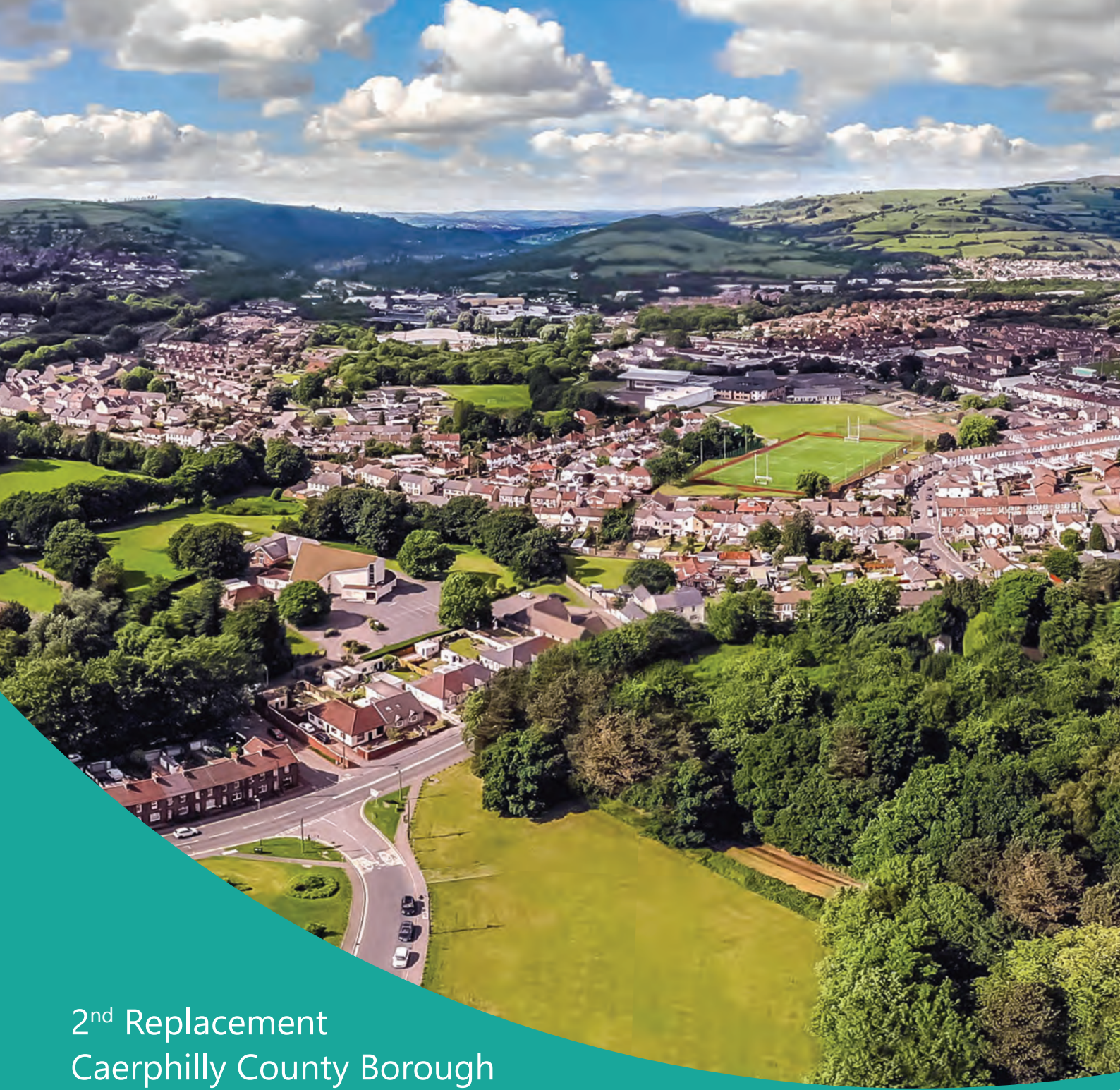

2nd Replacement
Caerphilly County Borough
Local Development Plan up to 2035

PS4 Population and Housing Growth Options

October 2022

CAERPHILLY COUNTY BOROUGH COUNCIL
CYNGOR BWRDEISTREF SIROL CAERFFILI

Mae’r ddogfen hon ar gael yn Gymraeg, ac mewn ieithoedd a fformatau eraill ar gais.

This document is available in Welsh, and in other languages and formats on request.

Contents

Figures

Tables

1. Introduction

1.1 One of the main functions of a Local Development Plan (LDP) is to ensure that there is sufficient land available in the County Borough to provide for all of the services required by current and future residents. These requirements depend on the number of people, so the future population level for which provision has to be made is a key element of the plan.

1.2 The most basic and important requirement of residents is a home, and land for housing is one of the most significant land-uses that have to be allocated in the LDP. The issues of population and housing are thus both fundamental to the Plan.

1.3 This Evidence Base Paper on 'Population and Housing Growth Options' is one of a number of background documents prepared as part of the evidence base to support the 2nd Replacement Local Development Plan up to 2035 (2RLDP). It will consider the current policy context in respect of determining population and household growth, as well as assessing current and historical demographic trends. The Paper will set out a number of growth scenarios and assess what each will mean in respect of the structure of the future population and implications for the workforce and housing requirements.

2. Policy Context

Future Wales: The National Plan 2040

2.1 'Future Wales' is the National Development Framework for Wales, setting out the direction for development in Wales to 2040. The provision of housing across Wales to meet needs is a key priority of the Welsh Government and Future Wales identifies that the planning system must facilitate the provision of additional market and affordable housing.

2.2 As part of Future Wales, a range of estimates of additional housing need over the 20-year period up to 2038/39 have been published at a national level, and also for the four regions of Wales, which includes South-East Wales.

2.3 Policy 7 of Future Wales clearly states that "*the national and regional estimates of need do not reflect future policies or events and are not a Housing Requirement for Wales or the regions. However, the estimates do provide part of the evidence and context on which housing policy and requirements can be based. The estimates of market and affordable housing need should inform the housing requirements set out in Strategic and Local Development Plans and it is expected the housing requirements will differ from the estimates of housing need."*

2.4 Future Wales provides area-specific policies for each of the four regions. The regional spatial diagram for South-East Wales highlights that Cardiff, Newport and the Valleys, including Caerphilly County Borough, are part of a national growth area and Policy 33 on this national growth area states that *"**Strategic and Local Development Plans should recognise the National Growth Area as the focus for strategic economic and housing growth**."*

2.5 Under the Welsh Government central estimates (2019-based) 66,400 additional homes are needed in the South-East Wales region until 2039 and over the initial five years (2019/20 to 2023/24) 48% of the additional homes needed should be affordable homes. These estimates provide part of the evidence and context on which Housing Requirements for Strategic Development Plans can be based and should be considered at the regional scale.

Planning Policy Wales

2.6 Planning Policy Wales (PPW) Edition 11 states in paragraph 4.2.6 that "*the latest Welsh Government local authority level Household Projections for Wales*, *alongside the latest Local Housing Market Assessment (LHMA) and the Well-being plan for a plan area, will form a fundamental part of the evidence base for development plans. These should be considered together with other key evidence in relation to issues such as what the plan is seeking to achieve, links between homes and jobs, the need for affordable housing, Welsh language considerations and the deliverability of the plan, in order to identify an appropriate strategy for the delivery of housing in the plan area. Appropriate consideration must also be given to the wider social, economic, environmental and cultural factors in a plan area in order to ensure the creation of sustainable places and cohesive communities."*

2.7 It also states in paragraph 4.2.7 that "*household projections provide estimates of the future numbers of households and are based on population projections and assumptions about household composition and characteristics. Certain elements of the projections, such as births and deaths, will remain relatively constant throughout the plan period. However other elements, such as migration and household formation rates, have the ability to influence outcomes significantly. Planning authorities need to assess whether the various elements of the projections are appropriate for their area, and if not, undertake modelling, based on robust evidence, to identify alternative options*."

Development Plans Manual

2.8 The Development Plans Manual (DPM) Edition 3, published in March 2020, provides detailed guidance on how to develop an evidence base to justify the level and distribution of economic growth and housing. The DPM recognises that there is not always a direct correlation between jobs and homes, but this is something that needs to be "*considered collectively when assessing growth levels and developing a sustainable strategy; the aim being to achieve a balance between homes and jobs thereby reducing the need for commuting*" (paragraph 5.25).

2.9 Links to the regional and sub-regional context should also be considered, taking account of functional linkages and geographical synergies between places to achieve better planning outcomes.

2.10 The DPM states that evidence will be required to demonstrate the current/baseline position of the plan and that "*trend-based forecasts quantify a variety of outcomes, based on a series of assumptions, extrapolating the level of need forward to cover the whole plan period. The forecasts used should relate directly to the range of issues and land uses the plan is seeking to address, for example changes in population and the need for additional homes to accommodate this change. All sources of evidence, including the latest Welsh Government Household Projections, should be used when preparing a plan"* (paragraph 5.28).

2.11 Once the total need has been determined, consideration should then be given to supply factors which could include the ability to deliver the level of growth within the timeframe of the LDP. The housing requirement is a policy decision which should balance need and supply factors, as well as clearly link to the vision and key objectives of the 2RLDP and ensure an appropriate balance between housing and jobs.

2.12 The DPM provides guidance on the demographic scenarios that should be considered when determining growth options. It is recognised in Paragraph 5.33 that "*trend-based projections inform plan preparation by extrapolating existing trends over the plan period, based on a series of assumptions. They provide a context within which a plan can be prepared. They are not a definitive statement about what will precisely happen, but illustrate what may happen, dependent on the assumptions used. Key to any projections will be the assumptions themselves."*

2.13 The latest Welsh Government Population and Household Projections are identified as a fundamental part of the LDP evidence base, and the DPM states that these projections, and the resultant housing numbers, should be considered as part of the evidence which should include a summary analysis of each variant projection, and the implications this has for population, households, and jobs growth in an area. The projections that the DPM states should be considered are:

- Principal Projection
- Higher variant
- Lower variant
- Ten-year migration
- Zero migration

2.14 The DPM also recommends that alternative scenarios should be tested which consider the impact of different assumptions. A number of example alternative scenarios are identified:

Demographic led	Changes in household size
Demographic led	Changes in household formation rates
Demographic led	Changes in migration rates (internal and international) age profile of migrants (retirement age, economically active)
Affordable Housing led	The level of housing provision necessary to deliver the total affordable housing need identified over the plan period
Jobs led	Changes to labour force / economically active profile
Jobs led	Plan for various economic growth outcomes (i.e. increases in labour force/working age, migration levels)
Dwelling led	Plan for a set number of homes to achieve demographic outcomes (i.e. housing need / population and migration levels)
Dwelling led	Past build rate scenarios (e.g., 5, 10, 15 and 20 years) - implication of replicating past trends (considered against the plan and economic context at that time, have regard to the developers operating in the area)
Policy led	Policy choice – consider the impact of regional growth levels, City Deal bids, Enterprise Zones, growth levels, containment and commuting factors

Table 1: ***Alternative Scenarios (Table 15 of Development Plans Manual, 2020, p112)***

2.15 The Manual states that *"LPAs can choose to plan for a specific demographic, dwelling, job led strategy, or alternatively a hybrid approach may be appropriate. There may be commonalities between different scenarios in terms of the homes and jobs generated indicating more than one scenario, or a combination of several will deliver the LDP strategy. The evidence base should set out clearly why a growth level is preferred and demonstrate how it aligns with the evidence base and how it will deliver the key issues the plan is seeking to address, whilst minimising the need to commute."*

2.16 Advice is given on the conversion factor for translating households to dwellings, as there are vacancies in the housing stock to allow for churn. LPAs should consider the locally specific evidence on this.

2.17 The DPM also provides guidance on economic forecasting, which will be considered as part of an Employment Land Review (ELR). It is important that LPAs do not consider employment forecasts in isolation but should consider the relationship between economic and demographic projections. Whilst there is no direct mathematical relationship between jobs and housing growth, it is important that the forecasting for jobs and homes broadly align.

Manual of Integrated Demographic Forecasting for Local Planning in Wales

2.18 A Manual prepared for RTPI Cymru, with funding support from Welsh Government was published in April 2017 by Ludi Simpson of the University of Manchester. The aim of the Manual is to provide support and guidance for local authorities on how to undertake the demographic modelling required to meet paragraph 4.2.7 of PPW, which requires LPAs to

assess the appropriateness of the elements of the projections within their area and undertake modelling to identify alternative options.

2.19 The first part of the Manual sets out the theory of demographic forecasting and the interrelationship between population, households, and the labour force. The second part of the Manual is a practical guide on how the POPGROUP software can be used to replicate official forecasts and test other scenarios with plausible alternative assumptions.

2.20 The Manual identifies a number of essential scenarios that an LDP will need to consider:

- Scenarios that update with improved data the demographic demand for housing provided by the continuity forecast.
    - Recent mid-year estimates.
    - Improved data for the demand-supply links.
    - Corrected migration data for students.
    - Known major changes to the population in communal establishments.
- Scenarios that help to judge the uncertainty of the continuity projections by exploring alternative trajectories of fertility, mortality, and migration: trajectories that are realistic alternatives based on past fluctuations outside the control of local planners.
    - High and low variants of fertility and mortality.
    - Migration based on data for years other than the last 5 years.
    - Alternative household formation rates.
    - Alternative economic activity rates.
- Scenarios that explore plans for levels of housebuilding or jobs growth independent of demographic demand.
    - Jobs growth provided from past experience or economic forecasts.
    - Housing growth based on past building rates.

Welsh Government Consultation on planning legislation and policy for second homes and short-term holiday lets

2.21 Welsh Government recently consulted on proposed changes to planning policy around second homes and policy lets. One element of the consultation was a proposed change to Section 4.2 of Planning Policy Wales (PPW) to state, "*Localised issues, such as the prevalence of second homes and short-term holiday lets, must also be considered when developing the requirement for market and affordable homes within a particular area and whether the evidence suggests that a local policy approach is needed."*

2.22 The consultation concluded in February 2022 and the responses are currently being considered. However, it is prudent for the Council to be mindful of this potential change to PPW when considering the levels of growth.

2.23 As part of the Council's response to this consultation, it was highlighted that as of 1st December 2021, based on Council Tax records, there were only 242 second homes in Caerphilly County Borough. This represents just 0.3% of all Council Tax dwellings within the County Borough. The definition of a second home for Council Tax purposes is a dwelling that is not a person's sole or main residence and is substantially furnished. This will include empty furnished properties to let or sell and dwellings that are left furnished following the death of a resident, so the actual number of second homes that are lived in part of the time is likely to be lower still.

2.24 The number of short-term holiday lets is also low. The data indicates that Caerphilly County Borough does not face the issues experienced in some other parts of Wales where the number of genuine second homes and holiday lets are impacting on the ability of local

residents to afford to buy or rent a home within their community. As such, it is not considered that this is a matter that would significantly influence the housing requirements.

Cardiff Capital Region City Deal

2.25 The Cardiff Capital Region (CCR) City Deal is a 20-year programme agreed in 2016 by the UK Government, Welsh Government and the 10 local authorities in South-East Wales. The City Deal focuses on a number of programmes of intervention which will be the catalyst for regional growth and the generation of additional private sector investment into the region.

2.26 At the start of the City Deal programme, the Growth and Competitiveness Commission reviewed the existing evidence base in order to understand how best to generate growth and support the ambitions of the region. Recommendation 1 of the report states "*Successful city-regions attract population, and population growth provides increased revenues that underpin amenities and services and reduce risks of high average dependency rates. But attracting population is the result of getting other things right. Depth and range of job market, affordability of housing, range of liveability choices.*

Whilst the Commission does not advocate setting any specific targets, the Capital Region should aim to become an attractive place to live, and in the context of average increases in the UK population over the next 20 years it should seek to keep pace with average population growth in the UK core cities. To grow, the Cardiff Capital Region will need to focus on retaining people in the region as they develop their skills, keeping students after they graduate and matching them to job and enterprise opportunities, attracting more experienced workers later in their career and developing a more flexible housing market."

2.27 The Commission recognised the importance of population growth, in particular the attraction of a working age population, as an important measure of how successful the city region is becoming.

2.28 The City Deal sets out a target of delivering 25,000 new jobs over the 20-year period. The evidence base that sits behind this target [1] indicates that this would equate to an increase in jobs across the region by around 3.76%. It is important that there is a working age population to support this level of growth.

The Caerphilly We Want - Well-being Plan 2018-2023

2.29 Caerphilly's Public Services Board was established in April 2016 under the Well-being of Future Generations (Wales) Act 2015 and brings together public services operating across the county borough to improve residents' well-being. Together, as public services and in consultation with residents and communities, they have undertaken an Assessment of well-being. The findings of this Assessment and 'The Caerphilly We Want' engagement programme have shaped the content of the Well-being Plan.

2.30 The Plan has 4 Well-being Objectives which set the direction for action and change over the next 5 years.

- Objective 1: Positive Change - A shared commitment to improving the way we work together
- Objective 2: Positive Start - Giving our future generations the best start in life
- Objective 3: Positive People - Empowering and enabling all our residents to achieve their own potential

[1] Aecom (September 2015), Baseline Economic Analysis for South-East Wales

- Objective 4: Positive Places - Enabling our communities to be resilient and sustainable

2.31 The 'Positive Places' objective makes specific reference to having attractive, well-used and connected communities with easy access to the natural environment and affordable and sustainable housing.

2.32 The objectives were informed by a number of key issues derived from engagement with a large cross section of stakeholders. There are a number of cross-cutting issues that will inform the wider Strategy of the 2RLDP, but of specific relevance to population, housing and jobs are the following issues, with the number in brackets representing the priority given to them through the combined engagement exercises:

- Providing training, apprenticeships, employment, and volunteering opportunities that are appropriate for all sectors of the community (1).
- Developing suitable housing to meet the variety of people's needs, including affordable housing (4).
- Maximising the benefits of the Cardiff Capital Region City Deal for Caerphilly county borough (10).
- Balancing the need for development with protecting the environment (11).
- Ensuring homes and public buildings are sustainable and energy efficient, to reduce our carbon footprint (21).
- Maintaining and enhancing sustainable and attractive communities and town centres (22).

Gwent Well-being Plan

2.33 In January 2021 the five separate Public Services Boards commenced work on a well-being assessment for the region. The draft Well-being Assessment was published for consultation between December 2021 and February 2022 and was approved by the Gwent PSB in March 2022.

2.34 The Well-being assessment recognises that across the region the number of older people is expected to rise in the next 20 years. The assessment acknowledges that "an aging population could mean higher demand for social care and health services in the future. An aging population will require housing that meets their needs."

2.35 The importance of housing is recognised, with the assessment stating "*Housing is also central to our communities, and it drives the demand for local services, shops and facilities and can attract investment. Without a settled home people may have difficulties accessing employment, education, training and health services*."

2.36 It also acknowledges that "*all development, including housing, has an impact on the environment and needs to progress in a way that is sensitive to local areas, limits energy consumption and embraces a sustainable approach to planning and design*."

Caerphilly County Borough Local Housing Strategy: An Agenda for Change

2.37 The 'Local Housing Strategy: An Agenda for Change' sets out the Council's vision and strategy for housing over the period December 2021 to December 2026. The vision for housing in Caerphilly County Borough identifies that the "*housing offer will be an affordable and attractive one. It will support an excellent quality of life, being connected economically,*

physically, and socially and in communities to be proud of. The new homes that are built will improve choice and quality."

2.38 The Strategy contains five strategic priorities:

- Creating Better Choices.
- Creating Great Places to Live.
- Creating Healthy Homes and Vibrant Communities.
- Delivery New Homes.
- Supporting Special Housing Needs.

2.39 Under the 'Creating Great Places to Live,' it is recognised that access to better paid employment for existing residents, encouraging young professionals/managers and families to remain in the area and attracting more residents to move into the area are all important elements and will help maximise housing led regeneration. The strategy recognises an imbalance in our housing markets with the Heads of the Valleys having a limited choice of housing. Whilst house prices are more affordable in this area, this affects the viability of new housing schemes, reducing choice further. In the Northern and Southern Connections Corridors it is recognised that there is a better diversity of housing stock, but there is a need to identify land to build more homes to increase supply and address affordability. There is evidence that the County Borough is losing younger age groups and retaining and attracting these households with an economic and housing offer is a priority.

2.40 The 'Delivering New Homes' strategic priority aims that more homes are delivered so that both Caerphilly residents and newcomers can find a suitable, desirable home that they can afford. The strategy recognises the importance of the 2RLDP in identifying the number and spatial priorities for new housing, whilst aligning to Future Wales. The Strategy identifies a commitment to being more pro-active in bringing sites forward for housing delivery. Delivering more affordable housing is also a critical part of the strategy.

Local Housing Market Assessment

2.41 The latest Local Housing Market Assessment (LHMA) was published by the Council in April 2018. This assessment identified a total need of affordable housing of 282 units per annum over 5 years (inclusive of turnover for social rented units). This is broken down into:

- 169 social rented units; and
- 113 units for intermediate products (56 low cost home-ownership and 57 intermediate rent).

2.42 The 169 social rented units comprises of:

- a shortfall of 25 units of accessible housing;
- a shortfall of 315 units of general needs accommodation; and
- a surplus of 171 units of older person's accommodation.

2.43 In terms of property sizes, by far the greatest need is for one bedroom accommodation (212.8% of the total social housing need), specifically general needs one bedroom accommodation.

2.44 The LHMA contains analysis of need at both ward and Housing Market area level, with 4 housing market areas being identified within the County Borough. Table 2 shows the need for social rented properties by housing market area, categorised as accessible housing (AH), general needs housing (GH) and older person's housing (OH).

Bed count	**1**	**1**	**1**	**2**	**2**	**2**	**3**	**3**	**3**	**4**	**4**	**4**	**5**	**5**	**5**	
Housing market area	**AH**	**GN**	**OP**	**AH**	**GN**	**OP**	**AH**	**GN**	**OP**	**AH**	**GN**	**OP**	**AH**	**GN**	**OP**	**Total**
Heads of the Valleys	0	67	-33	1	-54	-28	0	-75	0	1	4	0	0	0	0	-116
Northern Connections Corridor	4	192	-34	6	37	-8	1	-39	0	6	5	0	0	0	0	167
Lower Islwyn	-4	50	-24	0	-15	-6	0	-15	0	1	0	0	0	0	0	-12
Caerphilly Basin	3	167	-26	4	30	-12	-1	-42	0	4	3	0	0	0	0	130
Caerphilly County Borough	0	476	-118	10	-2	-55	0	-170	1	13	12	0	0	0	0	169

Table 2: ***Social rented need by market area and bed count***
Source: 2018 LHMA

2.45 Overall, there is a large net surplus of social rented accommodation in the Heads of the Valleys, largely due to an oversupply of 2 and 3 bed general needs properties and 1 and 2 bed older persons properties, which are largely on sheltered housing schemes. However, there is a significant shortfall in 1 bed general needs properties in the area.

2.46 Lower Islwyn has a small net surplus of properties overall, but an identified need for 1 bed general needs properties.

2.47 The Northern Connections Corridor has a need for adapted housing across all sizes, together with a large need for 1 bed general needs properties, and to a lesser extent, 2 and 4 bed general needs properties.

2.48 Caerphilly Basin has the largest need for 1 bed general needs properties, together with a need for 2 and 4 bed general needs. As is the case in the other areas, there is a surplus of 3 bed general needs units.

2.49 There is also a net need for 1, 2 and 4 bed low-cost home ownership (LCHO) properties in each of the 4 housing market areas, as shown in Table 3.

Housing market area	**1**	**2**	**3**	**4**	**5**	**Total**
Heads of the Valleys	5.3	1.7	1.1	0.1	-0.3	7.8
Northern Connections Corridor	18.9	8.3	-0.9	2.6	-0.9	28.0
Lower Islwyn	7.0	3.4	0.1	0.9	-0.4	11.0
Caerphilly Basin	6.6	3.2	-0.8	0.9	-0.4	9.5
Caerphilly County Borough	37.8	16.6	-0.5	4.4	-1.9	56.3

Table 3: ***LCHO need by market area and bed count***
Source: 2018 LHMA

2.50 Table 4 shows that there is a net need for intermediate rental properties across all market areas, but as with LCHO the need is for 1, 2 and 4 bed properties in all market areas, and 3 bed in the Northern Connections Corridor and Lower Islwyn.

Housing market area	1	2	3	4	5	Total
Heads of the Valleys	1.9	0.1	-0.2	0.0	-0.1	1.7
Northern Connections Corridor	17.0	5.2	1.0	0.2	-0.9	22.5
Lower Islwyn	1.4	2.1	1.5	0.0	-0.1	4.9
Caerphilly Basin	20.7	10.4	-3.3	1.0	-1.0	27.8
Caerphilly County Borough	41.0	17.8	-1.0	1.2	-2.1	56.9

Table 4: ***Intermediate rent need by market area and bed count***
Source: 2018 LHMA

2.51 Welsh Government (WG) commenced work on a new model for LHMAs in 2019 in line with the recommendations of the Independent Review of Affordable Housing Supply, which indicated that a more consistent framework across Wales for undertaking LHMAs was required. WG wrote to Local Authorities in March 2021 to advise on the progress that had been made on the model to date. The letter stated that "*the LHMA is an essential piece of evidence for LDPs, and many authorities are in the process of replacing their plans. Consequently, Local Authorities must continue the work on their LHMAs, and the current guidance remains in place to assist this process. We do not expect the forthcoming introduction of the new LHMA methodology to be a reason for delay in the production of LDPs*."

2.52 In light of this advice, work commenced on an update to the 2018 LHMA, which would have formed the basis for the Preferred Strategy. However, in March 2022, WG wrote again to Local Authorities (LAs) to states that the new methodology for the technical calculation of housing need across Wales was to become operational on 31st March 2022 and that all LDPs should be based on the outputs of the new methodology unless a plan had passed the Deposit Stage of plan preparation.

2.53 The preparation of a new LHMA using the new methodology was not possible in advance of the Pre-Deposit consultation due to the timescales and resources required. However, the Council are committed to preparing an updated LHMA utilising the new methodology as part of the evidence base for the Deposit LDP. Due to the change in methodology, it is likely that the need figure for different affordable tenures will be different to the need in the 2018 LHMA. A full analysis of the reasons for any significant changes and the implications for the LDP will be provided within the LHMA.

Regeneration Strategy - A Foundation for Success

2.54 The Council's Regeneration Strategy 2018-2023 concentrates on 4 strategic themes, namely Supporting People, Supporting Business, Supporting Quality of Life and Connecting People and Places.

2.55 One of the key priorities under the Supporting Quality of Life theme is to "Improve the delivery of new housing and diversify housing across all tenures (SQL5)." It is recognised that a limited choice of housing, particularly in the northern parts of the County Borough has had undesirable effects, including the out-migration of more affluent people to other areas.

2.56 The delivery of modern, good quality affordable homes across the whole of the County Borough will improve quality of life and create stronger and more cohesive communities. The strategy recognises that sites in the southern part of the County Borough are attractive to private sector developers but there are more marginal sites that, due to their location or industrial legacy, are perceived to be higher risk. Innovative solutions should be encouraged to bring these sites forward, deliver more housing and diversify the housing stock.

3. Demographic Profile

Population Structure

3.1 Caerphilly County Borough is the fifth largest local authority in Wales in terms of the number of people, with a population of 181,731 (2020 Mid-Year Estimates).

3.2 Figure 1 shows the age structure of the population as identified within the 2020 Mid-Year Estimates. It can be seen that the age structure of Caerphilly is broadly similar to that of the Wales overall, although Caerphilly has a slightly higher proportion of younger people aged 0-15 than the Wales average (18.4% compared to 17.8%) and a slightly lower older person population (19.6% compared to 21.1%).

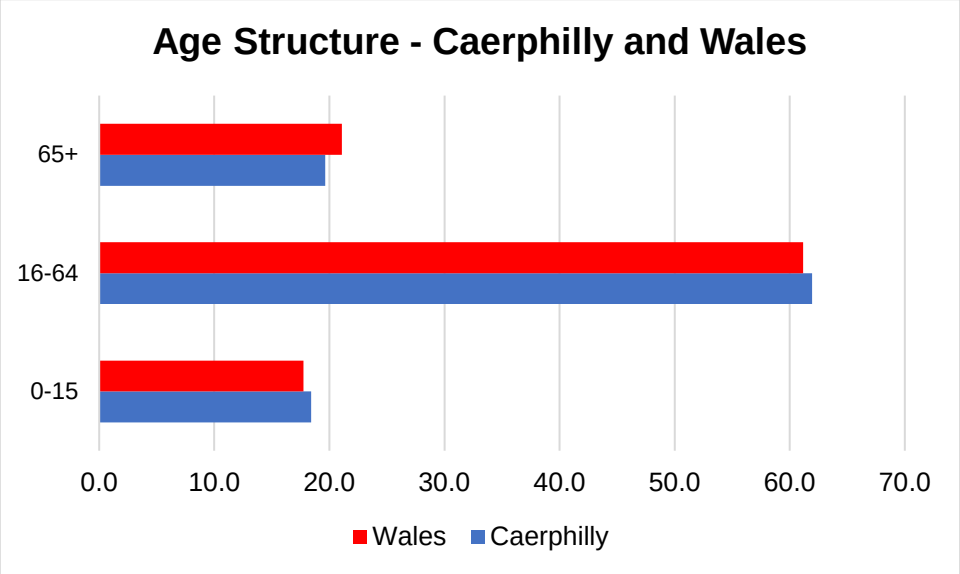

Figure 1: ***Age Structure (%) comparison – Caerphilly and Wales***
Source: 2020 MYE

3.3 Figure 2 provides a more detailed view of the population by age group, at the start of the 2018 projection period. It will be noted that there is a bulge in the population for both males and females aged around 70, which represents the post-war baby boom. There is some difference in the population structure for males and females. The male population has a clear bulge between 48 and 58, with significantly less people aged under 45. This has implications for the future, as many within this age group will have reached retirement age by the end of the LDP plan period in 2035, and there is a smaller age working population to replace them.

