9 1.28	1,337	
All Births	2,75	4 2,79	6 2,80	5 2,79	4 2,788	2,795	2,791	2,78	1 2,76	5 2,75	1 2,739	2,724	2,704	2,68	5 2,66	4 2,64	2 2,62	5 2,610	
TFR	1.8	4 1.8	6 1.8	6 1.8	5 1.85	1.85	1.85	5 1.8	5 1.8	1.8	5 1.85	5 1.85	1.85	5 1.8	5 1.8	1.8	4 1.8	4 1.84	
Births input																			
Deaths	4.50				4 4 9 7	4 420							4.47				c 4.54		
Female	1,52	1,45	4 1.53	1 1,444 3 1,53	5 1,437	1,430	1,440	1,43	2 1.53	4 1.53	4 1.53	3 1,402	1,472	1,40	9 1,45	15 1,50	4 1.56	1 1.568	
All deaths	3,21	4 3,01	1 2,98	4 2,97	3 2,973	2,976	2,971	2,97	0 2,97	7 2,98	3 2,988	3 2,999	3,009	3,02	3 3,04	0 3,06	0 3,08	3,103	
SMR: males	s 116.	.0 108.	9 105.	9 102	3 100.0	97.5	95.1	92.	7 90.	.6 88.	7 86.8	8 85.0	83.4	82.	0 80.	.6 79.:	2 77.1	9 76.8	
SMR: femal	k 111.	.3 101.	97.	8 96.	94.2	92.5	90.2	88.	3 86.	.6 84.	8 83.0) 81.5	79.9	9 78.	4 77.	.2 76.	0 74.	7 73.6	
SMR: perso	ı 113.	4 104.	7 101.	6 99.	2 96.9	94.8	92.5	5 90.	4 88.	5 86.	6 84.8	3 83.2	81.6	6 80.	1 78.	.8 77.	5 76.3	2 75.1	
Expectation	1 77.	.8 78.	6 78.	9 79.	3 79.6	79.9	80.2	2 80.	6 80.	.8 81.	1 81.4	1 81.6 	81.9	9 82.	1 82.	.3 82.	5 82.	7 82.9	
Expectation	82.	.3 83. 2 81	9 83. 2 81.	7 83. 5 81.:	9 84.2 3 82.1	84.4	84.t 82.f	5 84. 5 82.	9 85. 0 83	.1 85.	3 85.t 4 83.f	5 85.8	86.0) 86. I 84	2 86.	.4 86. 5 84	5 86.0 7 84.9	5 86.9 9 85.0	
Deaths inpu	it co.	. 01.		5 01.	02.1	02.0	02.0		J 00.				04.		o 04.	.0 04.		00.0	
In-migrati	on from th	e UK																	
Male	4,07	1 3,91	6 3,92	9 3,94	3,958	3,975	3,953	3,96	5 3,99	5 4,03	1 4,033	3 4,015	4,024	4,01	1 4,01	5 4,07	8 4,093	2 4,112	
Female	4,17	1 4,01	0 4,01	9 4,03	0 4,034	4,043	4,014	4,01	7 4,04	4,06	8 4,062	2 4,037	4,045	5 4,02	9 4,03	4 4,09	9 4,11	4 4,134	
All SMiaP: mal	8,24	1 0	5 7,94	в 7,97 1 0.	5 7,992	8,018	7,968	5 7,98	2 8,03	1 0.	9 8,095	5 8,052	8,065	3 8,04	0 8,04 1 0	1 0	6 8,201 1 0.1	5 8,246	
SMigR: fem	ε 0. ε 0	1 0.	1 0.	1 0.	1 0.1	0.1	0.1	0.	1 0.	1 0.	1 0.	0.1	0.1	. 0.	1 0.	1 0.	1 0.	1 0.1	
Migrants inp	· ·	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	•	
Out-migra	tion to the	UK																	
Male	3,71	7 3,87	5 3,87	3 3,87	3,852	3,830	3,844	3,82	1 3,77	9 3,72	6 3,709	3,721	3,729	3,74	6 3,74	7 3,69	3 3,70	1 3,695	
Female	3,86	6 4,02	9 4,01	1 4,00	3,974	3,942	3,942	2 3,91	1 3,85	2 3,80	3,78	3,779	3,762	2 3,79	5 3,79	9 3,74	5 3,74	3,750	
SMigR: mail	7,58 4 20	ა 7,90 5 20	+ 7,88 6 20-0	5 7,87 6 201	, 7,826 ; 20.5	20 4	7,786	, /,73 ; 20.	J 7,63	4 20	u 7,492 2 20.4	. 7,500	7,491	1 7,54	1 7,54 5 20	o 7,43	, /,449 1 20 ·	7,445 1 20.0	
SMigR: fem	. 28. i 28	. 29. 6 29	7 29.	- 29. 6 29.	. 20.5 5 29.6	29.5	29.0	29.	- 29. 7 29	. 29.	2 29. 2 29.1	1 29.3	29.4	. 29. I 29	- 29. 4 29	29. .4 29.	. 29. 0 29.	. 28.9	
Migrants inp	· ·	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
In-migrati	on from O	verseas																	
Male	38	7 38	8 38	7 40	5 393	396	386	5 38	6 38	6 38	6 386	386	386	5 38	6 38	16 38	6 38	6 386	