3.4 The female population also shows a population bulge aged around 50 in 2018, with a significantly smaller population aged 40. There are several years between 28 and 38 that have population spikes. In both the male and female population, there is significant drop in the population aged 18 and 19, which can be explained in part by some residents in this age group moving out of the County Borough for education or employment. In the 5 years prior to 2018, there is a notable decline in the number of births, which reflects a national decline in fertility.

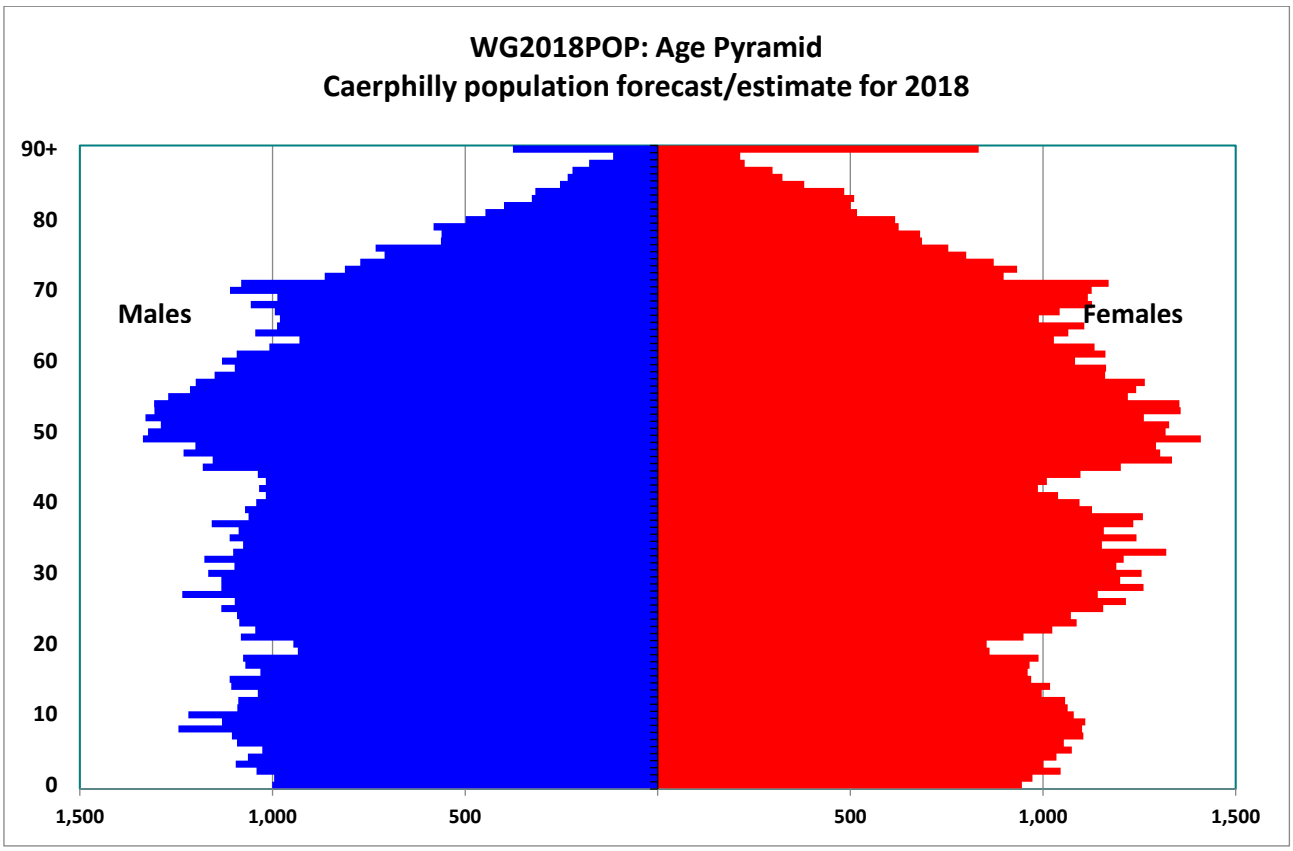

Figure 2: ***Caerphilly Age Structure 2018***
Source: 2018-Based Population projections

Population Growth

3.5 As can be seen in Figure 3, the population of Caerphilly County Borough has increased steadily since 2001, although the level of increase per annum has varied significantly. Between 2001 and 2020, the overall population has increased by 12,185.

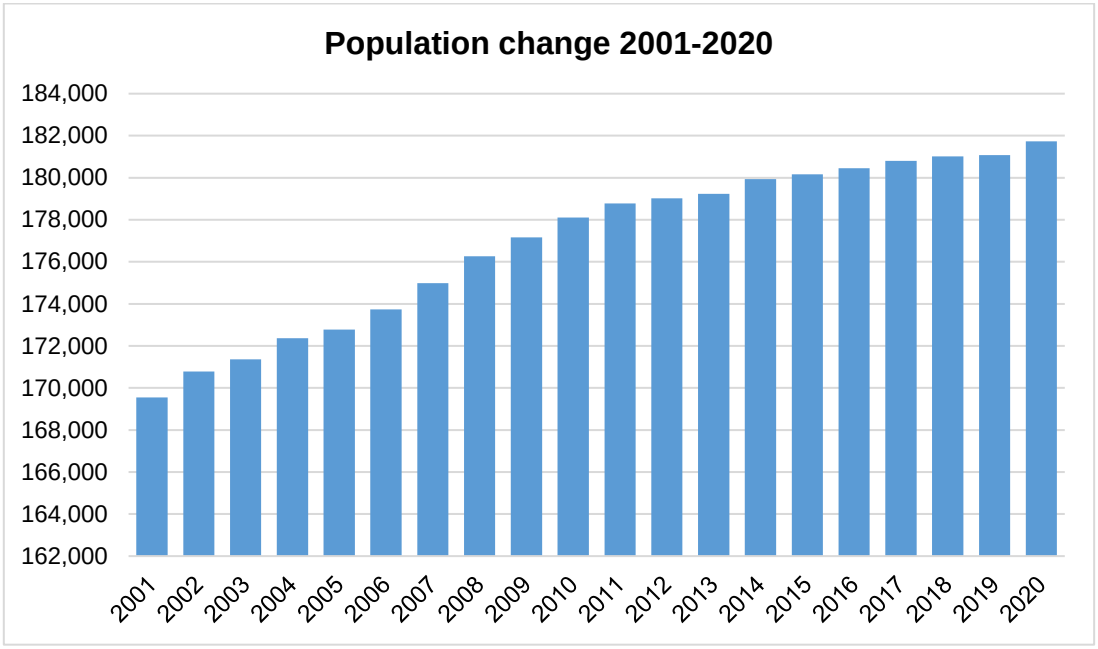

Figure 3: ***Population change in Caerphilly 2001-2020***
Source: Statswales

3.6 The period 2001/2 to 2010/11 saw the greatest increase in population, although this is partly due to revisions to the Mid-Year Estimates between 2001-2010 following the publication of the 2011 Census, which saw previous Mid-Year Estimates revised upwards.

3.7 Since 2011, the population has increased at a slower rate, with an increase of 2,949 persons between 2011 and 2020.

3.8 Figure 4 shows the annual population increase since 2011. Over this time period, the population increased by between 200 and 350 persons per annum, with the exception of 2013/14 and 2019/20 where the population increased by over 700, and in 2018/19, when the population only grew by 56 people. On average, the population has increased by 328 persons per annum since the last Census.

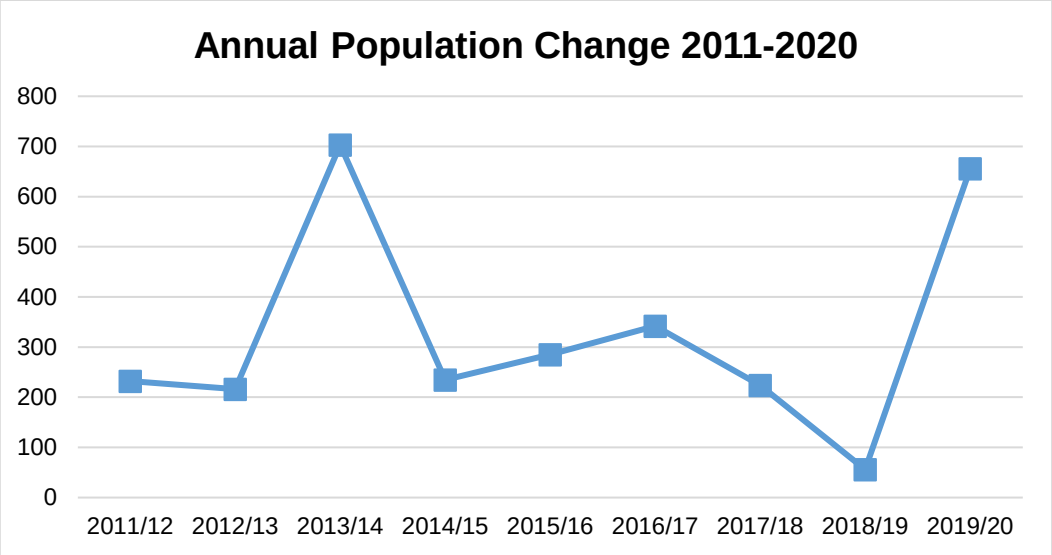

Figure 4: ***Annual Population Change in Caerphilly 2011-2020, Source: Statswales***

3.9 In the period 2001-2020 the population of Wales increased by 8.9%, and across South-East Wales, the percentage increase was 11%. There has been significant variation in the level of population change across LAs in South-East Wales, with the urban areas of Cardiff, Bridgend and Newport experiencing a greater increase in population than the Valleys authorities. The population increase in Caerphilly over the time period was 7.2%, which is similar to the percentage growth experienced in Merthyr Tydfil (7.5%) but higher than other Valleys Authorities (Torfaen, Rhondda Cynon Taf and Blaenau Gwent), which have experienced lower levels of growth in percentage terms.

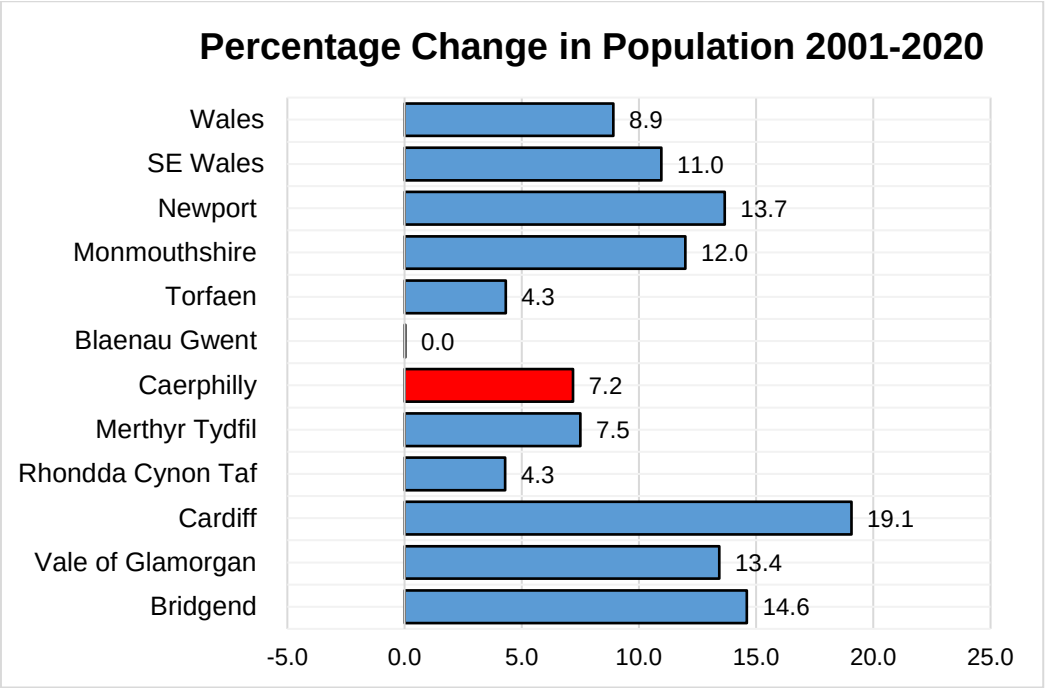

Figure 5: ***Percentage Change in Population – S.E. Wales LAs***
Source: Statswales

4. Background

Adopted Caerphlly County Borough Local Development Plan Up to 2021

4.1 As part of the evidence base for the 2RLDP, it is important to consider how the level of population and housing growth for the adopted LDP was determined to establish whether it is appropriate to employ a similar methodology.

4.2 At the time of the preparation of the adopted LDP, population and household projections were only available at regional level, rather than local authority level. National planning policy indicated that LAs should take the latest regional household projections as the starting point for planning purposes. The 2003-based regional projections, prepared at the time by the Welsh Assembly Government, were the latest projections available. Caerphilly was identified as part of the South-East Wales region for this purpose.

4.3 In order to disaggregate the regional figure to a local level, the South-East Wales Strategic Planning Group (SEWSPG), which comprises the ten local planning authorities of the region, carried out an exercise to apportion the regional household projection to individual authorities. The results of this exercise were incorporated in a Memorandum of Understanding, which recognised the apportionment for each authority as a "working hypothesis". As part of this exercise, Caerphilly CBC agreed an apportionment figure of 9,750 dwellings overall, or 650 dwellings per annum.

4.4 The Regional Apportionment figure, which was policy based rather than trend based, was considered as the highest point in a range of housing requirement figures assessed as part of the LDP process.

4.5 In exploring the growth options that may be realistic options in Caerphilly County Borough, a **high growth option** was considered. The high growth option assumed that the migration rate (i.e. the net in-migration into each LA as a percentage of the base population) would increase to the average figure for South-East Wales. This equated to a housebuilding requirement of 650 dwellings per annum, which was the same number agreed within the apportionment exercise.

4.6 However, in determining the level of growth, it was important to consider other options – namely a position of **balanced migration** as the lowest point in a range of growth, where only the forecasts for birth and deaths were taken into account and it was assumed that there would be zero net migration (i.e. the number of people moving into the County Borough equaled the number of people moving out). This equated to a housing requirement of 7,500 over the plan period, or 500 dwellings per annum.

4.7 The third option considered was a position of **moderate growth**, which was the mid-way point between the high growth option and the low growth option. This option would mean a housing requirement of 8,625 units over the plan period, or 575 dwellings per annum. Having regard to the level of in-migration that was considered to be reasonable for the County Borough, as well as a number of other policy considerations including environmental capacity, it was concluded that the moderate growth scenario represented the most appropriate option for the LDP. This formed the basis for the housing land requirement in the Adopted Plan. The number of households in 2006 was estimated to be 71,500. Based on an increase of 8,625 households over the plan period, the number of dwellings in 2021 was forecast to be 80,100. The plan assumed a ratio of 1 household to 1 dwelling.

4.8 It should be noted that whilst the Adopted LDP planned for a moderate level of growth, provision for 10,269 dwellings was made in the LDP to allow for choice and flexibility and to meet the regional apportionment figure should the level of growth that was delivered be higher.

Option	Population	Households 2006	Households 2021	Housing Requirements 2006-2021	Annual Housebuilding requirement
Balanced Migration	175,000	71,447	78,947	7,500	500
Moderate Growth	177,500	71,447	80,072	8,625	575
High Growth	180,000	71,447	81,197	9,750	650

Table 5: ***Growth options considered in the Adopted LDP (2006-2021)***
Source: Derived from LDP BP6: Population and Housing

4.9 Since the previous growth scenarios were prepared, there has been a notable change in how projections are prepared, as well as a change in national planning policy on how projections should be considered for planning purposes. Population and household projections are now prepared at a local authority level, and, instead of appointing growth on a regional basis, national planning policy states that the household projections should form part of the evidence base for assessing housing requirements, although there is scope to deviate from these projections where evidence supports this.

Population and Household Projections since the adopted LDP

4.10 Since the total housing requirement for the LDP (2006-2021) was calculated, the Welsh Government has published five sets of population and household projections at a local authority level, with base dates of 2006, 2008, 2011, 2014 and most recently 2018.

Welsh Government Local Authority Population Projections

4.11 The change in the population for Caerphilly County Borough identified in each of these projections is shown in Figure 6.

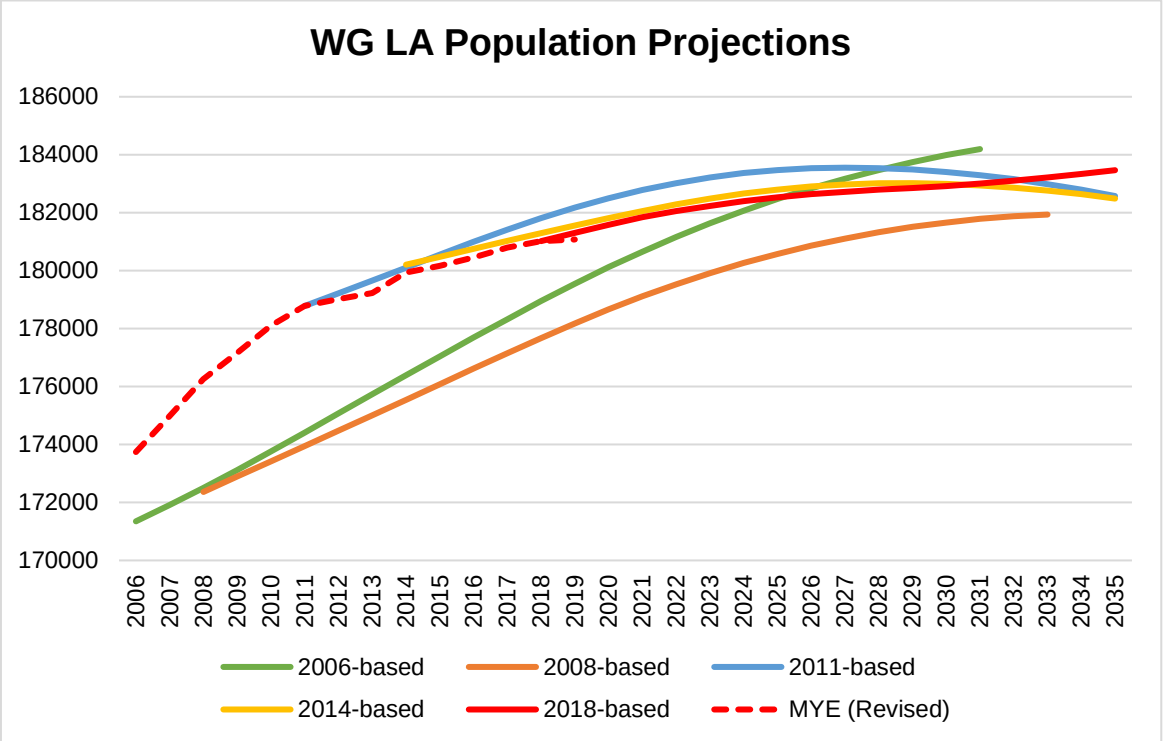

Figure 6: ***WG Local Authority Population Projections***
Source: Statswales

4.12 The 2006-based population projections, published in June 2008, identified a population for Caerphilly County Borough of 180,700 by 2021, which was 3,200 higher than the population figure identified in the LDP of 177,500. The projections assumed a net migration rate of 136 people per annum and a varying natural change figure of between 432 and 527. However, as detailed in the supplementary paper used to inform the LDP[2], Caerphilly CBC expressed concern that the projections were significantly higher than longer term trends would indicate.

4.13 The 2006-based household projections (June 2009) projected that there would be 83,800 households by 2021, an increase of 12,300 households over the plan period, compared to the 8,625 households/dwellings that the LDP made provision for.

4.14 The 2008-based population projections (May 2010), which superseded the 2006-based projections, showed a population level by 2021 of 179,100. The projections assumed a constant figure for net migration of 54 persons per annum and a varying natural change figure of between 430 and 490 persons per annum.

4.15 The 2011-based projections (published July 2013) were based on mid-year population estimates for 2011, which were the first population estimates to be based on the 2011 Census. These also incorporated the revised population and migration estimates for mid-2002 to mid-2010 that were published by the ONS in April 2013 following the results of the 2011 Census.

4.16 In the period up to 2035 (the end date for the 2nd Replacement LDP plan period) the population was projected to increase by 3,800 to 182,575. The projections assumed a constant figure for net migration of -29 per annum, meaning more people were expected to move out of the County Borough than move in. Natural change was projected to be positive until 2027/28, before the number of deaths were projected to exceed the number of births. Overall, the population was projected to increase until 2026/27, before declining.

4.17 The projected decline in the population was not unique to Caerphilly County Borough, with other LAs in Wales projected to follow similar patterns. Welsh Government had concerns about the implications of this for the preparation of development plans, and the Minister for Housing and Regeneration wrote to LAs in April 2014 to clarify that the assumptions used in these projections are based on past trends, which have been significantly affected by past economic conditions as a result of the economic crisis. This should be borne in mind when using the projections for planning purposes. The letter included the statement that LPAs *"must seek to provide for the level of housing required as a result of the analysis of all relevant sources of evidence rather than relying solely on the Welsh Government's household projections."* This letter was welcomed by the Council as prior to this significant emphasis had been placed by Welsh Government on meeting the projections, rather than recognising that they formed a part of the evidence base, and that the level of growth was a policy decision for each LA to take.

4.18 The 2014-based projections were published in September 2016, covering the 25-year period 2014-2039. If the period up to the end date of the 2RLDP is considered (2035), the population was projected to increase by 2,700. However, as was the case with the 2011 projections, the population was projected to increase slowly between 2014 and 2030, before starting to decline over the rest of the projection period. These projections assumed a constant net migration figure of -110. Natural change was projected to be positive until 2035, with more births than deaths, but the level of population increase due to natural change decreased significantly over the projection period.

4.18 The 2018-based projections are discussed in more detail in Chapter 5. However, as can be seen in Figure 6, there is projected to be a small but steady increase in population

[2] BP6 Supplementary Paper 1 – Population and Household Projections

throughout the projection period, with an increase of 2,450 persons in the period 2018-2035. This differs from the previous projections, which show a declining population mid-way through the projection period.

Welsh Government Local Authority Household Projections

4.19 The Welsh Government Local Authority Household Projections are based on the Local Authority Household Projections. It will be noted from Figure 7 that the 2006-based and 2008-based projections project a significantly higher rate of household growth than the sets of projections that have been prepared since the 2011 Census was released. This is in part due to the higher rates of population growth projected within these projections.

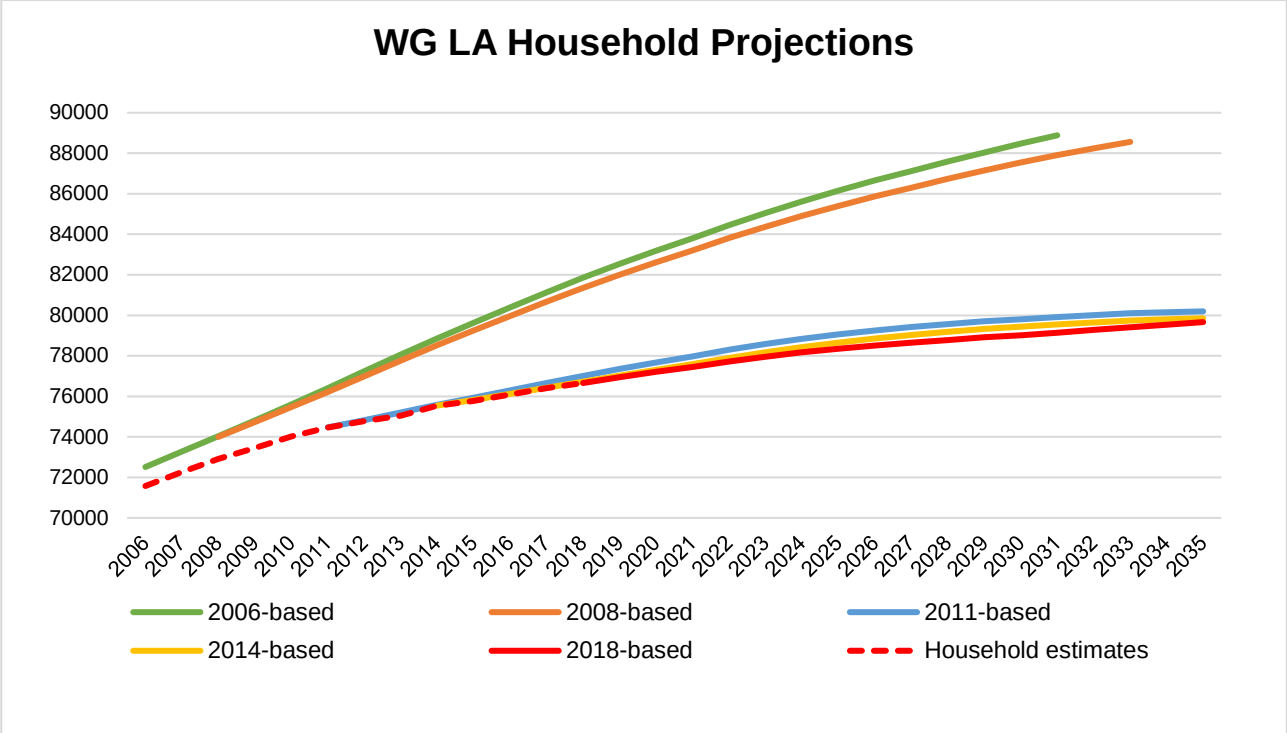

Figure 7: ***WG Local Authority Principal Projections***
Source: Statswales

4.20 The 2011, 2014 and 2018-based LA household projections follow a similar trajectory of a low level of household growth over the projection period. The 2011-based projections project a 2035 household figure of 80,200. This is marginally lower in the 2014 based projections (79,900) and lower again in the 2018 based projection (79,700).

4.21 The Statistical First Release for the 2018-based household projections includes a comparison between the 2014 and 2018-based projections in the year 2028, which indicates that Caerphilly's 2018-based projections are -0.5% lower than those produced in 2014, which is broadly similar to the Wales difference -0.2%. This contrasts with other LAs, which have experienced significant variations between the two sets of projections from the 2018 household projections being 7.2% higher in the Vale of Glamorgan to 9.7% lower in Ceredigion.

4.22 Average household size (AHS), measured in terms of persons per household, is calculated by dividing the private household population by the number of households. Figure 8 identifies the differences between the projections. The 2006 and 2008-based projections both started with a lower AHS as of the base date of the projections and the AHS was projected to decrease quickly over the projection period, following the trends experienced in the 1991-2001 census period. The 2011 census indicated that the average household size

in Caerphilly was actually much higher than this, thus subsequent sets of projections since 2011 identify a larger AHS at the start. The rates of change over the 2011, 2014 and 2018 projection periods are lower, but all follow a similar trajectory, and reflect the trends shown in recent household estimates.

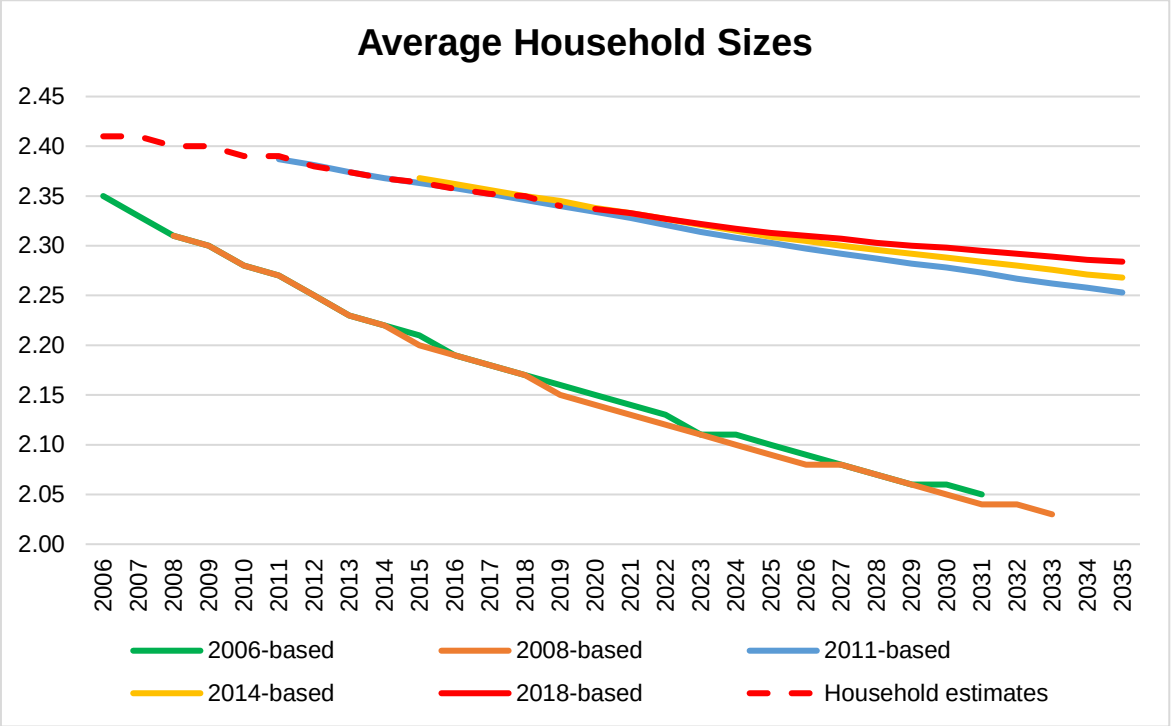

Figure 8: ***WG LA Household Projections Average Household Sizes***
Source: Statswales

2011 Census and MYE

4.23 The release of the 2011 Census data provided evidence of demographic trends, which are crucial when considering growth options. The 2011 Census identified a population for Caerphilly of 178,806. This figure was significantly higher than projected in the adopted LDP, which identified a 2011 population of 173,400. It was also notably higher than previous mid-year estimates (MYE) and the Welsh Government projections for 2011 in both the 2006 and 2008 population projections.

4.24 The mid-year population estimates for 2002-2010 for Wales have been revised to consider the results of the 2011 Census, and in Caerphilly's case, the MYE for each year have been revised upwards, as shown in the table below.

Year	Old MYE	New MYE	Difference
2001	169,546	169,546	0
2002	170,228	170,776	548
2003	170,325	171,363	1,038
2004	170,823	172,361	1,538
2005	170,743	172,777	2,034
2006	171,132	173,741	2,609
2007	171,751	174,987	3,236
2008	172,363	176,259	3,896
2009	172,737	177,159	4,422
2010	173,124	178,101	4,977
2011		178,782	

Table 6: ***Revised Components of Change between 2001 and 2011 MYE***
Source: ONS

4.25 Whilst the natural change and migration components have been amended slightly, the main reasons for the differences between the old and revised MYEs are not known and have therefore been classified as 'other (unattributable)'. Caerphilly has the second highest figure for 'unattributable' components of change in Wales with approximately 5,000 people that cannot be attributed to natural change, internal or international migration or other components such as asylum seekers, prisoners, and armed forces.

4.26 No further details on how the 'unattributable' figure has been derived for Caerphilly County Borough are available, but the ONS guidance[3] states that this may be due to a combination of potential inaccuracies in:

- Internal migration, particularly due to problems in accurately estimating certain moves, such as young people finishing further education courses.
- International migration, due to different methods of calculating immigration
- 2001 population estimates, which were based on the 2001 census
- 2011 Census estimates, as an estimate needed to be made for the number of people who didn't appear on a Census form.
- Prisoner definitions, which have recently been changed.

4.27 Given that the revised higher Mid-Year Estimates cannot be fully explained, it is necessary to apply caution when making assumptions based on population growth per annum in the last 10 years. It may well be the case that the 2001 population figures in the Census were underestimated, meaning that the population had actually increased at a higher level in the period 1991-2001 rather than 2001-2011.

4.28 When assessing the impact of unattributable change, it is recognised that in the preparation of population and household projections elsewhere, it has been assumed that this 'unattributable' figure is at least in part due to international migration and has been included within migration assumptions. However, given that migration assumptions have already been revised in the MYEs, and in light of advice from the ONS in respect of housing provision in England, the preferred approach is to exclude the unattributable figure from migration trends.

4.29 A further revision was made in March 2018 to the Mid-Year Estimates between mid-2012 and mid-2016 in light of methodological improvements. This resulted in minor changes to

[3] ONS - Methods used to revise the sub-national population estimates for mid-2002 to mid-2010 (30th April 2013)

the international migration figures, of between -17 and 4 persons per annum. In total, the estimates over this period decreased by 29 persons. The revised estimates have been included with Section 3 of this Paper.

2021 Census

4.30 The 2021 Census took place on 21st March 2021. The ONS has published an indicative timetable for the release of Census outputs and it is anticipated that LA estimates will be published in the summer of 2022, with all other census data outputs being published in March 2023.

4.31 Following the publication of the Census data, if there are significant differences between the Census count and the MYE, it may be necessary for the ONS to revise previous mid-year estimates.

4.32 Consideration will be given to any Census data that is published in due course. However, it should be noted that the Census is just a snapshot of the population at a point in time and does not represent a future forecast of population growth. Whilst population estimates form part of the evidence base, the growth scenarios consider a range of evidence including long term trends on births, deaths, internal and international migration, and how these trends can be influenced by policy.

5. 2018-Based Population and Household Projections

5.1 The subnational population projections provide estimates of the size of the future population for local authorities and national parks in Wales. They are trend-based projections, using assumptions about births, deaths and migration for the five-year period leading up to the year at the start of the projection (the base year). Population projections are not forecasts and do not attempt to predict the impact that future government policies, changing economic circumstances or other factors (for example, government policies on immigration, the implications of Brexit or COVID 19), might have on demographic behaviour.

5.2 Revised 2018-based population and household projections were published on 4th August 2020, after originally being published in February 2020 and then subsequently withdrawn due to an error affecting the 2018-based national projections. The projections cover the 25-year period from 2018 to 2043.

5.3 The 'principal' population projection is based on past trends in respect of fertility, mortality, and migration from the previous 5 years. Variant projections have also been published, including a 'high population' variant (based on high fertility, life expectancy and migration assumptions), and a 'low population' variant (based on low fertility, life expectancy and migration assumptions). Migration based assumptions including zero migration (i.e. no international or internal migration, only natural change in the population as a result of births and deaths), and a variant based on 10-year migration patterns (i.e. using 10 years of data for both international and internal migration, rather than 5 years of data) are also available.

5.4 The 2018-based projections employed a different methodology to previous projections, due to implausible results in relation to the out-migration of certain age cohorts in some local authority areas. To address this, migration rates were applied to the internal migration assumptions. For internal inward migration this was calculated as a rate relative to the rest of the UK population. For internal outward migration this was calculated as a rate relative to the resident population of the local authority. These changes mean that inward and outward internal migration is no longer constant and will depend on the size and the age structure of the population of the local authority relative to the rest of the UK. The international migration assumptions remain a constant figure.

Population

5.5 The Principal 2018-based LA Population Projections identify a base population for the County Borough at the start of the projection period of 181,019. In the LDP Plan period 2020-2035, it will be noted that the population is only projected to grow by 1,881.

2018 Population	2020 Population	2035 Population	Projected Population Change 2020-2035	% Population Change 2020-2035
181,019	181,585	183,466	1,881	1%

Table 7: ***Projected change in population 2020-2035***

5.6 A graph showing the 2018 population projections in the context of other recent WG populations is included in Section 4. This shows that the rate of growth projected is slower than past trends.

Households

5.7 Table 8 shows the household types as identified in the 2018-based household projections for the start and end dates of the plan period in 2020 and 2035, together with the percentage change for each household type for Caerphilly, South-East Wales and the Wales overall. In numerical terms, it is projected that smaller households will experience the most growth over the projection period in Caerphilly. This reflects the patterns for South-East Wales in total and Wales in total.

5.8 Overall, 1 person households will experience the biggest growth, increasing by 1,838 over the plan period. However, in percentage terms, the growth of 1 person households is only 8.4% compared to 16.1% in South-East Wales and 13.1% in Wales. Two person households are forecast to experience significant growth, particularly lone parent households (1 adult, 1 child). This also reflects the similar patterns to the region and Wales overall.

5.9 There is projected to be a decline in Caerphilly in all types of 3 person and 4 person households, except for 4-person (no children) households. Whilst this pattern broadly reflects regional and national patterns, the percentage change is more significant in Caerphilly.

5.10 There is projected to be an increase in some larger property types – 5 person (1 adult, 4+ children), 5+ persons (no children) and 4 persons (no children). However, the base numbers of these household types are lower, which means a small increase in numbers would represent a larger percentage increase. The notable increase in larger households with no children may be due to a number of factors e.g. non-dependent children continuing to live at home to attend higher education courses or because they are unable to afford to move into their own accommodation, or this could indicate a trend in elderly people living with their children to be cared for. This pattern also reflects the pattern in the region and Wales overall.

5.11 The lower proportional growth in single person households in Caerphilly compared to region is the major factor in the low household projection figure and high average household size and it will be appropriate to consider what impact there would be on household growth if Caerphilly's household type change was more in line with regional patterns.

	Caer-philly	Caer-philly	Caer-philly	Caer-philly	SE Wales	SE Wales	SE Wales	SE Wales	Wales	Wales	Wales	Wales
	2020	2035	Change 2020 - 2035	% Change 2020 - 2035	2020	2035	Change 2020 - 2035	% Change 2020 - 2035	2020	2035	Change 2020 - 2035	% Change 2020 to 2035
All Types	77204	79665	2461	3.2	662565	711496	48931	7.4	1,371,134	1,452,447	81313	5.9
1 person	21832	23670	1838	8.4	210271	244161	33890	16.1	442,897	500,737	57840	13.1
2 person (1 adult, 1 child)	3872	4607	735	19.0	28824	33780	4956	17.2	55,523	65,267	9744	17.5
2 person (No children)	24168	24965	797	3.3	197546	206400	8854	4.5	427,722	446,478	18757	4.4
3 person (1 adult, 2 children)	1588	1475	-113	-7.1	13151	12578	-573	-4.4	25,394	24,442	-952	-3.7
3 person (2 adults, 1 child)	5525	5278	-247	-4.5	44442	44844	402	0.9	85,612	84,179	-1433	-1.7
3 person (No children)	5856	5729	-127	-2.2	46273	46494	221	0.5	91,325	89,145	-2181	-2.4
4 person (1 adult, 3 children)	562	509	-53	-9.4	4918	4852	-66	-1.3	9,303	9,255	-48	-0.5
4 person (2+ adults, 1+ children)	7422	6904	-518	-7.0	60132	58484	-1648	-2.7	120,287	116,189	-4097	-3.4
4 person (No children)	2014	2330	316	15.7	17536	20530	2994	17.1	33,415	37,400	3985	11.9

	Caer-philly	Caer-philly	Caer-philly	Caer-philly	SE Wales	SE Wales	SE Wales	SE Wales	Wales	Wales	Wales	Wales
	2020	**2035**	**Change 2020 - 2035**	**% Change 2020 - 2035**	**2020**	**2035**	**Change 2020 - 2035**	**% Change 2020 - 2035**	**2020**	**2035**	**Change 2020 - 2035**	**% Change 2020 to 2035**
5+ person (1 adult, 4+ children)	299	371	72	24.1	1896	1810	-86	-4.5	3,574	3,605	31	0.9
5+ person (2+ adults, 1+ children)	3712	3379	-333	-9.0	31811	29947	-1864	-5.9	64,687	60,969	-3718	-5.7
5+ person (No children)	355	448	93	26.2	5767	7616	1849	32.1	11,396	14,781	3385	29.7

Table 8: ***Percentage change by household type***
Source: 2018-based household projections

6. Analysis of the Components of Population and Household Change

6.1 The key components of population change are the number of births and deaths (the difference between these is referred to as natural change) and migration (internal - from the UK, and international – from outside the UK). The following section explores these components in more detail, considering past trends.

6.2 Information is available on the components of population change within the Mid-Year Estimates. As previously explained, the biggest annual population change was in the period 2001 to 2011, although a significant proportion of this growth is 'unattributable population change' (UPC) due to revisions to the estimates following the publication of the 2011 Census that cannot be attributed to either natural change or migration. This is explained in more detail in Section 4.

6.3 It will be noted from Figure 9 that in the first four years of this period, natural change and net internal migration were positive, whereas net international migration was negative. In the following 3 years, the population grew primarily through net internal migration, with a smaller element of natural change and net international migration. In the period since 2008/9 to 2012/13, net internal migration was negative (more UK residents moving out of Caerphilly than in), and growth was primarily attributed to natural change. In recent years, the figures have been more variable. Natural change has been positive, but the contribution it has made to overall population growth has been less, with an increase in deaths and a lower number of births. The 2020 MYE showed negative natural change in Caerphilly for the first time in recent decades, as the number of births has continued to fall and death rates have exceeded previous levels, although this was in part due to the Covid-19 pandemic. Net internal migration has been variable, ranging from a net figure of -146 in 2015/16 to 867 in 2019/20. Since 2012/13, international migration has been positive at between 3 and 86 per annum.

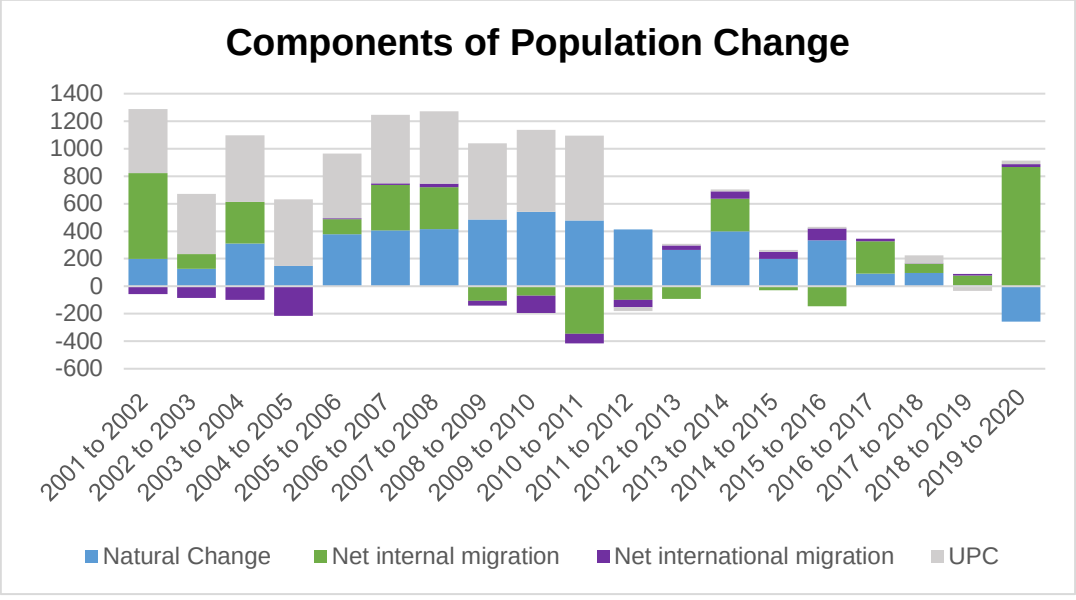

Figure 9: ***Components of Population Change in Caerphilly 2001 to 2020***
Source: Statswales

Births

6.4 Data on the number of births is obtained from the ONS. As can be seen from Figure 10, the number of births has varied, but there has been an overall trend downwards since 1991, in line with national trends which have documented a fall in fertility rates. The number of births was consistently between 2,150 and 2,200 between 2006/7 and 2010/11 but since 2011 they have fallen and in 2019/20 were at the lowest recorded figure of less than 1,750.

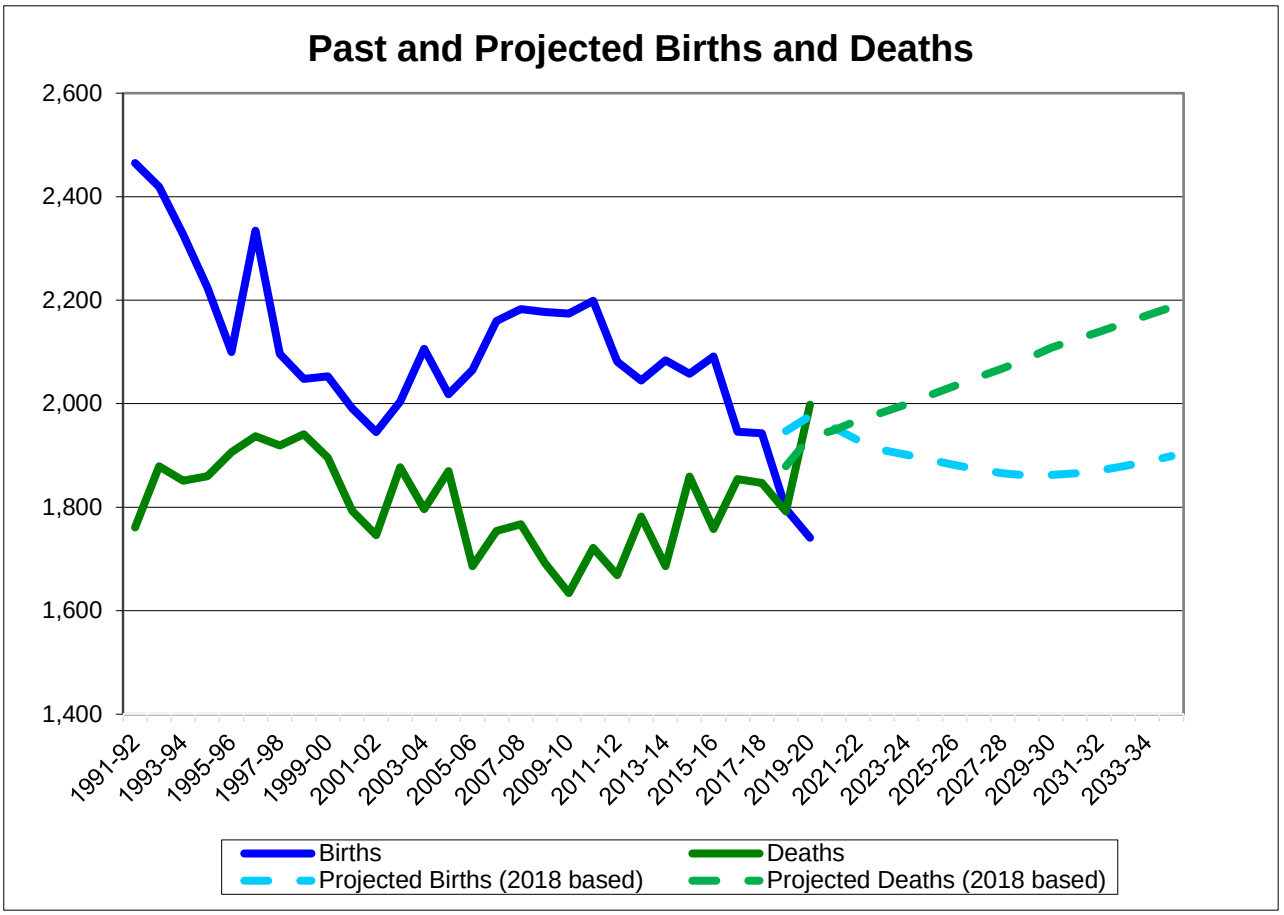

Figure 10: ***Past and Projected Births and Deaths 1991 to 2035***
Source: ***Statswales***

6.5 The 2018-based projections do not include the 2018/19 or 2019/20 figures but are based upon the 5-year trends prior to 2018. It is projected that birth rates will continue to decline slowly over the projection period to a low of 1,862 before stabilising and increasingly slightly over the remaining projection period.

6.6 As a way of benchmarking the projections against long term trends, the average estimated number of births over the period 1991/2 – 2019/20 has been calculated as 2,100 births per annum. If the previous 10 years is considered (2010/11 – 2019/20), then the average estimated number of births is 2,000 per annum. Over the last five years to 2019/20, the average number of births has dropped further still to 1,900. The number of births per annum in the projections varies, but over the 15-year plan period 2020 – 2035, it averages 1,889 per annum. This figure is lower than long term averages but is more reflective of more recent trends.

6.7 The total fertility rate (the average number of children to be born to a woman over her lifetime) over the projection increases marginally over the plan period from 1.70 in 2018 to 1.79 in 2035. However, this is still below the replacement fertility level of 2.1 children per woman. As can be seen in Figure 11, the demographics of the County Borough have

changed since 2001, with less woman aged 30 to 45 in 2018 than in 2011, although there are more women aged 20-30. ONS data identifies that the average age of a mother in England and Wales in 2019 was 30.7 and therefore the decline in the number of older woman of child-bearing age in 2018 compared to 2001 is a factor in explaining the decrease in the number of births.

6.8

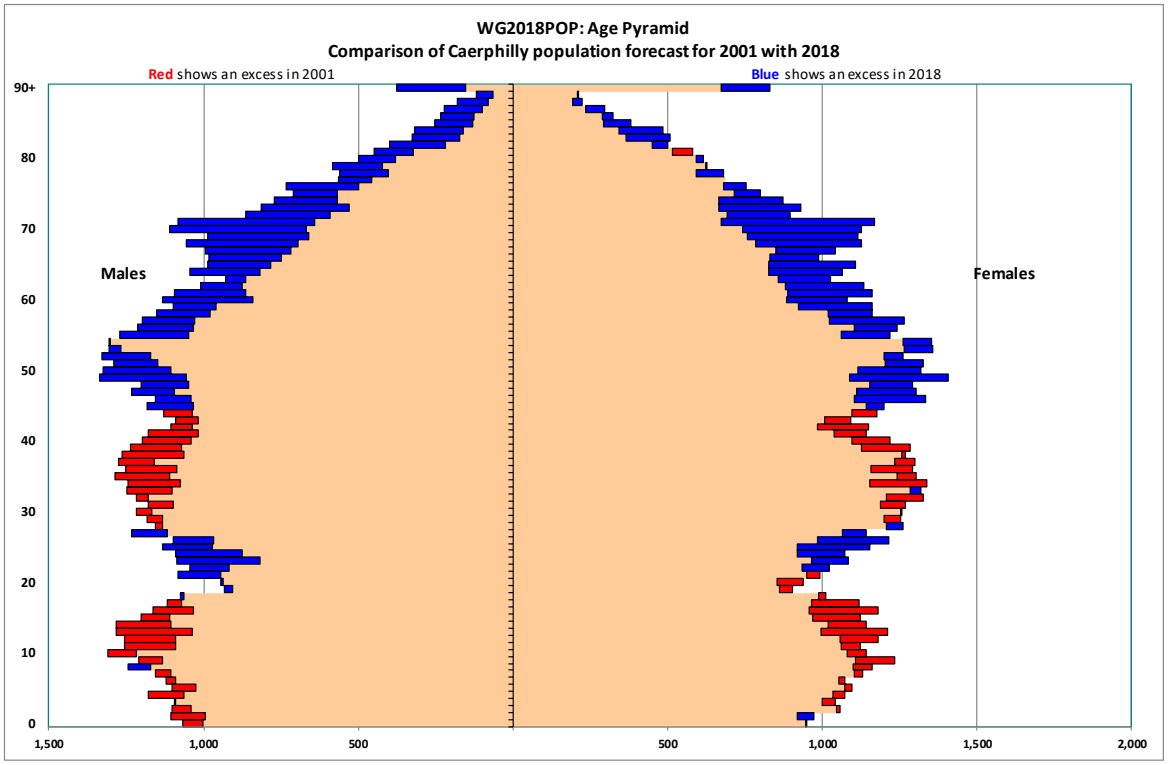

Figure 11: ***Comparison of population structure 2001 and 2018***
Source: Popgroup

Deaths

6.9 The death rate in Caerphilly County Borough has also been variable. It was relatively stable in the late 1990s between around 1,900 to 1,950 deaths per annum, before falling to a low of less than 1,700 deaths in the mid-2000s. The trend for the number of deaths has increased since then, which is a consequence of the demographic structure of the County Borough with a growing older person population.

6.10 The number of deaths is projected to continue to increase slowly over the LDP plan period. It will be noted that in 2018-19, the number of deaths was almost equal to the number of births, with a natural change figure of only 5, and in 2019-20 the number of deaths exceeded the number of births by 257, which is a combination of the lowest number of births in recent decades and the highest number of deaths, partly due to the Covid-19 related deaths in the early part of the pandemic. The 2018-based projections indicate that natural change is projected to be negative (i.e. there will be more deaths than births) in 2021/22, and this will continue throughout the plan period. By 2035, it is projected that there will be 288 more deaths than births.

6.11 It is important to note that the figures shown in Figure 10 do not include all deaths associated with the COVID-19 pandemic as the latest MYE for 2020 only included deaths in the period up to 30th June 2020. Deaths that occurred after this date, include those that occurred in subsequent waves of the pandemic, will be recorded in the 2021 and 2022 MYEs associated (the 'second wave') will be reflected in the 2021 MYE.

6.12 The projections should be considered in the context of long-term trends. The average number of deaths annually since 1991 has been 1,810 persons per annum. The average over the last 10 years has decreased to 1,800 per annum, but if data from the last 5 years only is considered, the number of deaths has been 1,850 persons per annum.

6.13 The long-term increase in the number of deaths can be explained by the clear change in demographics, as shown in Figure 11. The number of males and females in every age group from age 45 and above is greater in 2018 than it was in 2001, with the exception of 80-year-old females. As there is an older population, it is inevitable that the number of deaths will increase. This ageing population will continue to increase over the projection period, explaining the increase in projected deaths over the projection period.

Migration

6.14 Net migration (the difference between those moving into and out of an area) is more variable than natural change and is difficult to measure. As a result, detailed consideration needs to be given to the long- and short-term migration trends. Natural change is largely outside of the control of the planning system, but migration can be significantly influenced by policy decisions at a national level (e.g. Brexit) or due to local factors such as the availability and affordability of housing, or the location of employment.

6.15 Figure 9 identifies the impact on population change as a result of migration, where it is noted that the internal and international migration have been variable in the period since 2001. This is also shown in Table 9. Internal net migration (UK residents) per annum has ranged from a net in-migration of 623 persons per annum from the UK, to a net out-migration of 345 persons. Net internal migration into Caerphilly was broadly positive in the early to mid-2000s. However, further to the period of recession following the 2008 economic crash there was a pattern of out-migration of UK residents from the County Borough, which would in part be linked to low housebuilding rates during this time. Net internal migration has continued to be variable since then, although over the last three years it has been positive.

6.16 Figure 12 shows the origins of internal migrants that have moved to Caerphilly over the past five years. The net figure represents the difference between the number of people moving from the destination to Caerphilly and the number moving from Caerphilly to that destination on average over the past 5 years. It will be noted that the highest net migration inflows have been from Cardiff with an average of 301 persons per annum. Bridgend is the only other South-East Wales location in the top 5.

6.17 A total of three places out of the top five are from England – Bristol, South Gloucestershire, and North Somerset. This may be explained in part by the abolition of the Severn Bridge tolls in 2018, which has opened up the M4 corridor in South-East Wales as part of the wider housing market for the wider Bristol area, as it is an affordable alternative.

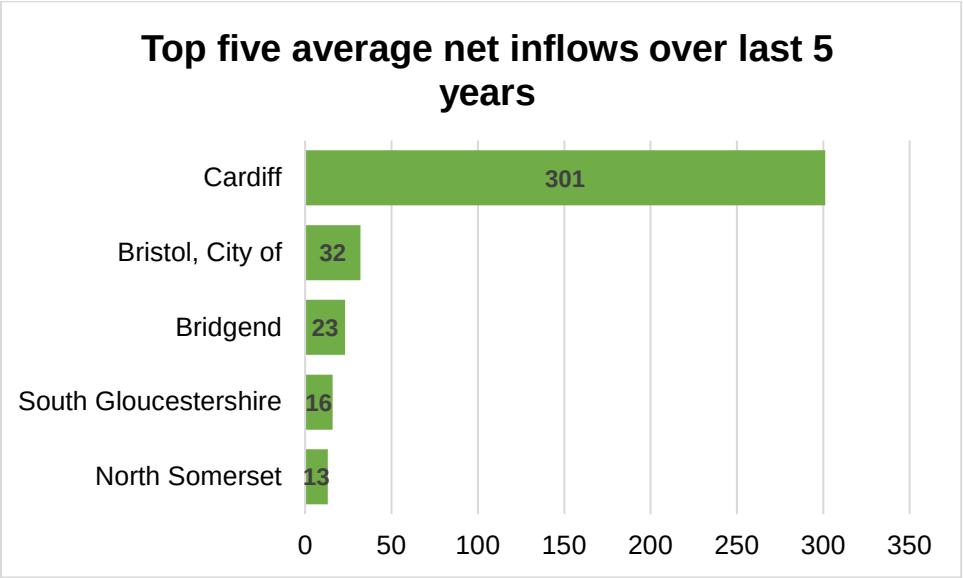

Figure 12: ***Average net inflows over last 5 years***
Source: ONS – internal migration origin and destination data

6.18 ONS data is also available on the net outflows from Caerphilly i.e., where more people from Caerphilly have moved to a destination than have moved from a destination to Caerphilly. It will be noted that all of the top five destinations are in Wales and 3 out of the 5 of them are neighbouring local authorities – Newport, Rhondda Cynon Taf and Merthyr Tydfil.