Female	34	0 34	1 34	0 35	4 345	347	340) 34	0 34	0 34	0 340) 340	340) 34	0 34	0 34	0 34	0 340	
All SMigR: mal	4 0	0 0	9 72 D 01	/ /6/ 0 0/) 738	743	/26	5 72 1 0	ь /2 0 0	0 01	5 /2t	5 /2t	0 01	5 /2) 0	ь /2 0 0	15 72 0 01	ь 724 0 01	5 /26 0 00	
SMigR: fem	ε 0. ε 0.	.0 0.	o 0.	D 0.	0.0	0.0	0.0	, 0,) 0,	0 0.	.0 0.1	0.0	0.0	0.0) 0.	0 0.	.0 0.	0 0.0	0.0	
Migrants inp	•	•	•	•	•	•		•	•	•	•		•	•	•	•	•	•	
Out-migra	tion to Ov	erseas																	
Male	30	9 30	9 31	0 30	9 310	310	310	31	0 31	0 31	0 310	310	310) 31	0 31	0 31	0 31	310	
Female	24	0 24	0 24	0 24	240	240	240) 24	0 24	0 24	0 240) 240	240) 24	0 24	0 24	0 24	240	
All SMigR: mal	4 43	9 54 2 43	9 55	U 540 N 431	9 550) 43.1	43.2	43.3) 55 8 43.1	0 55 6 43	8 44	U 550 1 44.1	J 550 R 44.F	55L 1 448	3 45	0 55	1 45	2 451	J 550 2 45.2	
SMigR: fem	€ 43. ; 41	z 43. 7 41	6 41	7 41:	3 420	42.3	43.0	, 42: 42:	0 43. 8 43	2 431	6 43.9	44.5	44.0	5 43. 5 44	9 45	1 45:	3 45:	3 45.3	
Migrants inp	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	
Migration	- Net Flow	s																	
UK	+65	9 +2	2 +6	3 +9	9 +166	+245	+182	2 +25	0 +40	5 +57	3 +603	3 +552	+578	3 +49	9 +50	13 +73	9 +75	7 +801	
Overseas	+17	8 +17	9 +17	7 +21	1 +188	+193	+176	5 +17	6 +17	6 +17	6 +176	5 +176	+176	5 +17	6 +17	'6 +17	6 +17	6 +176	
Summary	of nonula	tion change																	
Natural char	r -46	i0 -21	- 5 -17:	9 -18	3 -185	-181	-180	.18	9 -21	2 -23	2 -249	-275	-305	5 -33	8 -37	6 -41	8 -45	4 -492	
Net migratio	×+83	7 +20	2 +24	0 +31	+354	+438	+358	42	6 +58	1 +74	9 +779	+728	+754	+67	5 +67	'9 +91:	5 +93	3 +977	
Net change	+37	7 -1	3 +6	1 +12	6 +169	+257	+179	+23	7 +37	0 +51	7 +530) +453	+449	9 +33	8 +30	13 +49	7 +47	9 +485	
Crude Birth	10.0	5 10.2	0 10.2	3 10.1	9 10.16	10.18	10.16	5 10.1	1 10.0	5 9.9	8 9.91	9.84	9.76	9.6	7 9.5	9.4	9 9.4	2 9.35	
Crude Death	t 11.7	3 10.9	8 10.8 1 0.9	9 10.8	5 10.84	10.84	10.81	10.8	0 10.8 5 2.1	1 10.8	2 10.83	2 10.84	10.86	5 10.8 2 2 4	9 10.9	14 11.0 14 2.0	0 11.0	5 11.11	
CIUDE NEL IN	, 3.0	0 0.7	• 0.0	5 1.1.	5 1.25	1.00	1.34	/ 1.5	5 2.1	1 2.7.	2 2.04	2.0.	2.12	. 2.4	5 2.4	N 3.2	5 3.5.	5 5.50	
Summa	arv of P	opulatio	n estim	ates/for	ecasts														
-	Populatio	n at mid-ves																	
	201	2 201	2014	1 2014	2016	2017	2018	2010	2/12/	0 2021	2022	2023	2024	202	5 202	6 2027	7 2026	2020	2030
0-4	14.65	1 14.68	B 14.71	5 14.59	4 14.489	14.472	14.517	14.51	1 14.48	7 14.46	4 14.442	2023	14.340) 14.26	8 14.18	14.08	5 13.99	9 13.913	13.831
5-10	16,81	2 17,05	3 17,30	5 17,68	7 18,091	18,242	18,257	18,29	3 18,34	6 18,25	5 18,172	2 18,174	18,224	18,23	0 18,20	18 18,17	2 18,13	5 18,077	18,003
11-15	15,58	14,91	5 14,50	7 14,22	5 14,054	14,094	14,321	14,58	8 14,81	7 15,22	1 15,471	15,560	15,577	15,63	5 15,56	5 15,49	0 15,48	7 15,543	15,560
16-17	6,78	8 6,63	8 6,35	1 5,95	5,718	5,536	5,400	5,28	2 5,28	7 5,30	3 5,439	5,676	5,780	5,79	6 5,92	6,05	0 5,99	5,886	5,871