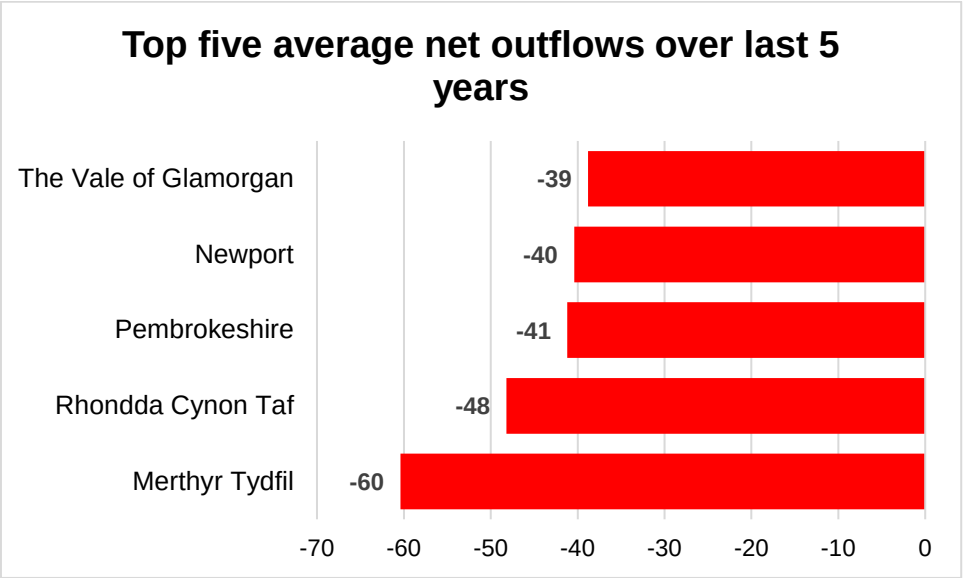

Figure 13: ***Average net outflows over last 5 years***
Source: ONS – internal migration origin and destination data

6.19 Data is also available on net migration by five-year age group for the 9-year period 2012-2020 (Figure 14). This data shows that there is a significant net out-migration of 15–19-year-olds as young people move out of the County Brough for higher education or employment. There is a significant inflow in the 20-24 age groups, which may be associated with some of those people who had left the area for higher education returning to Caerphilly. The 25-39 age groups also have on average a positive inflow, and there has also been a positive increase in the 0-4 age group. This indicates a flow of families with young children moving into the County Borough from other areas. There is little change due to net internal migration for the 40-44 to 70-74 population, with only a small net increase from people in these age groups moving to the area. There is a small decline in the older age groups (75+)

with slightly more people moving out of Caerphilly than in, but overall migration flows for these age groups are smaller than for the working age population.

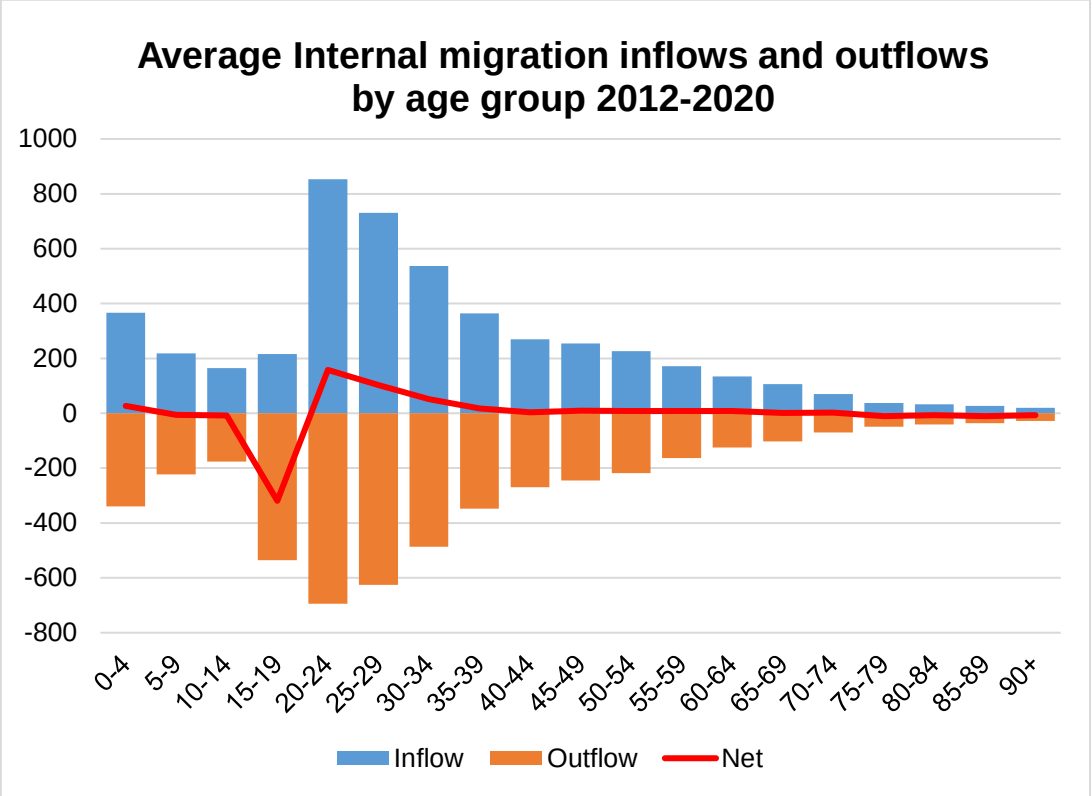

Figure 14: ***Average net internal migration by age group between 2012 and 2020***
Source: ONS - Internal migration: by local authority and five-year age group

6.20 Net international migration has also been variable. There was a significant level of out-migration of international residents out of Caerphilly in the first half of the 2000s. However, there was positive net international migration from 2005, which was thought to coincide with the accession of 10 Eastern European countries to the European Union (EU) in May 2004. The recession in 2008 and years following saw more international migrants move out of Caerphilly than in, but since 2013 international net migration has been positive.

Year	Net internal	Net international	Net migration
2001 to 2002	623	-58	565
2002 to 2003	106	-85	21
2003 to 2004	302	-100	202
2004 to 2005	-4	-212	-216
2005 to 2006	109	7	116
2006 to 2007	331	11	342
2007 to 2008	303	27	330
2008 to 2009	-105	-35	-140
2009 to 2010	-69	-125	-194
2010 to 2011	-345	-70	-415
2011 to 2012	-98	-54	-152
2012 to 2013	-92	33	-59
2013 to 2014	238	55	293
2014 to 2015	-29	52	23
2015 to 2016	-146	86	-60
2016 to 2017	235	19	254
2017 to 2018	67	3	70
2018 to 2019	72	13	85
2019 to 2020	867	20	887
19-year average	124	-22	103
10-year average	77	16	93
5-year average	219	28	247

Table 9: ***Net migration 2001/2 to 2019/20***
Source: MYEs

6.21 Information on the origins of international migrants is available from the Department of Work and Pensions (DWP) using national insurance registrations. Figure 15 shows the total number of international migrants who have moved to Caerphilly County Borough and have been allocated a national insurance number over the last 5 years. The figures reflect in-migration only, and do not consider any out-migration from Caerphilly to other areas after a national insurance number has been allocated.

6.22 It will be noted that the highest proportion of international migrants have been from the EU2 countries – Bulgaria and Romania. However, there have also been a significant number of national insurance registrations from migrants originally from the EU15 (the countries that were member states before the accession of the EU8 in 2004). The number of migrants from other parts of the world has been relatively small.

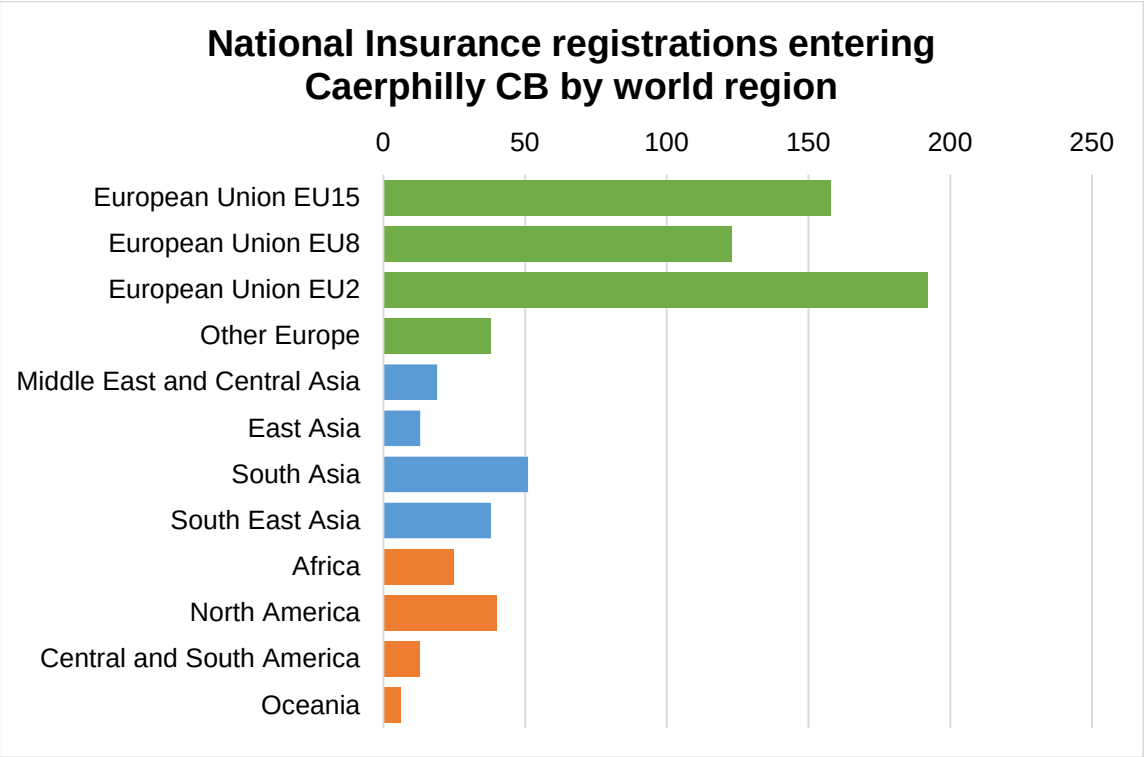

Figure 15: ***National Insurance Registrations – international migrants living in Caerphilly – Year ending Dec 2016 to Year ending Dec 2020***
Source: National Insurance number allocations to adult overseas nationals entering the UK, DWP

6.23 Future international migration figures will be heavily influenced by policy decisions. There has been a decline in the number of EU migrants registering for national insurance since the results of the Brexit referendum in June 2016. The departure of the UK from the European Union in January 2021 will inevitably have implications for future international migration into the UK, but the full implications of this are not currently known.

6.24 Furthermore, there will undoubtedly be implications of the COVID-19 pandemic on both UK and international migration, as the infrastructure is now in place so that many jobs can be undertaken remotely, meaning that people are less tied to a specific location for work. The full effects of both Brexit and the COVID-19 pandemic will not be fully known for some time and therefore it is necessary to make informed assumptions of migration from a range of sources.

Households

6.25 Average Household Size (AHS) is a key component of the household projections. Figure 16 sets out the change in average household size since 1991. It will be noted that the AHS decreased from 2.64 in 1991 to 2.43 in 2001 – an overall decline of 0.21 people per household in 10 years. The rate of decline between 2001 and 2011 was slower than had been experienced in the previous period with a decline of only 0.04 people per household, which is significantly lower than had been experienced in the previous 10 years. Between 2011 and 2019 there has been a decline of 0.05 person per household.

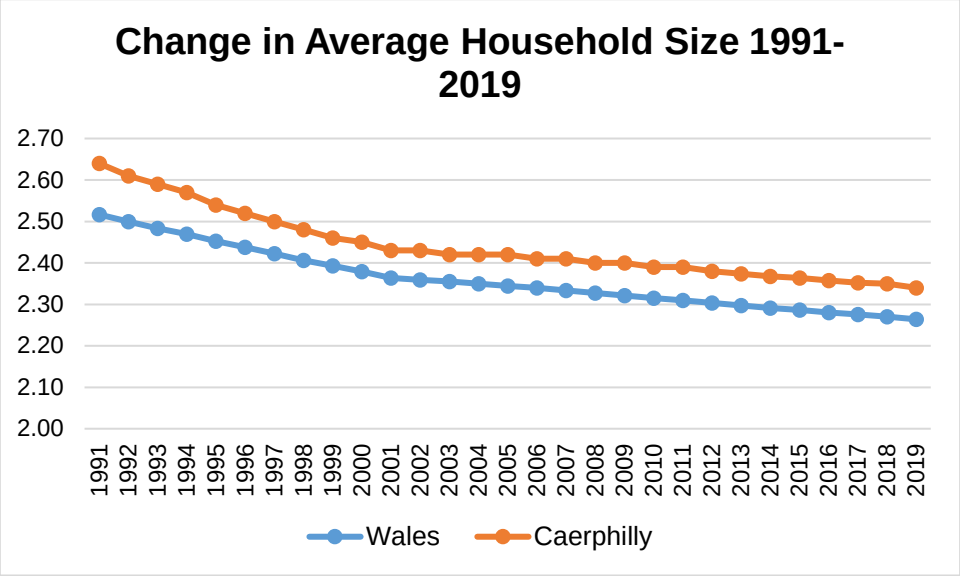

Figure 16: ***Average household size change 1991 to 2019***
Source: ***Statswales***

6.26 It will be noted that the Caerphilly AHS is higher than the Welsh average. In 2019, Caerphilly has one of the highest AHS in Wales, second only to Merthyr Tydfil. There are a number of possible reasons why the AHS has not decreased as quickly in the last 10 years as in the previous Census period. Affordability is a key factor as house prices have increased significantly since 2001 and many non-dependent children remain living with parents as they are unable to afford to move into their own accommodation. Other reasons are explored in more detail within the next section on concealed households.

Concealed households

6.27 Information is available from the 2011 Census on the number of concealed households within each local authority area. The ONS states *"a concealed family is one living in a multi-family household in addition to the primary family, such as a young couple living with parents".*

6.28 As shown in Table 10, the last Census indicated that were 760 concealed families in Caerphilly. Of these, 55.4% are lone parents either with dependent or non-dependent children, 34.2% are couples without children and the remaining 10.4% are couples with children (dependent and non-dependent).

6.29 Overall, this equates to 1.4% of all families that are concealed, which is slightly lower than the Wales average of 1.5%. This percentage relates to the number of concealed households as a percentage of all households classed as a family, i.e. more than one person living together as a family unit and therefore excludes any single person concealed households, which may also represent future newly forming households. It is also useful to consider the number of concealed families as a percentage of all households, rather than as a percentage of families. It is therefore calculated that 1.0% of all households contain a concealed family.

Concealed family status	Number
All categories: All families	**53,845**
Concealed family: Total	**760**
Concealed family: Lone parent family: Total	421
Concealed family: Lone parent family: Dependent children	377
Concealed family: Lone parent family: All children non-dependent	44
Concealed family: Couple family: Total	339
Concealed family: Couple family: No children	260
Concealed family: Couple family: Dependent children	55
Concealed family: Couple family: All children non-dependent	24
Unconcealed family: Total	53,085
Unconcealed family: No children	20,122
Unconcealed family: Dependent children	23,030
Unconcealed family: All children non-dependent	9,933
% of families that are concealed	**1.4**
Total households 2011 census	**74,469**
% Of households containing a concealed family	**1.0**

Table 10: ***Concealed family status***
Source: ONS 2011 Census (Table LC1110EW - Concealed family status)

6.30 The Census does not provide a figure for the number of single people living in a concealed household who would prefer to move out, but the Caerphilly CBC LHMA is an important source of data for the number and the preferences of those living in concealed households. The findings of a local housing survey were included as part of the 2018 LHMA, where responses were received from 3% of all households in the County Borough. Of this sample, 14% of respondents stated that one or more persons within their household were likely to move into their own accommodation as an independent household within the next 5 years. Many of these potential new households were single adults without children (70.8%) looking to move into their own accommodation and would not be classified as a concealed family for census purposes. However, 6.4% were lone parent families, 18.9% were couples without children and 3.2% were couples with children. In total, 28.5% of those households that were likely to move in the next 5 years fell under the definition of 'concealed household' at the time of the survey.

6.31 Whilst this LHMA survey represented only a small sample of households in the County Borough, it confirms a desire from a number of people living in concealed families to move. Nearly two thirds of those new forming households that were expecting to move in the next 5 years expected to stay within Caerphilly County Borough. If these concealed households can meet their needs within the housing market, the result may be that average household sizes decrease.

6.32 For many ethnic minority groups, it is customary for multiple generations of the same family to live together in the same household by choice. In areas with high ethnic minority populations such as Cardiff, this may be a factor in explaining large average household sizes. However, in Caerphilly, the 2011 Census indicated that only 1.6% of the population of the County Borough were of an ethnic minority group other than 'white' so this will not be a significant factor in explaining the increase in concealed households and average household size.

6.33 It should be acknowledged that, as the average household size is based on past trends, it will not reflect the potential influence of current and future policy initiatives at both the local and national level on household formation.

6.34 Policy initiatives that could influence household formation and average household size include:

- The availability of schemes aimed at helping first time buyers to purchase a home such as Help to Buy Wales (currently on Phase 3) and Shared Ownership – Wales. Schemes such as these may assist some people living in a concealed household to purchase their own property, resulting in an increase in smaller household sizes.
- The amount of land allocated for housing at a local level through the Local Development Plan, which will provide greater housing choice, and will provide the opportunity for the development of affordable housing, through both Section 106 agreements and the release of land to encourage Registered Social Landlords and the Council to develop their own build programmes. The provision of affordable housing may address the housing needs of some people currently in concealed households that would like to move into their own accommodation but cannot afford the private sector.
- The encouragement of older people to remain in their own homes rather than move into institutional care, which will influence the number of people living in single person households or older person couple households potentially in under-occupied family homes.
- The increased costs of higher education courses which now means that many non-dependent children are living at home to attend University, whereas historically they may have moved to alternative accommodation. If future amendments are made to tuition fees and student loans, this may also influence where students choose to live.

Past Housing Completion Rates

6.35 Housebuilding rates in Caerphilly County Borough have been variable over the past 30 years, as there is a strong relationship between economic conditions and the number of dwellings built. It will be noted from Figure 17 that housing completions were low at the start of the 1990s, reflecting the early 1990s economic recession. Housebuilding rates recovered in the late 1990s before dropping off, then rising in the mid-2000s. The credit crunch of 2007-8 and subsequent recession saw housebuilding rates drop sharply and the figures have remained low since then.

6.36 There is also a relationship between housebuilding and the stage of previous development plans. The high housebuilding in the late 1990s coincided with the formation of Caerphilly County Borough Council in 1996, which brought together the former Islwyn and Rhymney Valley Councils, two areas with major housing sites identified in development plans. There was a second peak in the mid-2000s following the delivery of sites allocated in the Caerphilly County Borough Unitary Development Plan, which was approved by the Council in 2003.

6.37 The adoption of the LDP in November 2010 did not result in a significant increase in housebuilding as economic conditions were not as conducive to housing delivery. However, there has been a notable decrease in housing delivery in the late 2010s as the adopted LDP neared the end of the plan period, and many of the plan's housing allocations have been developed, with the remaining allocated sites being those that are more constrained or less desirable to the private sector. The last two years have seen an upturn in the number of dwellings completed. However, the majority of these sites have been on unallocated sites that were granted planning permission on appeal. Many of these sites were allocated for residential use in the withdrawn Deposit Replacement LDP.

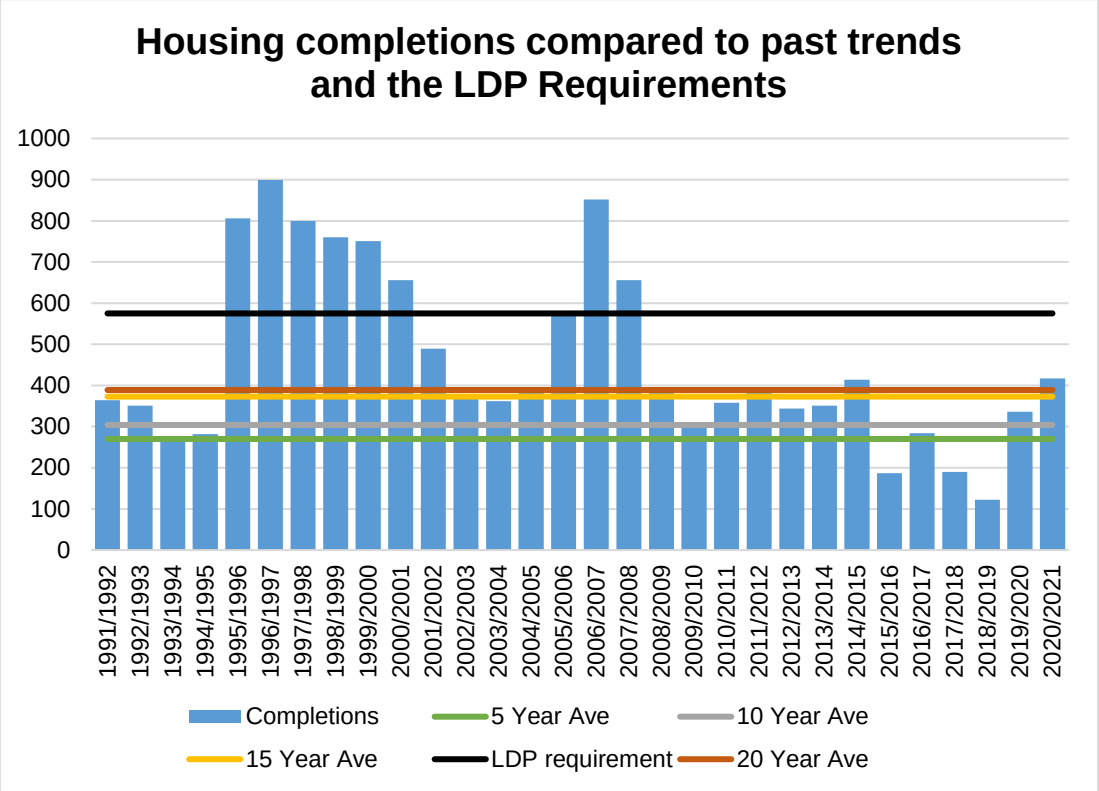

Figure 17: ***Housing Completions since 1991***
Source: Joint Housing Land Availability Studies/Annual Monitoring Reports

6.38 Figure 17 also considers housing completions against the adopted LDP target of 575 dwellings per annum. It will be noted that since the LDP was adopted in 2010, housing completions have been consistently below this rate. The assessment also considers the average number of completions over four different time periods in order to consider both long and short-term housebuilding trends. The past average completion rates are:

- 5 years – 270 dwellings per annum
- 10 years – 304 dwellings per annum
- 15 years – 373 dwellings per annum
- 20 years – 389 dwellings per annum

6.39 It is important to note that all new housing in the County Borough during the last plan period has been developed by private housebuilders or Registered Social Landlords (RSLs). Figure 18 provides information on the historic delivery of housing by tenure across Wales since 1974. It will be noted that the highest levels of housing delivery have been achieved when the Local Authority has been building alongside the private sector. It will be noted that the pattern of housing delivery in Wales broadly reflects what has been experienced in Caerphilly, with significantly lower delivery since the economic crash of 2008. The role of RSLs in housing delivery has been more significant in the 2010s than in the previous decade, but RSLs have not built at the scale that the LA build programme previously delivered.

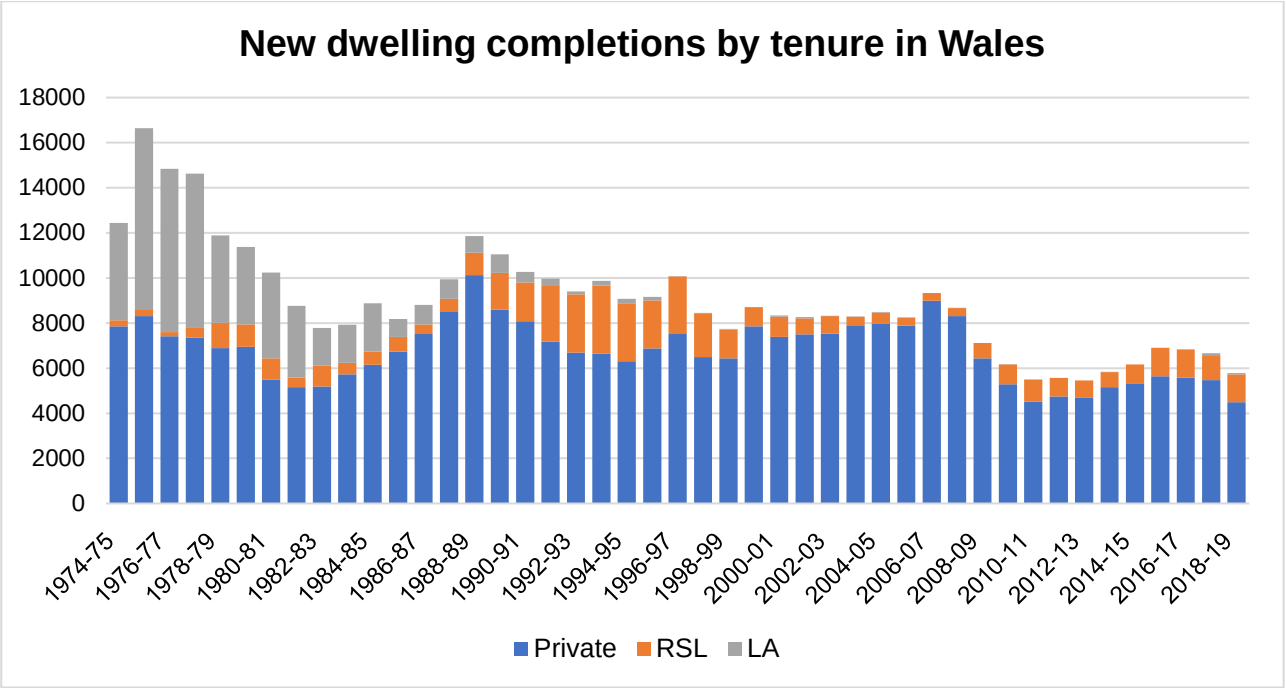

Figure 18: ***New dwelling completions by tenure***
Source: Statswales

6.40 Caerphilly Homes, the Council's housing department, has recently commenced an ambitious housebuilding programme which will see the first Council homes delivered in Caerphilly for decades. A target of 400 homes over the next 5 years has been set, with the first homes expected to complete in summer 2022, and the contribution that this will make to overall housing delivery will mean that housebuilding rates could realistically be higher in the future.

7. Methodology for determining Population, Household, Dwelling and Employment Growth

Popgroup

7.1 In determining the options for the level of population, household, and dwelling growth in the County Borough up to 2035, the Council has utilised Popgroup, which is a software package developed to forecast population and households for areas. The software replicates official projections, including the Welsh Government 2018-based population and household projections and allows users to enter alternative assumptions for births and fertility, deaths and mortality and internal and international migration to determine alternative population scenarios and allows for different assumptions for the number and type of households.

7.2 It also allows users to develop policy constrained scenarios to determine the size and profile of a population based on the level of dwelling provision.

7.3 Popgroup is currently owned by the Local Government Association and supported by Edge Analytics Ltd. The software is used by local authorities across the UK and has formed part of the evidence base for determining population and housing growth in a significant number of development plans. A description of the forecasting methodology Popgroup uses is set out in Appendix 1.

7.4 In accordance with Planning Policy Wales, the latest WG LA level projections should be considered as part of setting the housing requirement but planning authorities will need to assess whether these projections are appropriate for their area and, if not, undertake modelling, based on robust evidence, to identify alternative options.

7.5 A total of eleven main scenarios have been tested through Popgroup to determine the level of population and household growth that would be projected based on different assumptions.

7.6 The first three scenarios (**Scenarios A, B and C**) replicate the WG 2018-based population and household projections – principal, high and low.

7.7 Four scenarios look at different rates of migration – **Scenario D** is zero net (or balanced) migration, and **Scenarios E and F** look at migration figures across a longer time period (19 years and 10 years respectively). **Scenario G** considers the average migration that has occurred in the Cardiff Capital Region over the last 10 years and applies the average rates for internal and international migration to Caerphilly.

7.8 Three dwelling-led projections have also been produced. **Scenario H** assumes a continuation of the dwelling requirement in the adopted LDP and **Scenario I** uses the average past build rates figure for the last 15 years. In the dwelling-based scenarios, migration is used to balance the relationship between population and housing, so if there is insufficient population growth as a result of natural change to meet the number of dwellings identified, net migration is required to meet the identified number of dwellings. This assumes not only that there will be migration into Caerphilly, but also that less existing residents will out-migrate from Caerphilly.

7.9 The final dwelling-based projection, **Scenario J,** is almost at the midpoint between the other two dwelling based scenarios and would result in an increase in the working age population at a level that support the regional CCR jobs growth targets

7.10 **Scenario K** is an employment-led scenario taken from the Oxford Economics Forecast prepared as part of the evidence base for the Employment Land Review (ELR). It is a

'policy off' scenario which considers what impact there would be on the population if forecast employment trends were to drive the population without any policy intervention.

Conversion of Households to Dwellings

7.11 The Welsh Government Development Plans Manual states that LPAs must use a household conversion factor when translating households to dwellings. A conversion ratio of 1.04 dwellings per household is identified as an appropriate benchmark. However, it is for LPAs to consider and evidence what this conversion ratio should be. A key source of this data is the 2011 Census.

Dwellings	Household spaces with at least one usual resident	Household spaces with no usual residents	Dwellings per household space (vacancy rate)
77,217	74,479	2,738	1.037

Table 11: ***Dwellings, household spaces and accommodation type***
Source: ONS 2011 Census (Table KS401EW - Dwellings, household spaces and accommodation type)

7.12 As indicated in Table 11, the 2011 Census identified that there were 77,217 dwellings to accommodate 74,479 households, resulting in a conversion ratio of 1.037 dwellings per household. Caerphilly has the lowest dwelling vacancy rate of all local authorities in South-East Wales, with the ratio for the South-East Wales region equating to 1.045. For the purposes of calculating the number of dwellings for households, an assumption of 1.037 as a conversion ratio for vacancies has been factored in.

Base Scenarios

A	WG 2018-based Principal Projection	Based on the WG 2018-based LA 'Principal' population and household projections
B	WG 2018-based High population	Based on the WG 2018-based LA 'High' population and household projections - high fertility, high life expectancy and migration assumptions
C	WG 2018-based Low population	Based on the WG 2018-based LA 'Low' population and household projections low fertility, low life expectancy and migration assumptions
D	Zero net migration	Based on WG 2018-based 'Principal' assumptions for fertility and mortality but with balanced internal and international migration flows, resulting in zero net migration. Data from the 2019 and 2020 Mid-Year Estimates included.
E	19-year average migration	Based on 19-year average migration rates rather than the 5-year rates used in the 2018-based projections. Fertility and Mortality reflect LA 'Principal' projections. Data from the 2019 and 2020 Mid-Year Estimates included.
F	10-year average migration	Based on 10-year average migration rates rather than the 5-year rates used in the 2018-based projections. Fertility and Mortality reflect LA 'Principal' projections. Data from the 2019 and 2020 Mid-Year Estimates included.
G	SE Wales average migration – 10 years	Based on South-East Wales average migration for the past 10 years. Fertility, Mortality, and household assumptions reflect LA 'Principal' projections. Data from the 2019 and 2020 Mid-Year Estimates included.
H	Dwelling led – continuation of adopted LDP	Growth constrained to an average dwelling figure of 575 dwellings per annum. Data from the 2019 and 2020 Mid-Year Estimates included.
I	Dwelling led – 15-year average	Growth constrained to a rounded average dwelling figure of 373 dwellings per annum reflecting the average dwelling completions over the last 15 years. This figure is similar to the 20-year average of 389 dwellings. Data from the 2019 and 2020 Mid-Year Estimates included.
J	Dwelling led – CCR growth in working age population	Growth constrained close to a midpoint between Scenarios H and I and set at a dwelling number that would support a growth in the working age population necessary to support regional jobs growth.
K	Employment Led - Oxford Economics Employment Forecast	Population, migration, and jobs taken from the July 2021 Oxford Economics 'policy off' forecasts prepared as part of the evidence base for the Employment Land Review

Table 12: *Tested Scenarios*

Summary of Base Scenario Outputs

7.13 The outputs from each of the tested scenarios are set out in the table below. Table 13 provides information on the total and percentage change for population and households and the dwelling numbers that would apply in each scenario.

	Scenario	Population Change 2020-2035	% Change 2020-2035	Ave Net migration per annum	Change in working age population	HH Change 2020-2035	% HH Change 2020-2035	Total Dwellings	Dwellings per annum
A	**WG 2018-based Principal Projection**	1,881	1.0	306	-2,868	2,461	3.2	2,550	170
B	**WG 2018-based High Population**	5,499	3.0	376	-1,842	3,839	5.0	3,979	265
C	**WG 2018-based Low Population**	-3,313	-1.8	238	-3,938	626	0.8	648	43
D	**Zero Net Migration**	-2,789	-1.5	0	-6,413	515	0.7	534	36
E	**Long Term Average Migration (19 Year)**	-1,002	-0.6	104	-5,380	1,356	1.8	1,403	94
F	**Long Term Average Migration (10 Year)**	-1,137	-0.6	93	-5,443	1,299	1.7	1,344	90
G	**South-East Wales average migration**	5,212	2.9	525	-756	3,844	5.0	3,983	266
H	**Continuation of adopted LDP**	16,004	8.8	1,317	8,434	8,323	10.8	8,622	575
I	**Long term housebuilding rates**	8,884	4.9	781	2,668	5,399	7.0	5,595	373
J	**CCR Working age population growth**	11,598	6.4	969	4,866	6,513	8.4	6,750	450
K	**Oxford Economics Employment Led[4]**	-8,805	4.8	-349	-11,231	-2,031	- 2.6	0	0

Table 13: ***Summary of Base Scenario Outputs - 2020-2035***

7.14 The first seven scenarios are population led scenarios. These scenarios all use the WG 2018-based projection assumptions for fertility and mortality, or high or low variants of them (Scenarios B and C).

7.15 It will be noted that four of the population scenarios tested, result in an overall decline in population by 2035 (Scenarios C to F). As scenario C is the low population variant, with lower fertility and higher mortality assumed, this scenario would result in the greatest population decline. In each of these scenarios, the level of net migration does not offset the significant impact of the projected negative natural change (i.e. more deaths than births).

[4] Working age population based on 16-64 rather than 16-66 as per other scenarios

Scenarios E and F, which reflects long term migration change over similar periods (19 years and 20 years respectively) give similar results. It is clear from these scenarios that if the Council does not want to plan for population decline in the County Borough, there is a need to accommodate a level of migration that is above what has been experienced historically.

7.16 Scenario A, the WG Principal projection shows that the population is projected to increase by 1% over the plan period. As explained in Section 5, the projections have utilised a different methodology, where a migration rate relative to the UK population has been used for internal migration, rather than applying past trend assumptions at a constant rate through the projection period. The consequence of this is that the average net migration per annum is higher for this scenario and is higher than based on long term past trends.

7.17 Scenario G assumes that average migration in Caerphilly would reflect the average levels experienced by the South-East Wales region overall, which equates to 2.9% growth. This assumes a higher level of net migration than has previously been experienced and importantly, as explained in the detailed result, would ensure that the working age population would remain relatively constant, which would mean that there would be insufficient population to promote economic growth.

7.18 The dwelling led scenarios (H, I and J) assume a much higher level of net migration than has been experienced in the past, by assuming more people will be moving into Caerphilly and less people will be moving out. Scenario H, the continuation of the LDP dwelling requirement of 575, projects the population will grow by 8.8%, due to migration.

7.19 Scenario I considers long-term housebuilding rates over the 15-year plan period. This projects a population increase of 4.9% and an annual migration rate of 781 persons per annum.

7.20 Scenario J focuses on ensuring that the working age population grows to a level required to support regional jobs growth targets for CCR.

7.21 Scenario K, the employment led 'policy off' scenario is the only scenario to result in a decline in both the population and the number of households, and this option would result in no requirement for any new dwellings.

7.22 All other scenarios tested would result in an increase in households and would therefore generate a housing requirement. This is due to the projected household membership type, with a projected increase in smaller households (1 and 2 person) across most age groups, which means that even in a situation where the population is projected to decline (Scenarios C to F), more households will continue to form.

7.23 The WG Principal Projection scenario identifies a requirement for 170 dwellings, which is significantly lower than long term past build rates (373 units per annum, as shown in Scenario I). The WG high projection (Scenario B) and the South-East Wales migration projection generate very similar housing requirements of 265 and 266 per annum. The highest dwelling requirements are from the dwelling-based scenarios, H, I and J with annual housing requirements between 373 and 575 units per annum.

7.24 Figure 19 sets out the 2035 populations in each of the scenarios tested. This demonstrates that several of the scenarios would result in a decline in population by 2035.

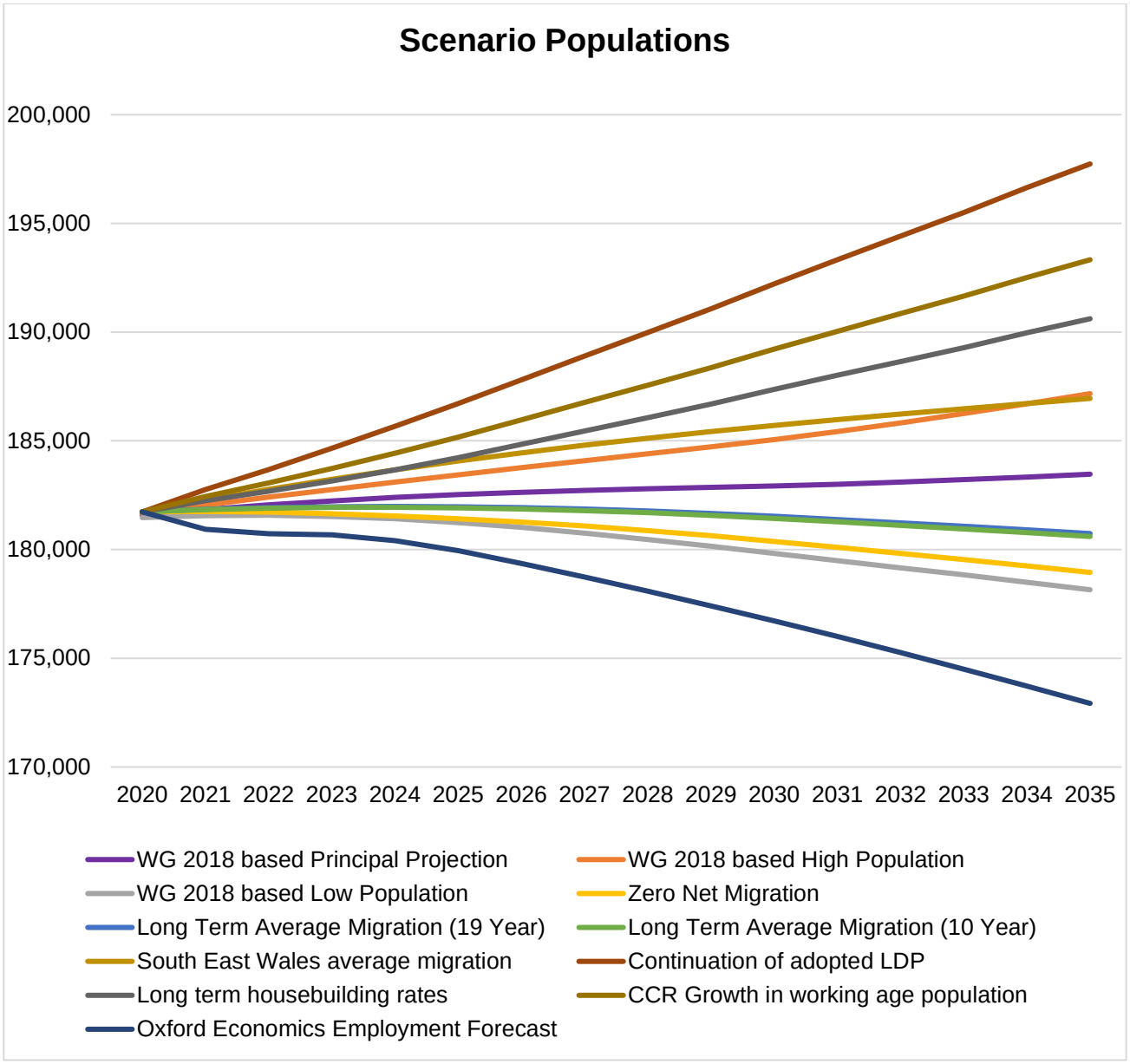

Figure 19: ***Populations for each tested scenario***

7.25 Figure 20 shows the number of households in the County Borough in each of the scenarios throughout the projection period. Except for scenario K, in all other scenarios where there will be a decline in population, there will be an increase in the number of households.

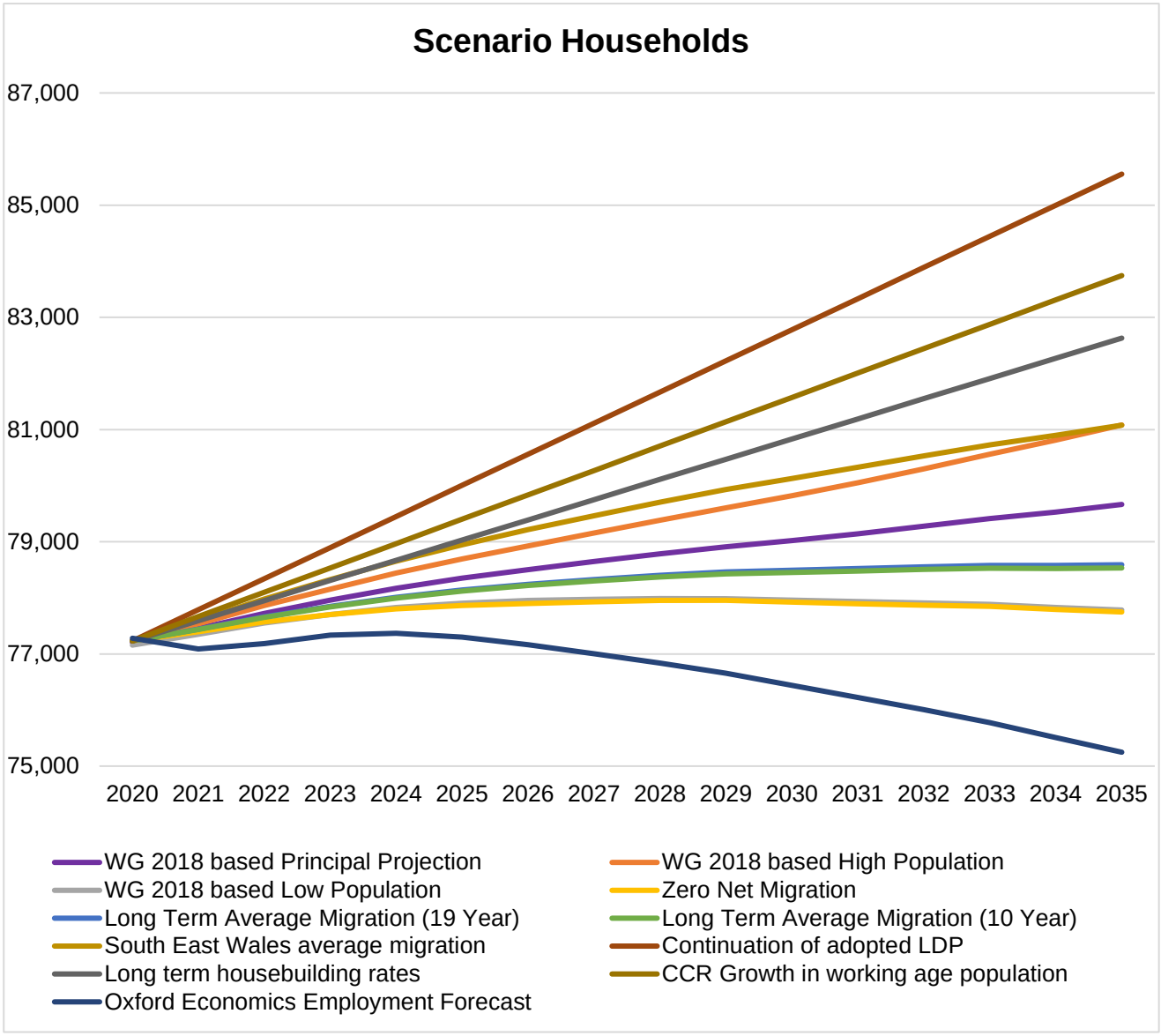

Figure 20: ***Households for each tested scenario***

Changes to Membership Rates

7.26 As explained in Chapter 5, the 2018-based household projections show an overall increase in the number of smaller households (1 person and 2 person) over the period 2020-2025. This trend is not, however, reflected across all age groups. By 2035, the proportion of younger adults in the 19-24 and 25-29 age groups that are living in smaller households is expected to decline significantly, reflecting trends experienced in the period between the 2001 and 2011 Censuses.

Gender	Age	Household Type	2001	2020	2035	Change 2001-2035	Change 2020-2035
Male	19-24	1 person	5.2%	2.4%	1.3%	-3.9%	-1.1%
		2 person (No children)	15.7%	15.4%	14.9%	-0.7%	-0.4%
		2 person (1 adult, 1 child)	0.1%	0.1%	0.1%	0.0%	0.0%
		3 person (No children)	26.1%	21.7%	18.5%	-7.6%	-3.2%
		3 person (2 adults, 1 child)	7.1%	7.4%	7.4%	0.3%	0.1%
		3 person (1 adult, 2 children)	0.2%	0.0%	0.0%	-0.2%	0.0%
		4 person (No children)	15.8%	18.8%	20.8%	5.0%	2.0%
		4 person (2+ adults, 1+ children)	13.6%	13.9%	13.9%	0.3%	0.0%
		4 person (1 adult, 3 children)	0.0%	0.0%	0.0%	0.0%	0.0%
		5+ person (No children)	3.8%	5.4%	6.5%	2.7%	1.1%
		5+ person (2+ adults, 1+ children)	12.4%	14.9%	16.6%	4.2%	1.7%
		5+ person (1 adult, 4+ children)	0.0%	0.0%	0.0%	0.0%	0.0%
Male	25-29	1 person	11.8%	7.7%	5.4%	-6.4%	-2.3%
		2 person (No children)	27.5%	25.9%	24.3%	-3.2%	-1.6%
		2 person (1 adult, 1 child)	0.3%	0.5%	0.7%	0.4%	0.2%
		3 person (No children)	17.7%	17.4%	17.0%	-0.7%	-0.4%
		3 person (2 adults, 1 child)	14.8%	11.1%	8.8%	-6.1%	-2.4%
		3 person (1 adult, 2 children)	0.1%	0.2%	0.2%	0.1%	0.0%
		4 person (No children)	6.9%	12.1%	15.7%	8.8%	3.6%
		4 person (2+ adults, 1+ children)	11.5%	12.3%	12.8%	1.3%	0.5%
		4 person (1 adult, 3 children)	0.1%	0.1%	0.1%	0.1%	0.0%
		5+ person (No children)	1.7%	4.4%	6.3%	4.6%	1.9%
		5+ person (2+ adults, 1+ children)	7.5%	8.3%	8.8%	1.2%	0.5%
		5+ person (1 adult, 4+ children)	0.0%	0.0%	0.0%	0.0%	0.0%

Gender	Age	Household Type	2001	2020	2035	Change 2001-2035	Change 2020-2035
Female	19-24	1 person	4.4%	1.1%	0.4%	-4.1%	-0.8%
		2 person (No children)	19.7%	15.8%	12.7%	-7.1%	-3.1%
		2 person (1 adult, 1 child)	9.6%	7.6%	6.0%	-3.5%	-1.5%
		3 person (No children)	14.4%	18.9%	21.2%	6.8%	2.3%
		3 person (2 adults, 1 child)	12.4%	9.2%	7.0%	-5.4%	-2.2%
		3 person (1 adult, 2 children)	4.1%	0.9%	0.3%	-3.9%	-0.7%
		4 person (No children)	9.6%	13.9%	16.3%	6.8%	2.4%
		4 person (2+ adults, 1+ children)	13.2%	14.9%	15.6%	2.4%	0.6%
		4 person (1 adult, 3 children)	0.9%	0.5%	0.4%	-0.5%	-0.2%
		5+ person (No children)	1.9%	3.4%	4.2%	2.3%	0.9%
		5+ person (2+ adults, 1+ children)	9.8%	13.6%	15.7%	5.9%	2.1%
		5+ person (1 adult, 4+ children)	0.0%	0.1%	0.2%	0.2%	0.1%
Female	25-29	1 person	6.0%	4.0%	2.9%	-3.1%	-1.1%
		2 person (No children)	23.5%	25.7%	27.1%	3.7%	1.4%
		2 person (1 adult, 1 child)	7.2%	9.2%	10.6%	3.4%	1.4%
		3 person (No children)	7.0%	7.8%	8.3%	1.3%	0.5%
		3 person (2 adults, 1 child)	17.4%	16.2%	15.1%	-2.3%	-1.1%
		3 person (1 adult, 2 children)	6.0%	4.7%	3.9%	-2.1%	-0.9%
		4 person (No children)	3.4%	6.2%	8.2%	4.8%	2.0%
		4 person (2+ adults, 1+ children)	15.9%	14.1%	12.6%	-3.3%	-1.5%
		4 person (1 adult, 3 children)	2.7%	1.3%	0.7%	-2.0%	-0.6%
		5+ person (No children)	0.6%	1.6%	2.4%	1.8%	0.8%
		5+ person (2+ adults, 1+ children)	9.5%	8.3%	7.3%	-2.2%	-1.0%
		5+ person (1 adult, 4+ children)	0.8%	0.8%	0.8%	0.0%	0.0%

Table 14: ***Change in Household membership rates 2001-2035 (Male and Female)***
Source: Popgroup data module 2018-based household projections

7.27 As can be seen in Table 14, the male and female 19-24 and 25-29 age groups all experience a reduction in the proportion of people living in single person households and all groups apart from female 25-29 have seen a decrease in 2 person no children households.

Conversely, the proportion of people in these age groups living in larger households with no children is projected to increase. This would include younger adults living with parents who are unable to afford to move out. There is concern by the extent to which the proportion of households is projected to decline with only 0.4% of 19-24 females and 1.3% of males expected to live alone.

7.28 From a policy perspective, it is not desirable to have high levels of concealed households that are unable to access the housing market due to affordability. The projections are trend based and this trend has been extrapolated from 2001 and 2011 Census data. However, it is questioned whether it is realistic to assume that 1-person household membership rates will fall to levels of 1% or lower. Ensuring that there is a sufficient supply of housing supply, including the provision of affordable housing, is a key factor in this respect.

7.29 To consider the impact of this issue, additional scenarios have been tested which assume that instead of household membership rates for smaller households continuing to fall throughout the projection period, they will stabilise in 2020 and the rates for the 19-29 age groups will remain constant at 2020 levels. The membership rates for the other age groups will remain as projected.

7.30 As the revised membership rates are applied to the household projections, there is no change to the projected population. However, there will be a change to the number of households, as it assumes that the trend towards young adults living in larger households as they are unable to afford to create their own households will not increase further post 2020. This means additional households in these age groups only will form. This will result in a small increase in the number of households over the 15-year period (between 0.4 and 0.5%), which equates to a small, but important, number of additional dwellings.

	Scenario	Population Change 2020-2035	HH Change 2020-2035	HH Change MR Adjustment	% HH Change 2020-2035	% HH Change MR Adjustment	Total Dwellings	Total Dwellings MR Adjustment	Dwellings per annum	Dwellings per annum MR Adjustment
A	**WG 2018-based Principal Projection**	1,881	2,461	2,862	3.2	3.7	2,550	2,966	170	198
B	**WG 2018-based High Population**	5,499	3,839	4,241	5.0	5.5	3,979	4,395	265	293
C	**WG 2018-based Low Population**	-3,313	626	1,026	0.8	1.3	648	1,064	43	71
D	**Zero Net Migration**	-2,789	515	884	0.7	1.1	534	917	36	61
E	**Long Term Average Migration (19 Year)**	-1,002	1,356	1,695	1.8	2.2	1,403	1,756	94	117
F	**Long Term Average Migration (10 Year)**	-1,137	1,299	1,636	1.7	2.1	1,344	1,696	90	113
G	**South-East Wales average migration**	5,212	3,844	4,195	5.0	5.4	3,983	4,348	266	290

Table 15: ***Membership rate adjustments (Scenarios A-G)***

7.31 In the dwelling led scenarios, the number of dwellings will remain fixed, as will the number of households, but the change in membership rates means that there will be less people living in each house than projected in the 2018-based household projection, and therefore less population. The population required to meet the dwelling requirements consequently drops, as shown in Table 16.

	Scenario	Pop Change 2020-2035	Pop Change MR Adj	% Change 2020-2035	% Change MR Adj	Change in working age pop	Change in working age pop MR Adj	HH Change 2020-2035	% HH Change 2020-2035	Total Dwell	Dwell per annum
H	**Continuation of adopted LDP**	16,004	15,058	8.8	8.3	8,434	7,668	8,323	10.8	8,622	575
I	**Long term housebuilding rates**	8,884	7,990	4.9	4.4	2,668	1,944	5,399	7.0	5,595	373
J	**CCR Growth in Working age population**	11,598	10,685	6.4	5.9	4,866	4,126	6,513	8.4	6750	450

Table 16: ***Membership rate adjustments (Scenarios H, I and J)***

7.32 No membership rate adjustments have been made to Scenario K, the employment led scenario as this was prepared by an external party, Oxford Economics, rather than through the Popgroup Model.

SCENARIO A - WG 2018-based Principal Projection

- Population increase of 1,881 people - averaging 125 per year (1% increase)
- Population in 2035 of 183,620 people (adjusted MYE)
- Household increase of 2,461 (3.2% increase)
- Total dwelling requirement of **2,550 (170 dwellings per annum)**
- Net in-migration of 306 per annum
- Working age population with adjusted MYE (16-66) projected to decline by 2,868
- Adjusted membership rates, total dwelling requirement of **2,966 (198 dwellings per annum)**

7.33 In accordance with national planning policy, the latest Welsh Government projections should be assessed to determine whether they are appropriate for the LA area, before considering other alternatives. In light of this, the first scenario tested considers the 2018-based population and household principal projections, which assume a continuation of natural change and international migration rates that were experienced in the five years preceding 2018. For internal migration, rates rather than numbers have been used, with the internal outward migration being calculated as a rate relative to the resident population of the local authority, and the internal inward migration being calculated as a rate relative to the rest of the UK population.

7.34 This scenario projects a population increase for the County Borough of 1,881 people by 2035, which equates to 125 new residents per annum over the plan period. As shown in Figure 21, natural change is projected to be negative over the plan period, with 2,700 more deaths than births. The population is therefore projected to grow as a result of migration, rather than natural change, with net migration of 4,588 people projected over the 15-year period, equating to 306 persons per annum. The majority of population growth will be as a result of internal (UK) migration, resulting in a net increase of 3,943 in total. The internal migration numbers per annum are projected to increase over the projection period. International net migration is constant in the projections, set at +43 people per annum.

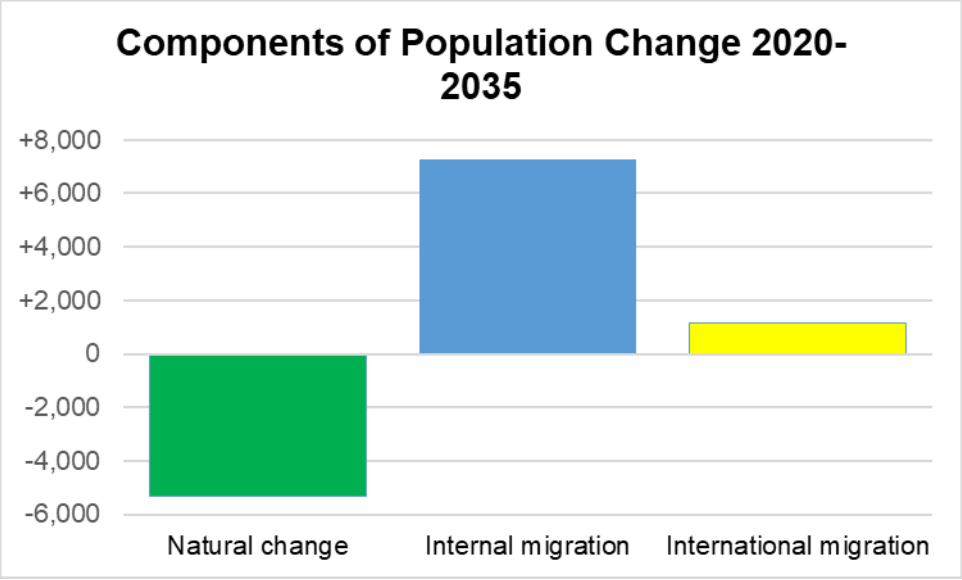

Figure 21: ***Components of change – Principal Projection***

7.35 The assumptions for births, deaths and international migration in the Principal Projection are based on the trends from the 5 years prior to 2018. As explained in Section 6, there has been a trend towards lower numbers of births and higher numbers of deaths as a result of declining fertility rates and an ageing population and, based on a continuation of these trends, the number of deaths is projected to exceed the number of births throughout the projection period, resulting in negative natural change figures.

7.36 Migration is the biggest driver for population growth under this scenario. However, only 5 years international migration figures were included under this scenario. It is shown in Section 6 that migration was variable in this 5-year period. The data included the period during the EU Referendum on leaving the EU, and this decision may have had an impact on international migration to and from Caerphilly.