18-59Femal	151,77	4 151,78	8 151,18	4 150,64	5 149,909	149,003	147,980	146,81	4 145,68	2 144,32	0 143,152	2 141,954	140,787	139,68	0 138,63	137,76	9 137,16	5 136,567	136,082
00/05 -74 75-84	39,02	5 39,43 0 21.46	5 40,070 7 21.550	5 40,71 9 21.58	J 41,304 7 21,549	41,966	42,503	s 42,94	2 43,53 2 22,42	7 44,30 7 22.77	U 44,155	24,454 24,655	45,11/	45,88	8 46,58 9 26.22	97 47,170 M 26.570	6 47,771 6 26,834	J 48,219 5 27.149	48,579
85+	7.89	4 8.08	6 8.36	5 8.72	9,134	9,491	9.807	10.18	2 10.50	7 10.82	B 11.203	3 11.623	11.899	12.17	4 12.43	10 12.73	0 13.15	3 13.671	14.043
Total	273,69	7 274,07	4 274,06	1 274,12	2 274,248	274,417	274,674	274,85	3 275,09	0 275,46	0 275,97	276,506	276,959	277,40	9 277,74	6 278,04	9 278,54	5 279,026	279,510
Dependen	cy ratios,	mean age a	and sex rat	io															
0-15 / 16-65	5 0.2	8 0.2	B 0.2	B 0.2	3 0.28	0.29	0.29	0.2	9 0.3	0 0.3	0.30	0.30	0.31	0.3	1 0.3	1 0.3	1 0.3	1 0.31	0.31
65+ / 16-65	0.3	5 0.3	5 0.3	7 0.3	0.38	0.39	0.40	0.4	0 0.4	1 0.4	2 0.43	3 0.44	0.45	5 0.4	6 0.4	8 0.4	9 0.5	0.52	0.53
Median age	42	3 42	4 0.6 5 42	5 0.6 7 43) 43.2	43.3	43.4	5 0.7	0 0.7 5 43	4 43	2 0.75 4 43.4	5 0.75 1 43.5	434	5 0.7 1 43	7 0.7 5 43	9 0.8 6 43	0 0.8 7 43	1 0.83 7 43.8	43.9
Median age	45.	.3 45.	6 45.	9 46.	2 46.5	46.7	47.0) 47.	2 47.	5 47.	7 47.9) 48.0	48.0) 48.	0 48.	.0 48.0	0 48.0	0 48.1	48.1
Sex ratio ma	a 92.	.0 92.	2 92.	3 92.	4 92.6	92.7	92.8	93.	0 93.	1 93.:	2 93.3	3 93.5	93.6	6 93.	7 93.	.8 93.	8 93.1	9 94.0	94.1
_ .																			
Population	n impact c	of constrain	t								_								
Number of p	ersons	+54	a -12	ь -12	s -108	-102	-73	-18	ъ -16	-4	5 +10 ¹	+118	+47	+6	ь -2	ro -5	1 +15	s +159	+184
Household	ds																		
Number of F	118.57	6 119.16	2 119.74	8 120.33	5 120.921	121.508	122.094	122.6R	0 123.26	7 123.85	3 124.440	125.0%	125.61	2 126.19	9 126.78	15 127.37	2 127.95	3 128.544	129.131
Change in H	louseholds d	ov +58	6 +58	6 +58	5 +586	+586	+586	6 +58	6 +58	6 +58	6 +586	6 +586	+586	6 +58	6 +58	16 +58	6 +58	5 +586	+586
Number of s	5 124,35	124,97	3 125,58	8 126,20	126,818	127,433	128,048	128,66	3 129,27	8 129,89	3 130,508	3 131,123	131,738	132,35	3 132,96	133,58	3 134,19	3 134,813	135,428
Change in	over previou:	s +61	5 +61	5 +61	5 +615	+615	+615	5 +61	5 +61	5 +61	5 +615	5 +615	+615	5 +61	5 +61	5 +61	5 +61	5 +615	+615
Labour Fr	orce																		
Number of I	131 60	1 137.55	3 137.45	1 137.98	2 137.060	136 689	136 230	135.92	3 135 50	0 134.80	1 134.040	133.205	132.40	2 131 78	8 131.07	6 130.60	8 130.30	4 129.829	129 494
Change in L	abour Force) (+5,95	2 -10	2 -17) -222	-370	-450		7 -33	13 -78	9 -752	2 -756	-800) -70	5 -71	2 -46	8 -30	4 -476	-334
Number of s	s 97,32	1 97,68	4 100,72	6 100,66	6 100,578	100,371	100,104	99,94	6 99,76	i4 99,18	4 98,631	98,074	97,485	5 96,96	7 96,44	13 96,09	9 95,876	6 95,525	95,279
Change in	over previou	s +36	3 +3,04	2 -6	-88	-208	-267	-15	8 -18	1 -58	0 -553	3 -556	-589	9 -51	8 -52	4 -34	4 -22	4 -350	-246



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