7.37 In addition, the 5-year period would not have covered the implications of the abolition of the Severn Bridge tolls in December 2018. It will be noted in Section 6 that more recent data on migration origins shows net inflows from the wider Bristol area, as the removal of the tolls makes the South Wales Valleys a more affordable alternative to the Bristol housing market.

7.38 When the household projections are applied to the population scenario and converted into numbers of dwellings, an annual housebuilding figure of 170 dwellings would be required to meet the level of population growth. This increases to 198 dwellings in the adjusted membership rate scenario. This level of housebuilding is low when compared to both longer term housebuilding rates (an average of between 300 and 400 per annum based on timescales) and it is reasonable to expect that significantly higher housebuilding rates than these can be achieved.

Structure of the population

7.39 The population structure pyramid below provides a comparison between the 2020 and 2035 population structures. The blue areas are age cohorts that are projected to increase by 2035 compared to what they are now, and the red areas are where the number of people in this age cohort is expected to decrease by 2035.

7.40 At the start of the projection period, there were 33,500 children (0-15) in the County Borough, considering the latest MYEs. This number is projected to decline by approximately 2,700 over the projection period. The working age population, which has been defined as 16-66 to reflect the age that those retiring in 2035 will receive their state pension (age 67), will also decline by 2,870. The most significant growth will be in the population aged 66+, which will grow by 7,400 by 2035.

7.41 The decline in working age population over the projection period, and increase in the number of elderly people, who will not be working, is likely to have implications for the economic prosperity of the County Borough as there will be potentially less workers to occupy jobs in Caerphilly and more dependants who are not in work creating an unbalanced population under this scenario.

7.42 The decline in school aged children is also a concern, particularly in areas where a decline in pupil numbers will impact on the sustainability of local schools.

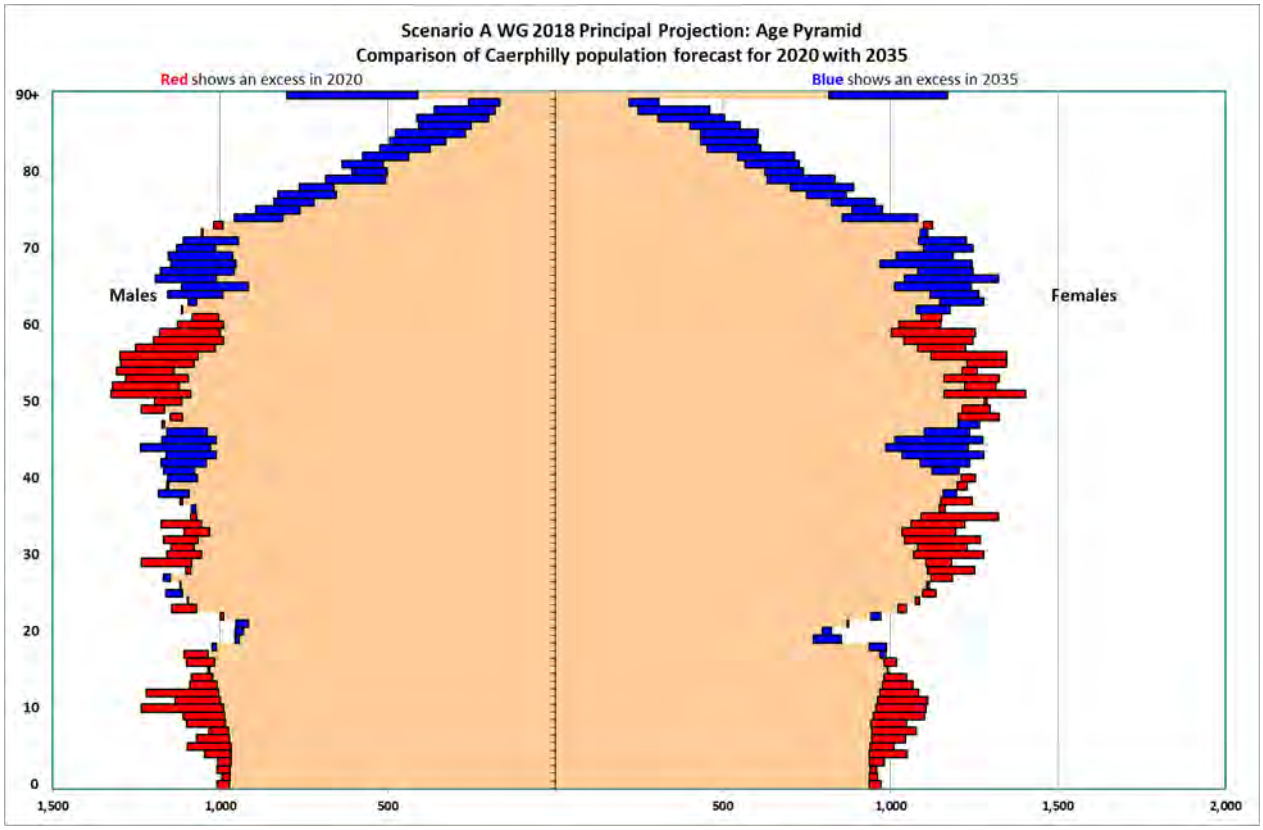

Figure 22: ***Comparison of Caerphilly population 2020 with 2035 (WG Principal Projection)***

Scenario A Conclusions

7.43 The Principal Projections scenario is proposing a very low level of population growth (1%) over the next 15 years, as a result of negative natural change (higher deaths and lower births). Population growth is entirely due to migration. This scenario would result in a significant decline in both the 0-15 and working age population, and a significant increase in the older population (67+). The resultant households based on this population projection are also low (3.2%). This equates to a housing requirement of 170 dwellings a year or 198 dwellings in the adjusted membership rate scenario, which is well below past build rates.

SCENARIO B - WG 2018-based High Population Variant

- Population increase of 5,499 people - averaging 367 per year (3% increase)
- Population in 2035 of 187,238 people (adjusted MYE)
- Household increase of 3,839 (5% increase)
- Total dwelling requirement of **3,973** (**265 dwellings per annum)**
- Net in-migration of 376 per annum
- Working age population with adjusted MYE (16-66) projected to decline by 1,842
- Adjusted membership rates, total dwelling requirement of **4,395 (293 dwellings per annum)**

7.44 In addition to principal projections, Welsh Government have also published two variant projections based on alternative future scenarios of fertility, mortality and migration compared to the principal projection. The variant projections include:

- 'high population' – based on high fertility, life expectancy and migration assumptions.
- 'low population' – based on low fertility, life expectancy and migration assumptions.

Welsh Government is clear that these variants do not represent the upper or lower limits of future demographic behaviour.

7.45 This scenario tests the higher population variant and identifies an increase in population of over 3,600 above those figures contained in the principal projection. Despite, higher fertility rates being applied, and a higher life expectancy, natural change is still expected to be negative overall, with 147 more deaths and births overall. It is questioned whether these assumptions are realistic as it assumes a higher level of births than past trends suggest. The high population projections show a faster increase in the total fertility rate (TFR i.e. the average number of children per woman) than the Principal Projections indicates, and this responds to a projected number of births that is around 2,000 per annum through the projection period. The Mid-Year Estimates for 2019 and 2020 indicates that birth rates for the first two years of the projection period have been significantly lower than that at less than 1,800.

7.46 Mortality has also been higher than the High Population Variant projects, but the 2020 figures have been affected by deaths experienced during the first wave of the pandemic.

7.47 Migration is projected to be significant, with 376 person per annum on average. Like the principal projections, international migration has been applied as a constant figure of 43 per annum, but internal migration is projected to be higher, at a varying rate across the projection period.

7.48 The WG 2018-based household projections have been applied to this scenario and overall, there would be a 5% increase in population under this scenario. In dwelling terms, there would be an increase of 265 dwellings. In the scenario with adjusted membership rates, the number of dwellings would increase to 293 dwellings.

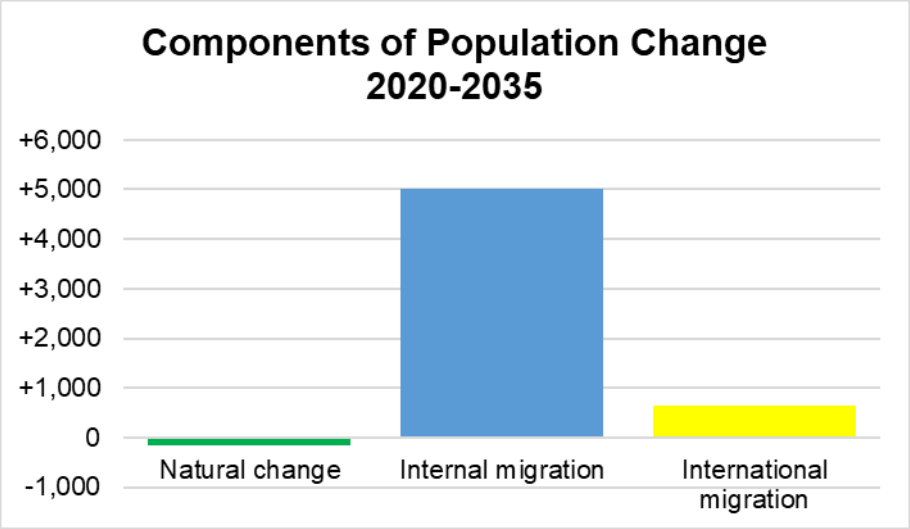

Figure 23: ***Components of change – WG 2018-Based High Population***

Structure of the population

7.49 The population structure pyramid in Figure 24 provides a comparison between the 2020 and 2035 population structures. The blue areas are age cohorts that are projected to increase by 2035 compared to what they are now, and the red areas are where the number of people in this age cohort is expected to decrease by 2035.

7.50 Compared to Scenario A, the patterns are very similar, particularly for the older age groups. However, there are some changes to the youngest age groups as this projection assumes higher fertility and therefore more births during the projection period. This would mean more children aged under 5 than in 2020. There will still, however, be an overall decline in school aged children of nearly 1,000 between the start and end of the projection period.

7.51 The working age population, which has been defined as 16-66 to reflect the age that those retiring in 2035 will receive their state pension (age 67), will also decline by 1,800. The most significant growth will be in the population aged 67+, which will grow by nearly 8,100 by 2035.

7.52 As explained in the previous scenario, the decline in working age population over the projection period, and increase in the number of elderly people, who will not be working, is likely to have implications for the economic prosperity of the County Borough as there will be potentially less workers to occupy jobs in Caerphilly under this scenario.

7.53 The decline in school aged children is also a concern in this scenario, particularly in areas where a decline in pupil numbers will impact on the sustainability of local schools.

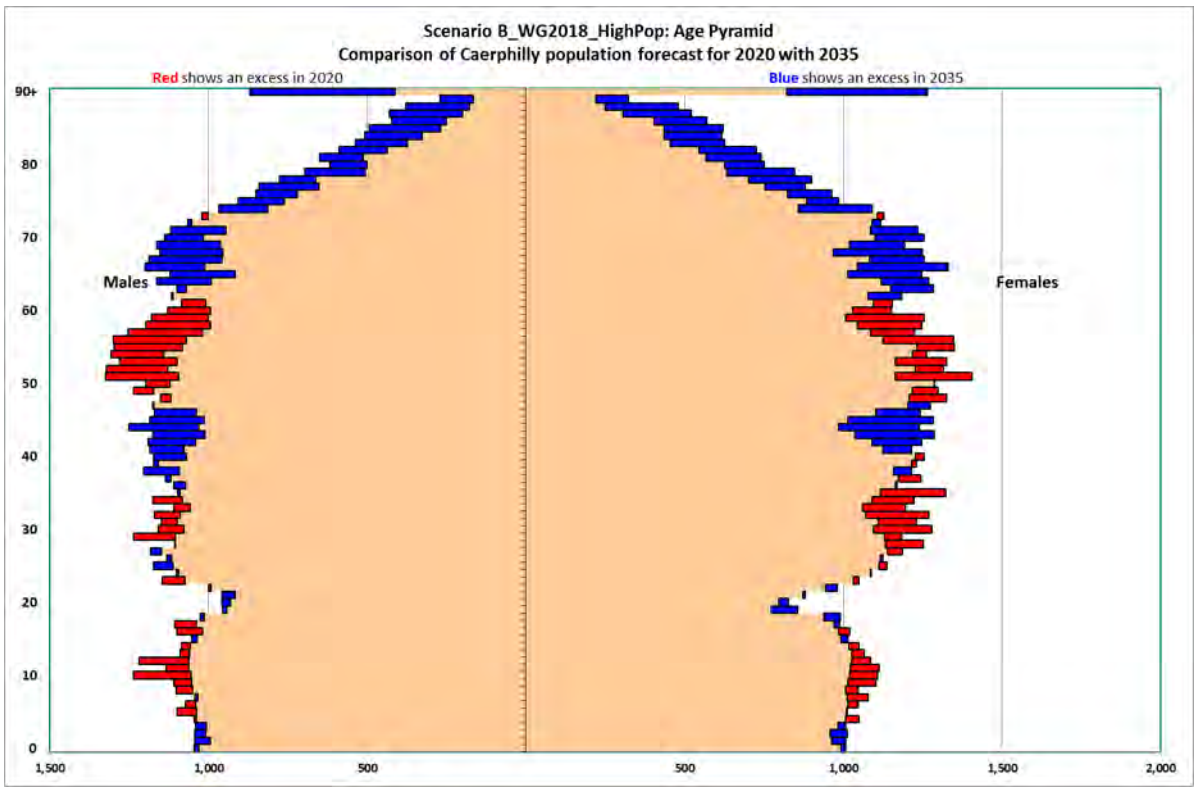

Figure 24: ***Comparison of Caerphilly population 2020 with 2035 (WG 2018 High Population Projection)***

Scenario B Conclusions

7.54 The High Population Projection scenario projects a higher level of population growth (3%) over the next 15 years than the Principal Projections, due to higher assumptions for births, longer life expectancy and increased internal migration assumptions. As a result, whilst natural change is still projected to be negative (more deaths than births) the extent to which this affects the overall population is less significant. Population growth is, however, entirely due to migration. This scenario would result in decline in both the 0-15 and working age population, and a significant increase in the older population (67+). The resultant households based on this population projection is 5%, which equates to a housing requirement of 265 dwellings a year, which is below long term past building rates.

SCENARIO C - WG 2018-based Low Population Variant

- Population decrease of 3,313 people - averaging a loss of 221 people per year (1.8% decrease)
- Population in 2035 of 178,426 people (MYE adjusted)
- Household increase of 626 (0.8% increase)
- Total dwelling requirement of **648** (**43 dwellings per annum)**
- Net in-migration of 238 per annum
- Working age population adjusted by MYEs (16-66) projected to decline by 3,938
- Adjusted membership rates, total dwelling requirement of **1,064 (71 dwellings per annum)**

7.55 The second of the variant projections published by Welsh Government alongside the Principal Projections is the Low Population Variant. This assumes that fertility would be lower than assumed in the Principal Projections and that life expectancy would be lower. It also assumes a lower rate of internal migration, although international migration remains fixed at +43 net international migrants per annum.

7.56 Under this scenario, there would be a greater decline in the population due to negative natural change as there would be even fewer births than the WG Principal Projections indicate, and a greater number of deaths. Overall, the population would decrease by 1.8%, a total of 3,313 people or a loss of 221 people per annum. With a population adjustment to reflect the 2019 and 2020 MYEs, this would mean a population of 188,426 by 2035.

7.57 Even though the population is projected to decline, when the household projections are applied to this population, there would still be an increase in households by 0.8%, as the trends indicate that in most age groups there will be an increase in smaller person households, meaning that even a declining population will need more housing to support the existing residents. This would equate to a dwelling requirement of 43 units per annum.

7.58 If the membership rates for 19-29 are adjusted, this would increase the dwelling requirement to 1,064, or 71 dwellings per annum.

7.59 As shown in the Figure below, the low population assumptions mean that there will be a greater decline in population due to natural change and low population growth due to migration.

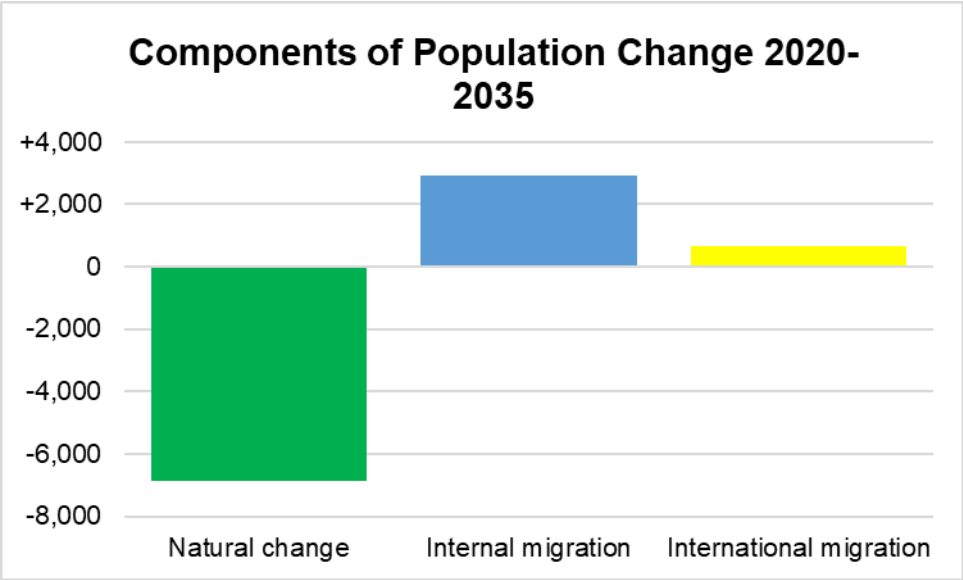

Figure 25: ***Components of change – WG 2018-Based Low Population***

Structure of the population

7.60 The population structure pyramid below provides a comparison between the 2020 and 2035 population structures. The blue areas are age cohorts that are projected to increase by 2035 compared to what they are now, and the red areas are where the number of people in this age cohort is expected to decrease by 2035.

7.61 At the start of the projection period, there were 33,500 children (0-15) in the County Borough, considering the latest MYEs. The principal projections showed the school age population was projected to decline by approximately 6,100 over the projection period as the low variant assumes lower fertility and lower migration (including families and women of childbearing age). This will have significant implications for the provision of school places.

7.62 The working age population is also set to decline by 3,900 (compared to 2,900 in scenario A), which will have significant implications for the economic activity in the County Borough. There will be a small growth in the population of males and females in their mid-40s, but there will be significantly less people in the other age cohorts, particularly in respect of women.

7.63 The most significant growth will be in the population aged 66+, which will grow by nearly 6,700 by 2035. There are fewer people projected in this age group compared to the Principal Projections, as life expectancy is projected to be lower in this low population scenario.

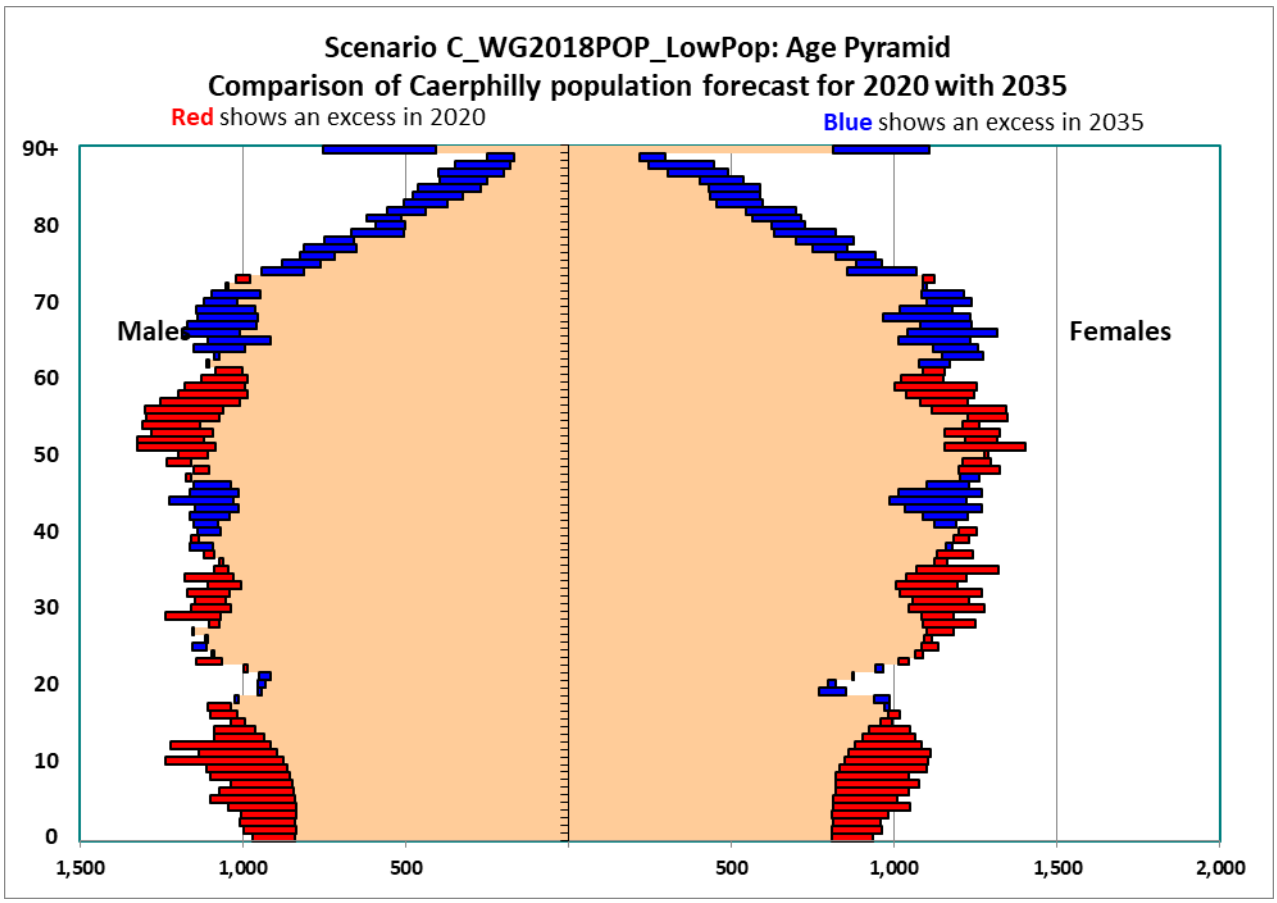

Figure 26: ***Comparison of Caerphilly population forecast for 2020 with 2035 (WG 2018 Low Population Projection)***

Scenario C Conclusions

7.64 The Low Population Variant scenario identifies that the population will decline by 1.8% by 2035, as a result of lower births, lower life expectancy and lower rates of migration. This will result in a significant decline in both the school age population and the working age population, and an increase in the older population. This is not a sustainable population structure, as it is not desirable to plan for population decline, particularly as Caerphilly is identified as a National Growth Area in Future Wales.

7.65 The projected change in household formation and types means that this scenario would generate a small housing requirement of 43 dwellings, or 73 dwellings in the membership adjusted scenario. This is significantly lower than past housing completion rates and could be accommodated by existing housing commitments without the need to allocate any additional land for housing.

SCENARIO D – Zero Net Migration

- Population decrease of 2,789 people - averaging a loss of 186 people per year (1.5% decrease)
- Population in 2035 of 178,950 people
- Household increase of 515 (0.7% increase)
- Total dwelling requirement of **534** (**36 dwellings per annum)**
- Net in-migration of 0 per annum
- Working age population (16-66) projected to decline by 6,413
- Adjusted membership rates, total dwelling requirement of **917 (61 dwellings per annum)**

7.66 In the Zero Net Migration scenario, it is assumed that the population will change as a result of natural change only and there will be no net migration (i.e. the same number of people will move out of Caerphilly as will move in).

7.67 The scenario uses the fertility and mortality assumptions from the Principal Projections and therefore natural change is negative. The population is projected to decline by 2,789 people or 1.5%. The assumption for natural change is projected to decline more significantly than in Scenario A, as the Principal Projections assume that there will be net migration into Caerphilly, and this migration would include families and women of child-bearing age.

7.68 As was the case in Scenario C, even though the population is projected to decline, when the household projections are applied to this population, there would still be an increase in households by 0.7%, as the trends indicate that in most age groups there will be an increase in smaller person households, meaning that even a declining population will need more housing to support the existing residents This would equate to a dwelling requirement of 36 units per annum, or 61 dwellings per annum in the scenario with adjusted membership rates for 19-29 year olds.

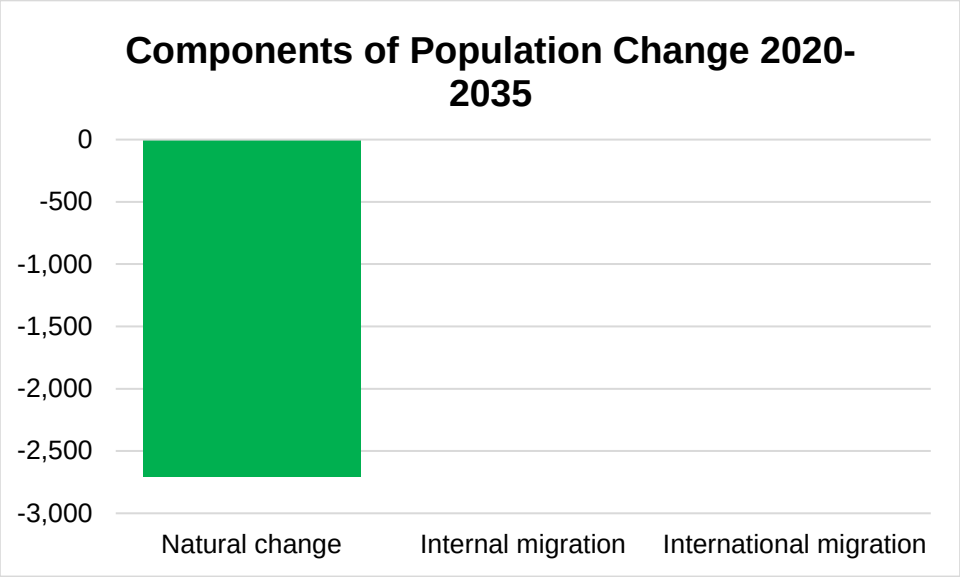

Figure 27: ***Components of change – Zero Net Migration***

Structure of the population

7.69 The population structure pyramid below provides a comparison between the 2020 and 2035 population structures. The blue areas are age cohorts that are projected to increase by 2035 compared to what they are now, and the red areas are where the number of people in this age cohort is expected to decrease by 2035.

7.70 This scenario would result in a significant decline of both the younger population (a decline of nearly 3,500) and the working age population (a decline of 6,400), together with an increase of 7,100 in the number of older people (67+) by 2035. As with other scenarios that would result in population decline, the consequence of these projected demographic changes is that there would not be a balanced population structure.

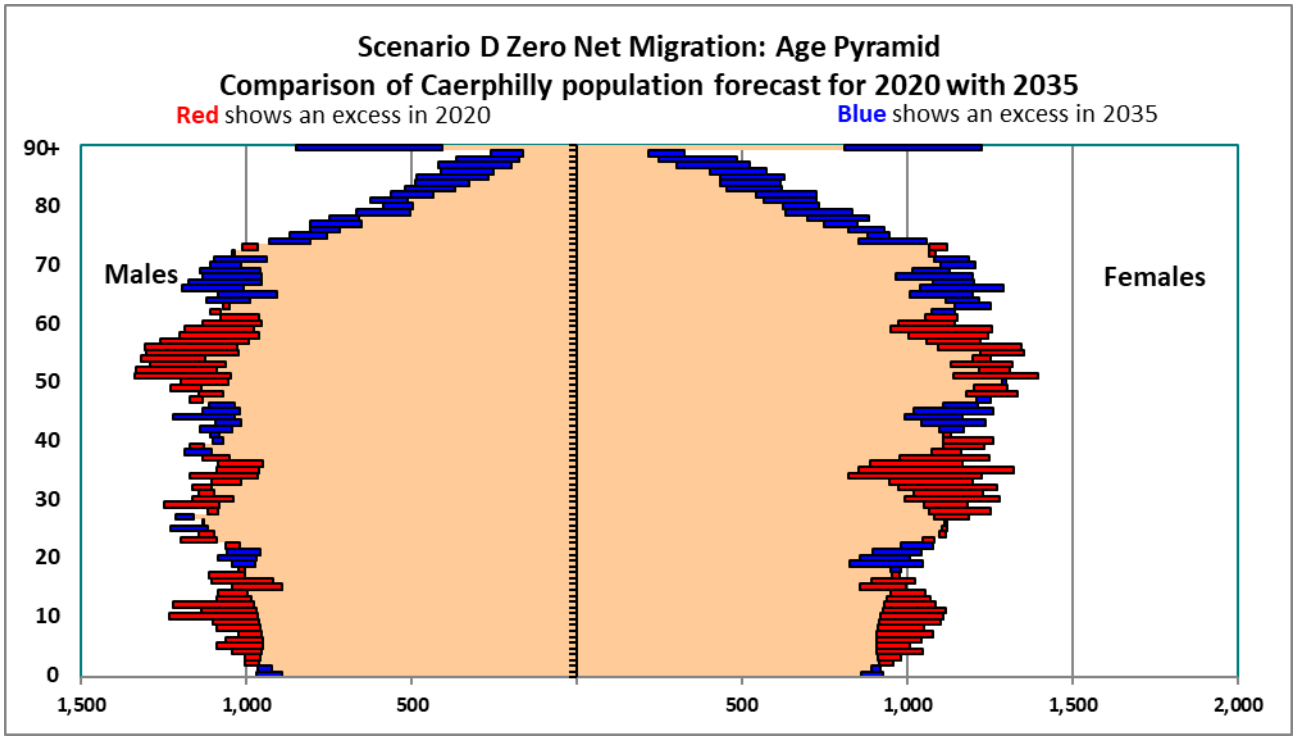

Figure 28: ***Comparison of Caerphilly population 2020 with 2035 (Zero Net Migration)***

Scenario D Conclusions

7.71 The Zero Net Migration scenario identifies that the population will decline by 1.5% by 2035 as there will be no net migration to off-set the population decline as a result of lower fertility and higher life expectancy. This will result in a significant decline in both the school age population and the working age population, and an increase in the older population. As was the case with the previous scenario, it is not a sustainable population structure, as it is not desirable to plan for population decline, particularly as Caerphilly is identified as a National Growth Area in Future Wales.

7.72 The projected change in household formation and types means that this scenario would generate a small housing requirement of 36 dwellings, or 61 dwellings in the membership adjusted scenario. This is significantly lower than past housing completion rates and could be accommodated by existing housing commitments without the need to allocate any additional land for housing.

SCENARIO E – Long Term Average Migration (19 Years)

- Population decrease of 1,002 people - averaging a loss of 67 people per year (0.6% decrease)
- Population in 2035 of 178,737 people
- Household increase of 1,356 (1.8% increase)
- Total dwelling requirement of **1,403** (**94 dwellings per annum)**
- Net in-migration of 104 per annum
- Working age population (16-66) projected to decline by 5,380
- Adjusted membership rates, total dwelling requirement of **1,756 (117 dwellings per annum)**

7.73 This scenario uses the assumptions around fertility and mortality from the Principal Projections (Scenario A) but assumes that migration will reflect the long-term trends for the last 19 years – from the 2001 Census onwards.

7.74 As explained previously in this paper, following the publication of the 2011 Census, the Mid-Year estimates for 2001 to 2010 were revised, which resulted in figures of 'unattributable change' figures being identified. It is anticipated that the 'unattributable change' was due to an under-estimation of the population in 2001, and inaccurate migration figures for these years, but as this cannot be quantified, we have not included unattributable change in the figures.

7.75 A constant migration figure has been applied across the projection period, equating to a net internal migration figure of 125 and a net international migration figure of -21. This equates to an overall net migration of 104 people per annum.

7.76 Overall, this results in a small decrease in population of 1,000 people by 2035, as the level of migration does not offset the loss of population from natural change (more deaths than births).

7.77 Despite a projected decrease in population, the household projection trends would mean that there would be a 1.8% increase in households, which would equate to a dwelling requirement of 94 dwellings per annum, or 117 dwellings in the membership rate adjustment scenario.

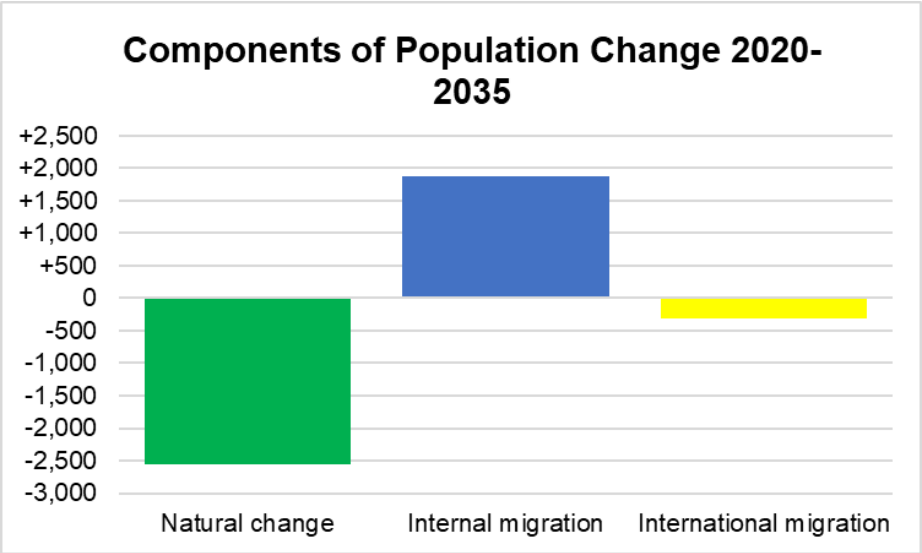

Figure 29: ***Components of change – Long Term Migration (19 Years)***

Structure of the population

7.78 The population structure pyramid below provides a comparison between the 2020 and 2035 population structures. The blue areas are age cohorts that are projected to increase by 2035 compared to what they are now, and the red areas are where the number of people in this age cohort is expected to decrease by 2035.

7.79 Whilst not as extreme as in other scenarios, the long term average migration over 19 years scenario would result in a significant decline of both the younger population (a decline of over 2,900) and the working age population (a decline of 5,400), together with an increase of 7,300 in the number of older people (67+) by 2035. As with other scenarios that would result in population decline, the consequence of these projected demographic changes is that there would not be a balanced population structure.

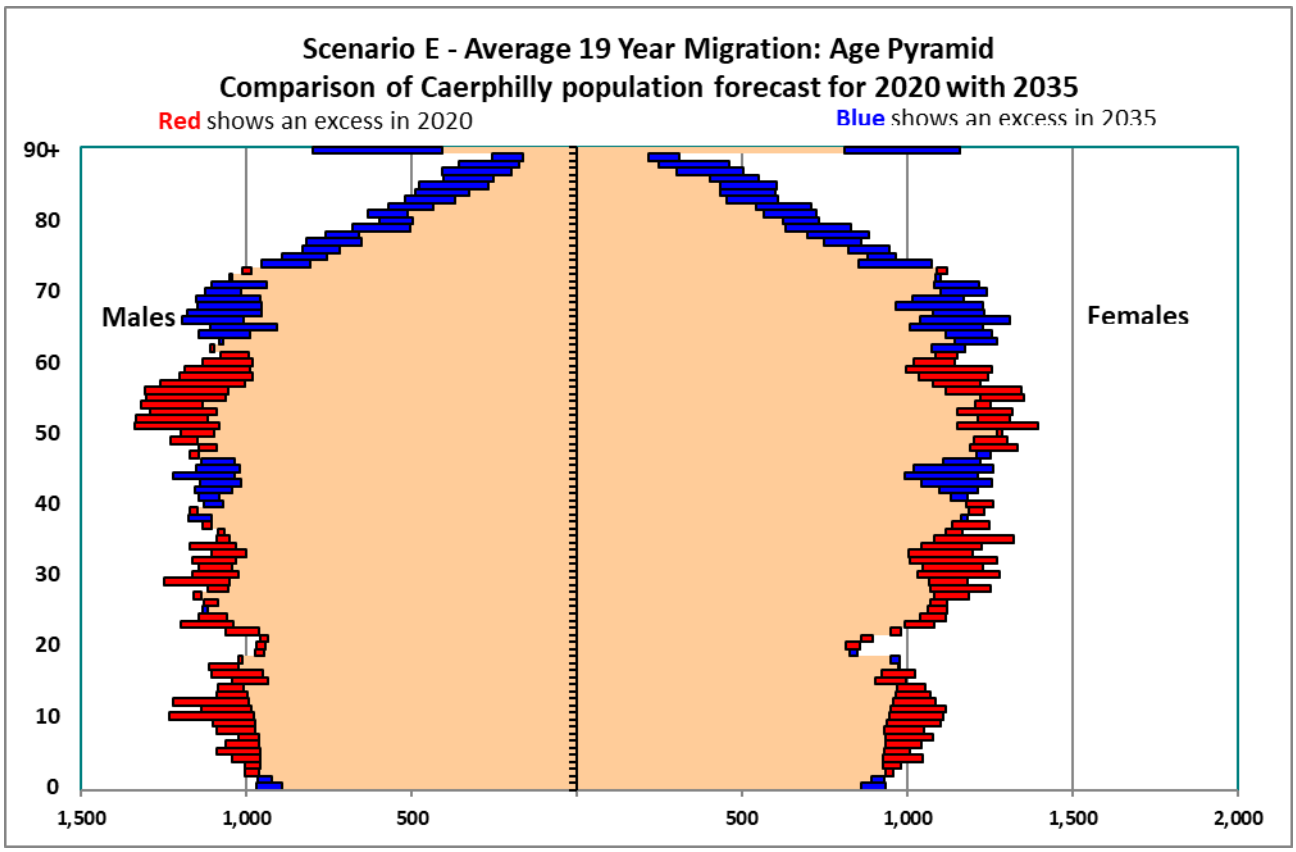

Figure 30: ***Comparison of Caerphilly population 2020 with 2035 (Long Term Average Migration- 19 years)***

Scenario E Conclusions

7.80 The Long-Term Average Migration (19 Years) scenario identifies that the population will decline by 0.6% by 2035 as the low level of migration is insufficient to offset the population decline as a result of lower fertility and higher life expectancy. This will result in a significant decline in both the school age population and the working age population, and an increase in the older population. As was the case with other similar scenarios, this is not a sustainable population structure, as it is not desirable to plan for population decline, particularly as Caerphilly is identified as a National Growth Area in Future Wales.

7.81 The projected change in household formation and types means that this scenario would generate a small housing requirement of 94 dwellings, or 117 dwellings in the membership adjusted scenario. This is significantly lower than past housing completion rates and could primarily be accommodated by existing housing commitments without the need to allocate any significant additional land for housing.

SCENARIO F – Long Term Average Migration (10 Years)

- Population decrease of 1,137 people - averaging a loss of 76 people per year (0.6% decrease)
- Population in 2035 of 180,602 people
- Household increase of 1,199 (1.7% increase)
- Total dwelling requirement of **1,344** (**90 dwellings per annum)**
- Net in-migration of 93 per annum
- Working age population (16-66) projected to decline by 5,443
- Adjusted membership rates, total dwelling requirement of **1,696 (113 dwellings per annum)**

7.82 This scenario uses the assumptions around fertility and mortality from the Principal Projections (Scenario A) but assumes that migration will reflect the long-term trends for the last 10 years.

7.83 A constant migration figure has been applied across the projection period, equating to a net internal migration figure of 77 and a net international migration figure of 16. This equates to an overall net migration of 93 people per annum.

7.84 Overall, this results in a small decrease in population of 1,137 people by 2035, as the level of migration does not offset the loss of population from natural change (more deaths than births).

7.85 Despite a projected decrease in population, the household projection trends would mean that there would be a 1.8% increase in households, which would equate to a dwelling requirement of 90 dwellings per annum, or 113 dwellings in the membership rate adjustment scenario.

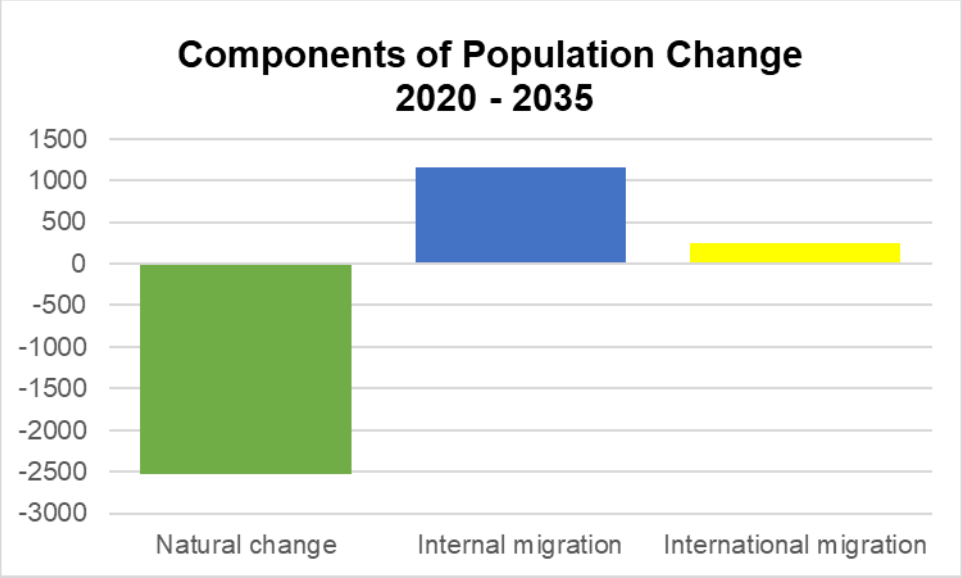

Figure 31: ***Components of change – Long Term Migration (10 Years)***

Structure of the population

7.86 The population structure pyramid provides a comparison between the 2020 and 2035 population structures. The blue areas are age cohorts that are projected to increase by 2035 compared to what they are now, and the red areas are where the number of people in this age cohort is expected to decrease by 2035.

7.87 Whilst not as extreme as in other scenarios, the long-term average migration over 19 years scenario would result in a significant decline of both the younger population (a decline of nearly 3,000) and the working age population (a decline of over 5,400), together with an increase of 7,300 in the number of older people (67+) by 2035. As with other scenarios that would result in population decline, the consequence of these projected demographic changes is that there would not be a balanced population structure.

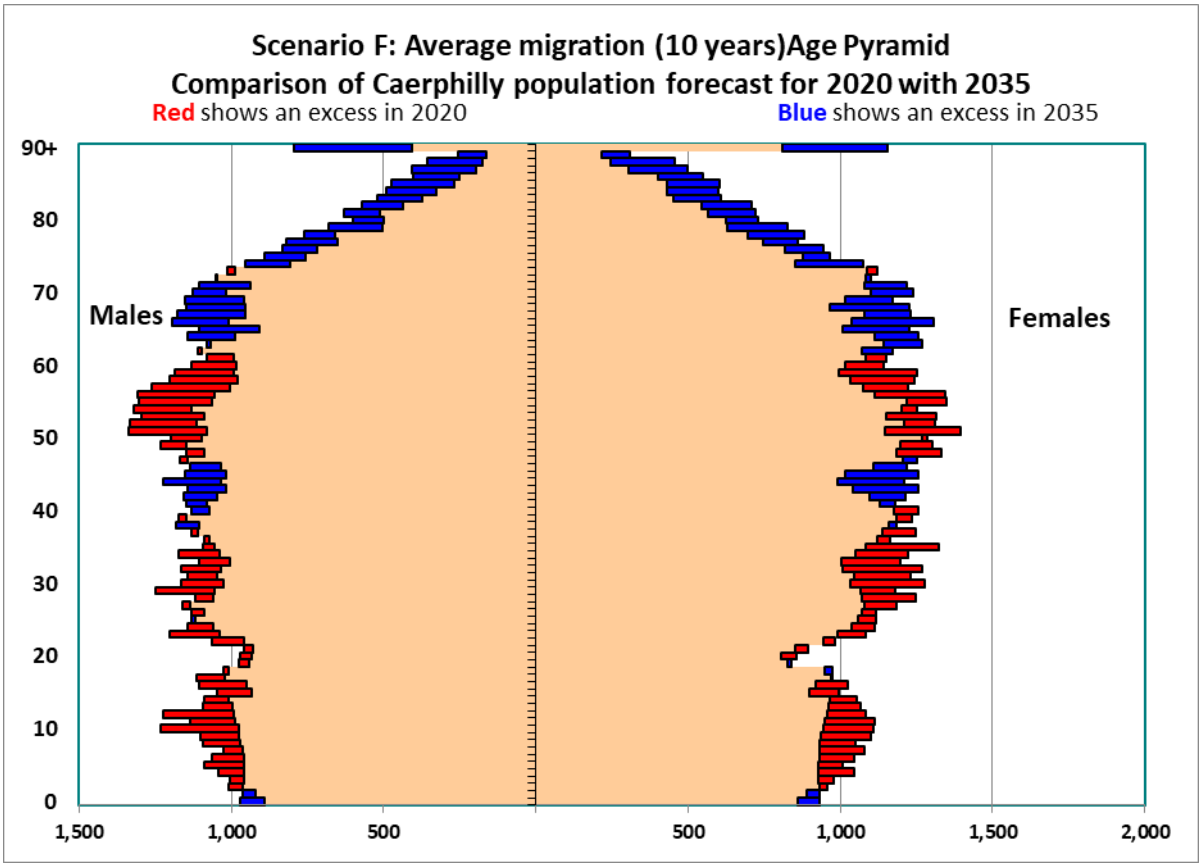

Figure 32: ***Comparison of Caerphilly population 2020 with 2035 (Long Term Average Migration (10 Years)***

Scenario F Conclusions

7.88 The Long-Term Average Migration (10 Years) scenario is very similar to the 19 Years scenario, although the types of migrants are projected to be different, with less net internal migration and more net international migration. This also identifies that the population will decline by 0.6% by 2035 as the low level of migration is insufficient to offset the population decline as a result of lower fertility and higher deaths. This will result in a significant decline in both the school age population and the working age population, and an increase in the older population. As was the case with other similar scenarios, this is not a sustainable population structure, as it is not desirable to plan for population decline, particularly as Caerphilly is identified as a National Growth Area in Future Wales.

7.89 The projected change in household formation and types means that this scenario would generate a small housing requirement of 90 dwellings, or 113 dwellings in the membership adjusted scenario. This is significantly lower than past housing completion rates and could primarily be accommodated by existing housing commitments without the need to allocate any significant additional land for housing.

SCENARIO G – South-East Wales Average Migration

- Population increase of 5,212 people - averaging 347 people per year (2.9% increase)
- Population in 2035 of 186,951 people
- Household increase of 3,844 (5.0% increase)
- Total dwelling requirement of **3,983** (**266 dwellings per annum)**
- Net in-migration of 525 per annum
- Working age population (16-66) projected to decline by 756
- Adjusted membership rates, total dwelling requirement of **4,348 (290 dwellings per annum)**

7.90 This Scenario assumes that fertility and mortality will be as per the Principal Projections but that the rate of migration will reflect the average migration for the South-East Wales region for the previous 10 years. This has been derived from the average 10 year internal and international inward and outward migration using data from the mid-year estimate for each local authority in the region. The average of the combined figures for the 10 South-East Wales authorities has then been calculated. The figures are set out in Table 17 below.

	INUK	**OUTUK**	**UK Net**	**INOV**	**OUTOV**	**Overseas Net**	**Net**
Bridgend	4,435	3,675	760	298	189	109	869
The Vale of Glamorgan	5,240	4,538	702	323	212	111	812
Rhondda Cynon Taff	6,869	6,754	115	814	337	477	593
Merthyr Tydfil	1,532	1,534	-2	164	85	78	76
Caerphilly	4,723	4,646	77	155	139	16	93
Blaenau Gwent	1,826	1,796	31	98	62	36	67
Torfaen	2,717	2,394	323	94	74	21	344
Monmouthshire	4,541	4,005	536	210	165	45	581
Newport	5,849	5,530	318	972	631	341	660
Cardiff	20,764	21,486	-722	5,450	3,573	1,877	1,156
Total SE Wales	**58,495**	**56,357**	**2,138**	**8,578**	**5,466**	**3,112**	**5,250**
Average SE Wales	**5,850**	**5,636**	**214**	**858**	**547**	**311**	**525**

Table 17: ***South-East Wales Average Migration (10 years)***
Source: Mid-Year Estimates

7.91 The South-East Wales average migration was a scenario tested as part of the adopted LDP evidence base and formed a 'high growth' option.

7.92 If the average migration for Caerphilly is compared to the South-East Wales average, it will be noted that the average UK net migration for the region is higher than it is for Caerphilly (214 compared to 77). However, it is not a level that is considered unrealistic, as net internal migration has exceed 214 in several instances over the past 20 years, as shown in Section 6. The average net international migration is, however, significantly higher than has been experienced in Caerphilly in the last 10 years, driven by high migration into Cardiff from international migrants.

7.93 Under this scenario, there would be population growth of 5,212 by 2035, which equates to a 2.9% increase. Overall, net migration would be 525 per annum, which overall would represent an increase over recent past trends but is not a level that is considered unrealistic. The key difference in this scenario is that the change would be driven by international migration as well as internal migration. Due to the demographic assumptions on fertility and mortality, there will continue to be negative natural change of nearly 2,700 more deaths than births over the projection period.

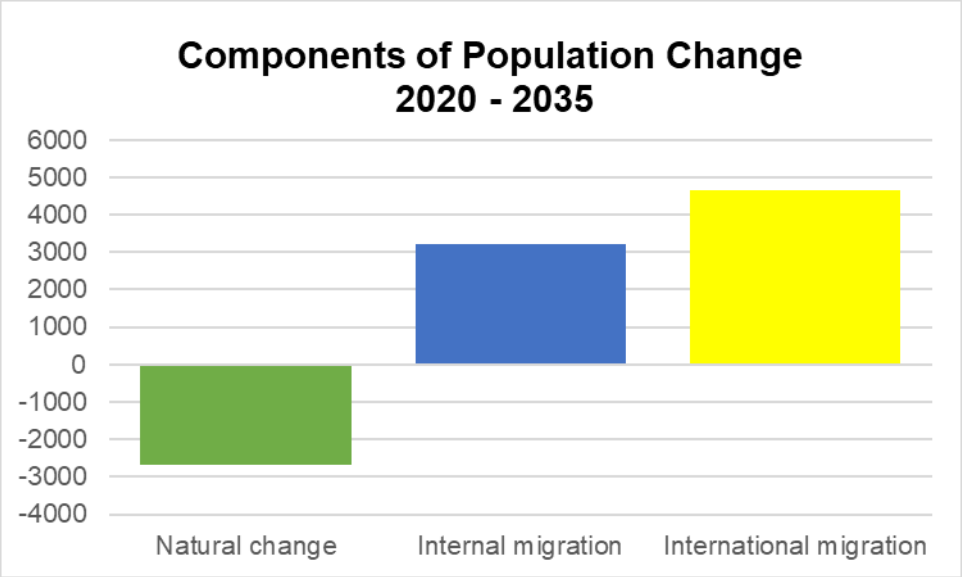

Figure 33: ***Components of change – SE Wales Average Migration***

7.94 When the household projections are applied to this population, this would result in a 5% increase in the number of households and generate a requirement for nearly 4,000 new dwellings, or 266 dwellings per annum. When the adjustments to the membership rates are applied, this would increase the dwelling requirement to 290 units per annum.

Structure of the population

7.95 The population structure pyramid below provides a comparison between the 2020 and 2035 population structures. The blue areas are age cohorts that are projected to increase by 2035 compared to what they are now, and the red areas are where the number of people in this age cohort is expected to decrease by 2035.

7.96 Under this scenario, there will be a decline of 1,800 children by 2035. However, the working age population would remain broadly balanced, with a decline of just over 750 people by 2035.

7.97 As in all scenarios, there will be an increase in the older population – in this case an increase of 7,800 additional people aged 67+ by 2035.

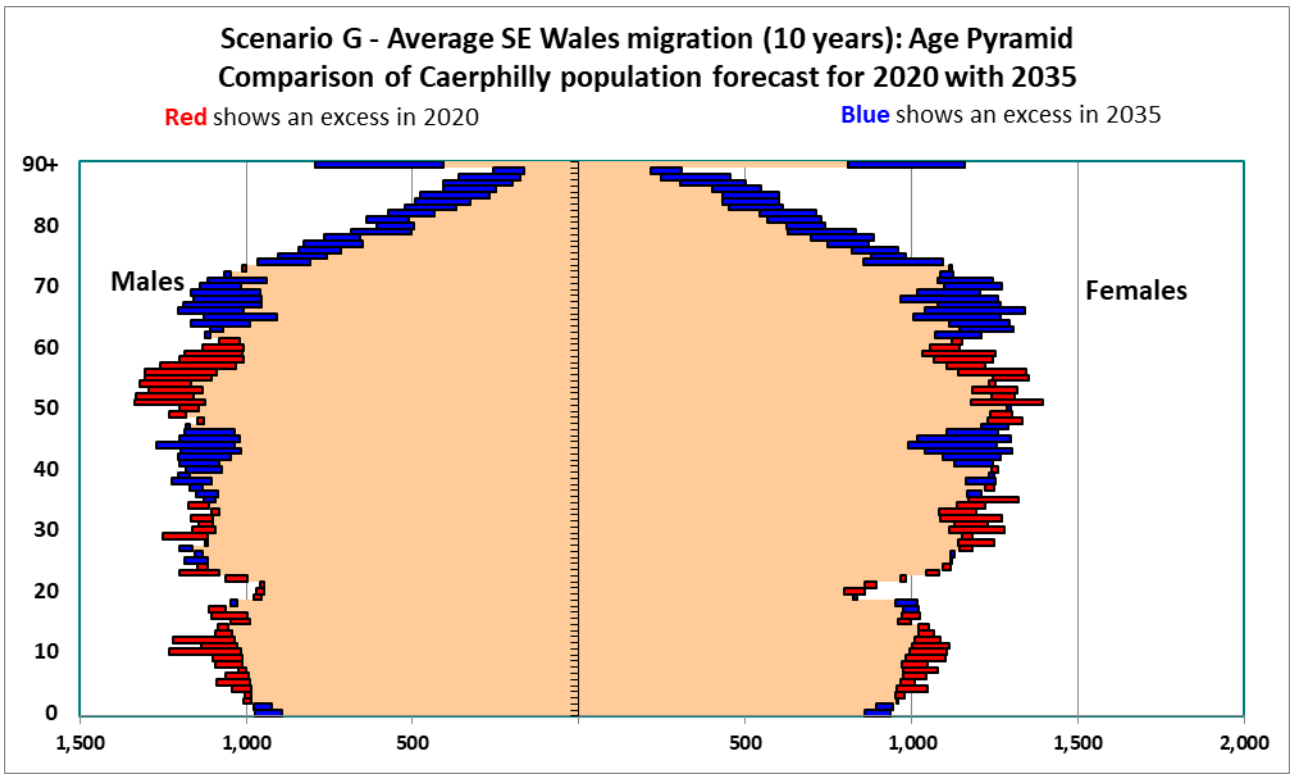

Figure 34: ***Comparison of Caerphilly population 2020 with 2035 Average SE Wales Migration***

Scenario G Conclusions

7.98 The Average SE Wales migration scenario projects positive population growth (2.9%) over the next 15 years. The growth in population is entirely due to migration. This scenario would result in a decline in the 0-15 age group and a significant increase in the older population (67+). However, the working age population would experience a small decline of 750 people. The resultant households based on this population projection represent a 5% level of growth. This equates to a housing requirement of 266 dwellings a year, or 290 in the membership rates adjustment scenario, which is below long-term housebuilding rates, but comparable with build rates over the last 5 years. This level of growth would be deliverable but not ambitious.

SCENARIO H – Continuation of adopted LDP

- Population increase of 16,004 people - averaging 1,067 people per year (8.8% increase)
- Population in 2035 of 197,735 people
- Household increase of 8,323 (10.8% increase)
- Total dwelling requirement of **8,625** (**575 dwellings per annum)**
- Net in-migration of 1,317 per annum (1,209 with adjusted membership rates)
- Working age population (16-66) projected to increase by 8,434 or a 7,668 with adjusted membership rates
- Adjusted membership rates, total dwelling requirement remains at 8,625 but the population increase will reduce to 15,058 (8.3%) or 1,004 per year

7.99 Scenario H is a dwelling based projection, which assumes that the number of dwellings will be fixed at the average dwelling requirement figure included within the adopted LDP- a figure of 8,625 dwellings over the 15-year plan period, or 575 per annum. It is important to note that this scenario only uses the dwelling figure from the adopted LDP. It does not utilise any previous assumptions for fertility, mortality or migration as the assumptions in the adopted LDP were originally prepared at the start of the plan period (2006/7) and since then there has been significant demographic change as falling birth rates and higher death rates now means that natural change is projected to result in population decline, rather than be the main driver for population growth.

7.100 The scenario assumes that fertility and mortality will reflect past trends, as per the 2018-based projections, as these figures are considered reasonable. The additional population required to meet the 575-dwelling figure per annum will be achieved through migration, rather than natural change, with an assumption that less people will move out of the County Borough and more people will move in. It is assumed that net migration will primarily be internal (UK residents) and that the international migration rates will remain constant at the 2018-based projections level of +43 net international migrants per annum.

7.101 Under this scenario, the population would increase by 16,000, which equates to 1,067 additional people per annum – an 8.8% population increase. As in all the scenarios tested, there will be negative natural change (more deaths than births), so the population growth would be entirely due to migration – a net increase in 1,317 people per annum. This would represent an increase in migration that is over 12 times the level experienced in long term past trends.

7.102 The number of households under this scenario would increase by 10.8% to 88,657 by 2035.

7.103 In the scenario adjustment for 19-29 membership rates, the household and dwelling rates remain fixed. However, as the membership rates for 19-29s are held at 2020 levels, it will mean that by 2035 there will be no increase in this age group living in larger households no decrease in the numbers living in smaller households. When compared to the 2018-based principal projections, this will mean a greater proportion of people in smaller households. The population required to fill these smaller households would be lower, as there will be less people per household. As a result, the total population increase is lower under this adjustment (8.3% rather than 8.8%) and the net migration required to meet this figure is also lower (1,209 per annum compared to 1,317).

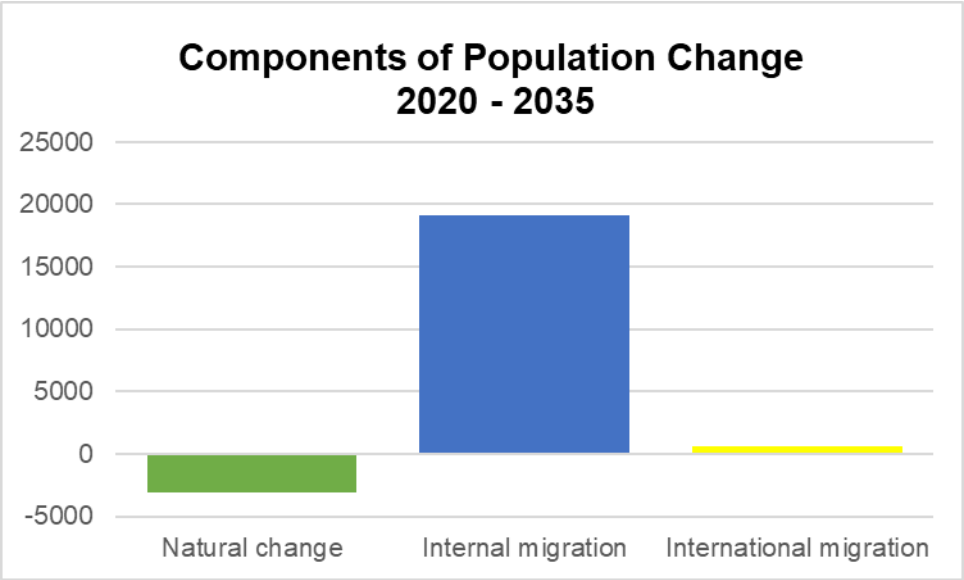

Figure 35: ***Components of change – Continuation of adopted LDP***

Structure of the population

7.104 The population structure pyramid below provides a comparison between the 2020 and 2035 population structures. The blue areas are age cohorts that are projected to increase by 2035 compared to what they are now, and the red areas are where the number of people in this age cohort is expected to decrease by 2035.

7.105 As a result of the significant in-migration under this scenario, there will be an increase in the males and female population in almost all age groups between 18 to 50, which will help to support economic activity in the County Borough. Overall, there is projected to be an increase of nearly 9,000 more people of working age by 2035, or 8,200 in the membership rate adjusted scenario.

7.106 The 0-15 population is projected to decline by 1,200, which is the lowest of any of the scenarios. Whilst the fertility rate is projected to continue at past low trends, the in-migration into Caerphilly of families and of women of childbearing age will help to offset this decline so, whilst there will be fewer children across all age groups apart from under 2s, this won't be as significant as in other scenarios.

7.107 In addition to an increase in the working age population, there will also be a significant increase in the older population (67+), which is projected to increase by 8,800 in 2035, or 8,700 in the membership rate adjusted scenario. As shown in Section 6 (Figure 14), the migration flows for the older age group are lower than for other age groups so an increase in migration will impact more significantly on younger age groups. As a result, the projected number of older people is expected to increase, but there are only 1,300 more older people than projected in Scenario A, the principal projection.

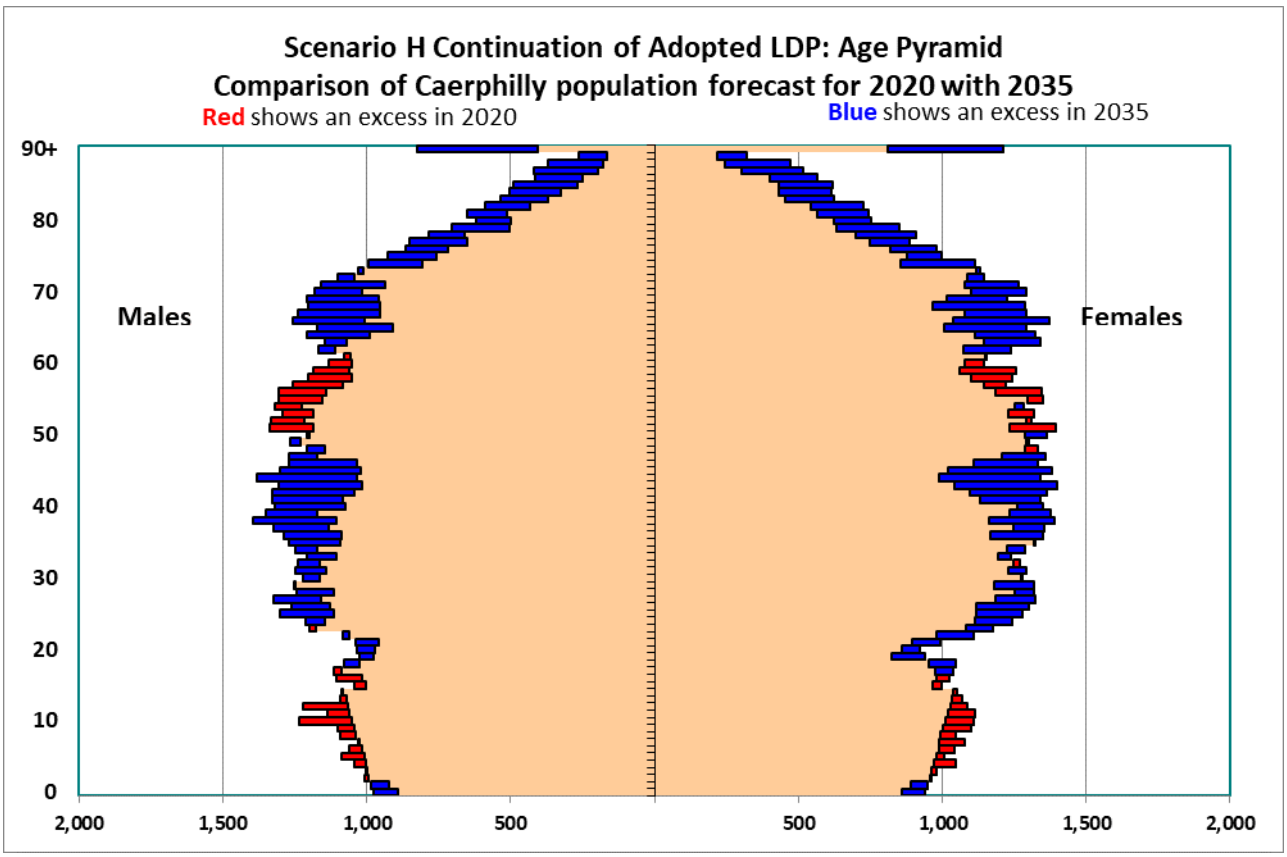

Figure 36: ***Comparison of Caerphilly population 2020 with 2035 (Continuation of Adopted LDP)***

Scenario H Conclusions

7.108 Scenario H projects an increase in population of 8.8%, or 8.3% in the membership adjusted scenario. This is higher than the population growth that has been experienced in recent years and would require a level of migration that is significantly higher than has been experienced when compared with long term trends. However, this option would reverse the projected decline in the working age population by providing a stronger economically active population to support jobs growth in the County Borough. There will be an increase in the older population above what the principal projections indicate, but due to the profile of migrants, proportionately the growth of this group when compared to the principal projections would not be as significant as for the working age population, helping to support a more balanced population. It would also reduce the extent to which the school age population is projected to decline.

7.109 In housebuilding terms, whilst 575 dwellings is the annual housing requirement in the adopted LDP, this level of housebuilding has not been met since 2008 and one of the consistent conclusions of successive Annual Monitoring Reports is that the housing requirements in the LDP have not been met. As the past delivery of housing has been lower than 575 per annum, it would need to be demonstrated that the figure of 575 would be deliverable within the 2RLDP.

SCENARIO I – Long Term Housebuilding Rates

- Population increase of 8,884 people - averaging 592 people per year (4.9% increase)
- Population in 2035 of 190,615 people
- Household increase of 5,399 (7.0% increase)
- Total dwelling requirement of **5,595** (**373 dwellings per annum)**
- Net in-migration of 781 per annum (719 with adjusted membership rates)
- Working age population (16-66) projected to increase by 2,668, or 1,944 with adjusted membership rates
- Adjusted membership rates, total dwelling requirement remains at 5,595 but the population increase will reduce to 7,990 (4.4%) or 533 per year

7.110 As explained in Section 6, housing completions in the County Borough have been variable, as they are intrinsically linked to economic conditions. The average number of completions varies considerably depending on the timescales used. It is important to consider a longer time period, as this will include a full economic cycle with both times of strong economic performance (housing booms) and also weaker performance (recessions). The number of completions experienced in previous timescales is as follows:

- 5-year average - 270 dwellings
- 10-year average – 304 dwellings
- 15-year average – 373 dwellings
- 20-year average – 389 dwellings

7.111 Scenario I is a dwelling led scenario, which assumes that the number of dwellings will be fixed at the 15-year average of 373 per annum, as 15 years reflects a plan period. The 15-year average is very similar to the 20-year average of 389 dwellings.

7.112 The scenario assumes that fertility and mortality will reflect past trends, as per the 2018-based projections, as these figures are considered reasonable. The additional population required to meet the 373 dwelling figure will be achieved through net migration, rather than natural change, retaining the existing population that might otherwise have moved out and encouraging new people to move in . It is assumed that net migration will primarily be internal (UK residents) and that the international migration rates will remain constant at the 2018-based projections level of +43 net international migrants per annum.

7.113 The population would increase under this scenario by an average of 592 persons per annum, or 8,884, which would equate to a change of just under 5% over the projection period. Households would also increase by 7% over the plan period.

7.114 In the scenario adjustment for 19-29 membership rates, the household and dwelling rates remain fixed. However, as the membership rates for 19-29s are held at 2020 levels, it will mean that by 2035 there will be no increase in this age group living in larger households no decrease in the numbers living in smaller households. When compared to the 2018-based principal projections, this will mean a greater proportion of people in smaller households. The population required to fill these smaller households would be lower, as there will be less people per household. As a result, the total population increase is lower under this adjustment (4.4% rather than 4.9%) and the net migration required to meet this figure is also lower (719 per annum compared to 781).

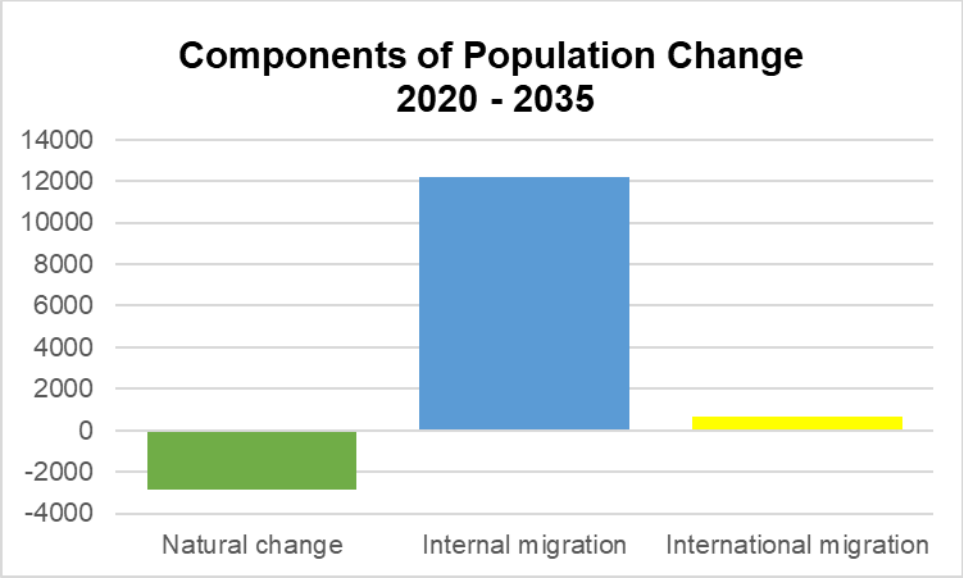

Figure 37: ***Components of change – Long Term Housebuilding Rates***

Structure of the population

7.115 The population structure pyramid below provides a comparison between the 2020 and 2035 population structures. The blue areas are age cohorts that are projected to increase by 2035 compared to what they are now, and the red areas are where the number of people in this age cohort is expected to decrease by 2035.

7.116 The 0-15 population is projected to decline by 1,900, although there are more babies projected in 2035 compared to 2020. This may be due to the low birth numbers in 2019 and 2020 compared to longer term trends.

7.117 The working age population (16-66) is expected to increase by 2,700, which will help to support economic growth in the County Borough and offset the significant growth in the older population (67+), which is projected to grow by 8,100.

7.118 When the membership rate adjustment is applied, the increase in the working age population will be less, but there will still be an increase of 1,950 additional economically active people, which will help economic growth.

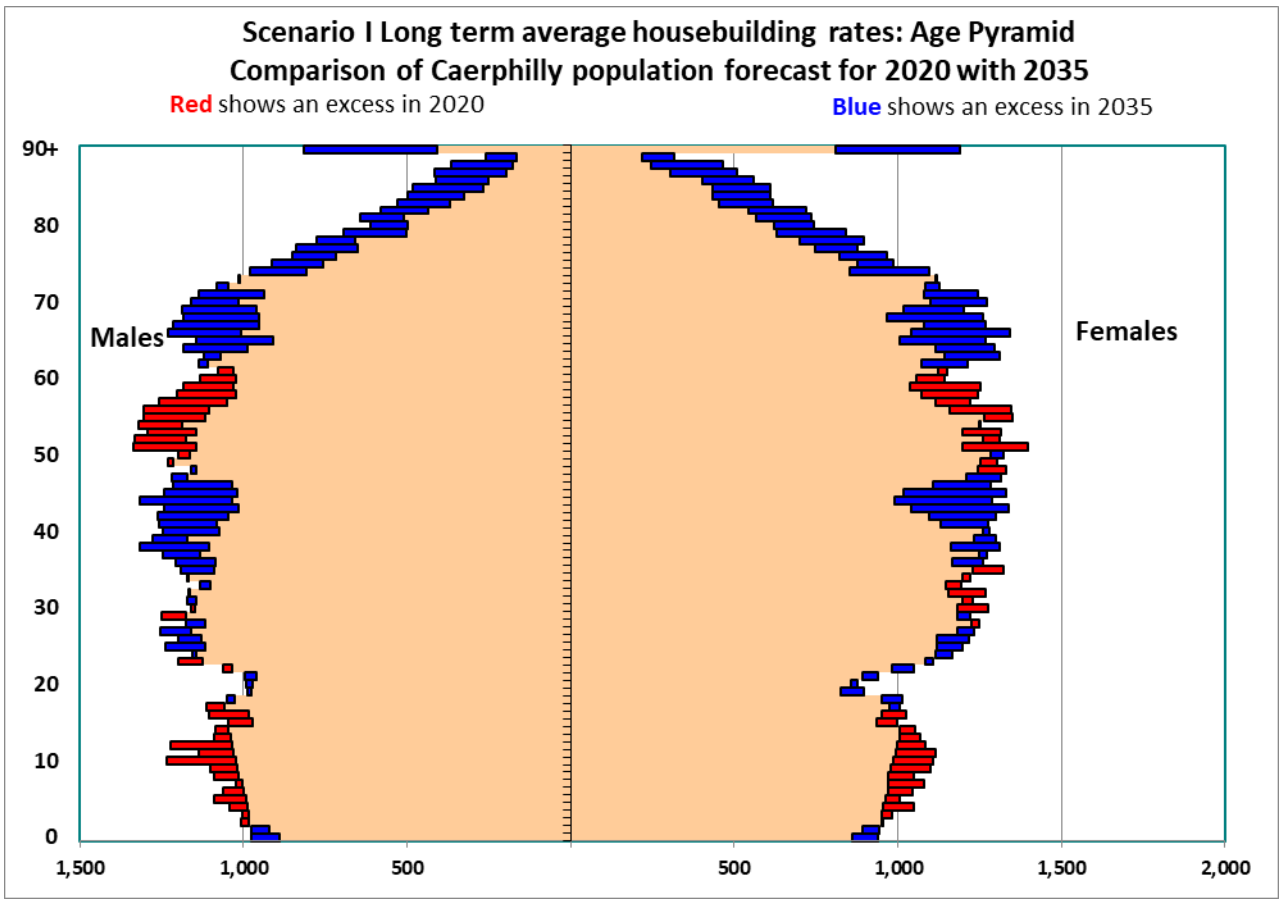

Figure 38: ***Comparison of Caerphilly population 2020 with 2035 (Long term average housebuilding rates***

Scenario I Conclusions

7.119 The long-term housebuilding scenario clearly reflects a realistic level of housebuilding, given that it is what has been achieved over a long time period, although it is ambitious when compared to shorter term trends. Overall, this dwelling led scenario would result in a positive increase in population (4.9% or 4.4% in the MR adjusted scenario) which is considered ambitious but deliverable. It will help to achieve a population structure where the economically active population can grow and help to support the provision of new jobs. However, it is questioned whether this level of growth is sufficiently ambitious to reflect Caerphilly's position within a National Growth Area, and the economic aspirations of CCR.

SCENARIO J – CCR Growth in Working Age Population

- Population increase of 11,598 people - averaging 773 people per year (6.4% increase)
- Population in 2035 of 193,329 people
- Household increase of 6,513 (8.4% increase)
- Total dwelling requirement of **6,750** (**450 dwellings per annum)**
- Net in-migration of 969 per annum (906 with adjusted membership rates)
- Working age population (16-66) projected to increase by 4,866 or 4,126 with adjusted membership rates
- Adjusted membership rates, total dwelling requirement remains at 5,595 but the population increase will reduce to 10,685 (5.9%) or 712 per year

7.120 The CCR City Deal sets out the ambitious target of creating 25,000 jobs. This dwelling led scenario seeks to support the regional growth aims of CCR by setting the dwelling requirement at a level that would result in a growth in the working age population at a level that would support the job creation aims of CCR.

7.121 A housing requirement of 450 dwellings per annum would require an increase in the population of the County Borough of 6.4%, or 773 people per annum. In terms of the working population, this would mean a growth in the working age population of 4.2%, which is at a level that would support the City Deal growth ambitions to ensure that Caerphilly has a working age population available to fill these jobs.

7.122 The figure of 450 dwellings is close to representing a mid-point between the past build rates figure of 373 dwellings per annum and the adopted LDP figure of 575 – a level that is considered ambitious when considered against past delivery rates but still realistically acheivable.

7.123 In the scenario adjustment for 19-29 membership rates, the household and dwelling rates remain fixed. However, as the membership rates for 19-29s are held at 2020 levels, it will mean that by 2035 there will be no increase in this age group living in larger households no decrease in the numbers living in smaller households. When compared to the 2018-based principal projections, this will mean a greater proportion of people in smaller households. The population required to fill these smaller households would be lower, as there will be less people per household. As a result, the total population increase is lower under this adjustment (5.9% rather than 6.4%) and the net migration required to meet this figure is also lower (906 per annum compared to 969). In this scenario, the working age population would increase by 3.5%, which is still at a level that would support regional ambitions.

7.124 The scenario assumes that fertility and mortality will reflect past trends, as per the 2018-based projections, as these figures are considered reasonable. The additional population required to meet the 450 dwelling figure will be achieved through migration, rather than natural change, with an assumption that less people will move out of the County Borough and more people will move in. It is assumed that net migration will primarily be internal (from UK residents) and that the international migration rates will remain constant at the 2018-based projections level of +43 net international migrants per annum.

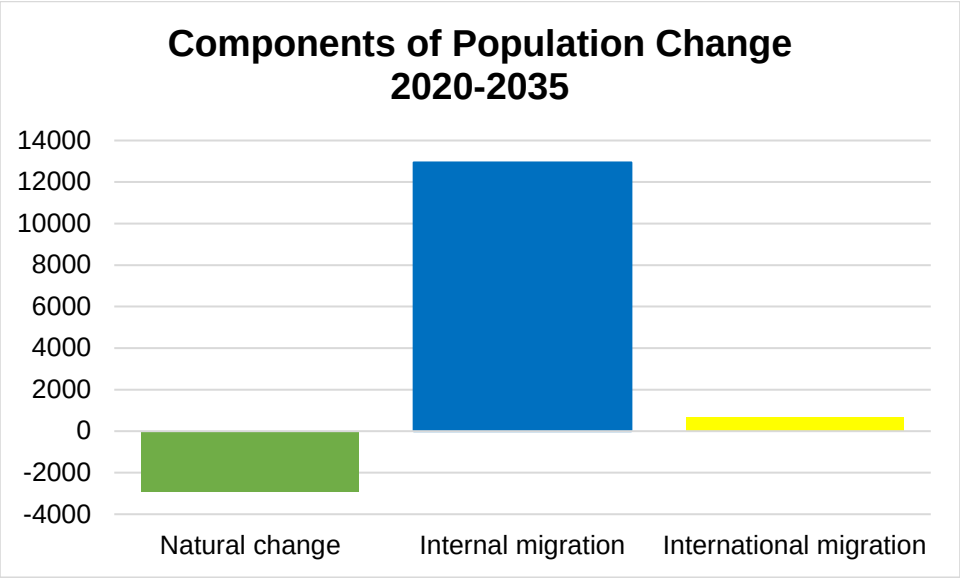

Figure 39: ***Components of change – CCR Growth in Working Age Population***

Structure of the population

7.125 The population structure pyramid below provides a comparison between the 2020 and 2035 population structures. The blue areas are age cohorts that are projected to increase by 2035 compared to what they are now, and the red areas are where the number of people in this age cohort is expected to decrease by 2035.

7.126 The 0-15 population is projected to decline by 1,660, although there are more babies projected in 2035 compared to 2020. This may be due to the low birth numbers in 2019 and 2020 compared to longer term trends.

7.127 The working age population (16-66) is expected to increase by 4,900, which will help to support economic growth in the County Borough and offset the significant growth in the older population (67+), which is projected to grow by 8,400.

7.128 When the membership rate adjustment is applied, the increase in the working age population will be less, but there will still be an increase of 4,100 people that could potentially be economically active, which will help economic growth.

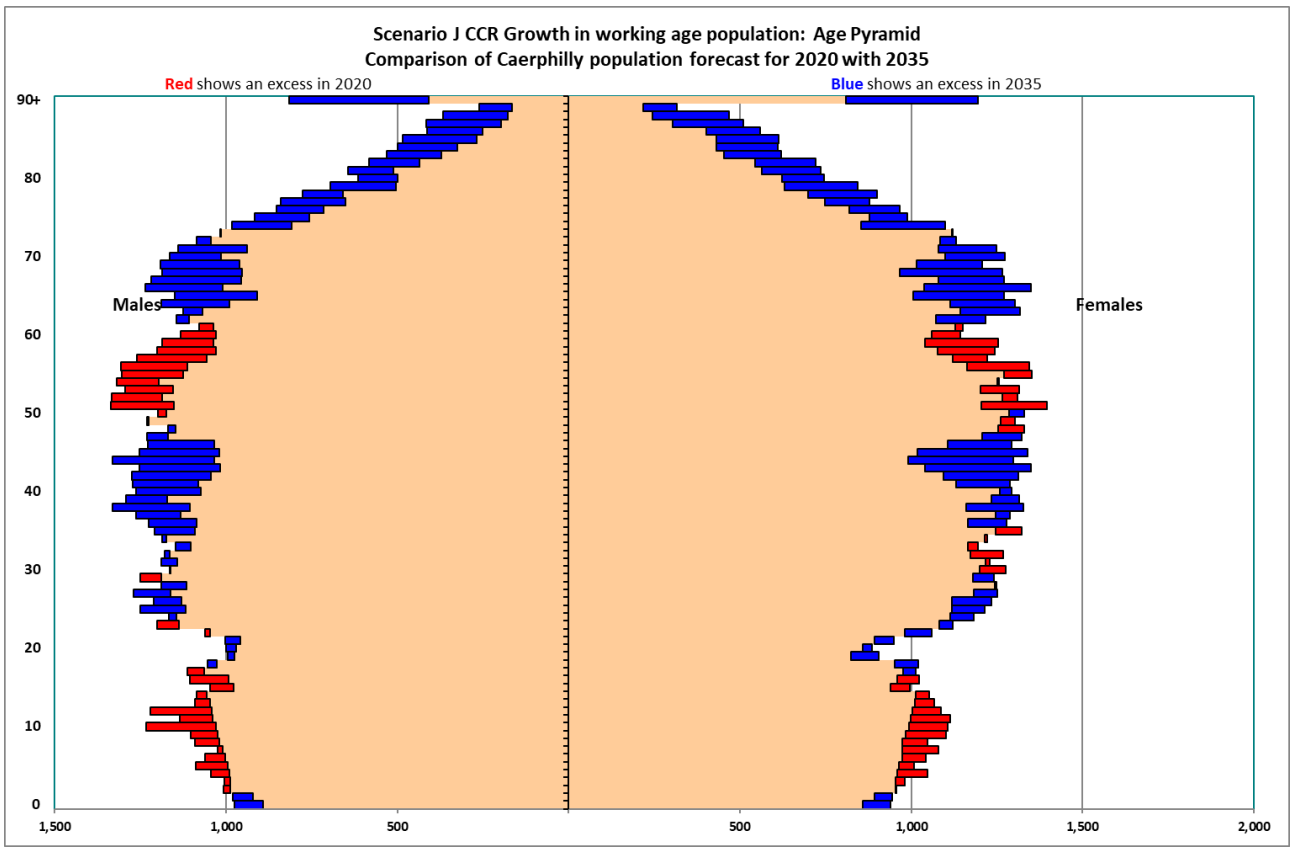

Figure 40: ***Comparison of Caerphilly population 2020 with 2035 (CCR Growth in working age population)***

Scenario J Conclusions

7.129 The level of growth proposed in CCR Growth in Working Age Population scenario would support regional growth aspirations in that there will be an appropriate labour force available to support future job creation in the region. The scenario would require an increase in migration to a level that is higher than long term trends but is considered achievable. The dwelling requirement of 450 dwellings per annum is higher than long-term past trends but is at a level that is ambitious but deliverable.

SCENARIO K – Oxford Economics Employment Forecast scenario

- Population decrease of 8,805 people – an average decline of 587 people per year (4.8% decrease)
- Population in 2035 of 172,926 people
- Household decrease of 2,031 (2.6% decrease)
- Total dwelling requirement of **0 dwellings**
- Net in-migration of -349 per annum
- Working age population (16-64) projected to decrease by 11,231
- Loss of 1,355 jobs (2% decline)

7.130 As part of the Employment Land Review (ELR) prepared to support the 2RLDP, Oxford Economics were commissioned to prepare economic forecasts for the plan period. The forecasting model takes account of:

- National/regional outlooks – all the forecasting models we operate are fully consistent with the broader global and national forecasts which are updated on a monthly basis.
- Historical trends in an area (which implicitly factor in supply side factors impinging on demand), augmented where appropriate by local knowledge and understanding of patterns of economic development built up over decades of expertise, and
- Fundamental economic relationships which interlink the various elements of the outlook.

7.131 Scenario K reflects the labour demand forecast included in the ELR. This is one of three methods that the ELR forecast land requirement has taken into account, in accordance with the Welsh Planning Practice Guidance Note 'Building an Economic Development Evidence Base to Support a Local Development Plan.'

7.132 The ELR details that, under this forecast, over the 2020-2035 period, Caerphilly is projected to lose 1,355 jobs, a 2.0 percent decline, from 66,579 in 2020 to 65,224 in 2035. The projected decline in employment in the Oxford Economics forecast is strongly driven by the loss of jobs in the manufacturing sector, forecast at 3,452 jobs less by 2035. This is offset to some extent by net employment growth in sectors including business administration and support, construction and professional, scientific, and technical, but there is still a decline in jobs, population, the working age population, and households under this scenario, with net out-migration of 349 persons per annum. As a result, there would be no requirement for new housing under this scenario if the Oxford Economics are looked at in isolation.

7.133 As explained in detail in the ELR and the Employment Background Paper, in land use terms, the Oxford Economics forecasts have been used to forecast floorspace and employment land requirements, factoring in which industry sectors are likely to take up employment land and applying appropriate employment densities to convert employment numbers to floorspace and then floorspace to employment land demand. Using this model, there would be no requirement for employment land in the plan period and potentially opportunities to convert some industrial land for other uses.

7.134 As the forecast has been prepared by Oxford Economics rather than Popgroup, it is not possible to replicate the components of population change, or the age structure pyramids as part of this scenario.

Scenario K Conclusions

7.135 A consideration of the Oxford Economics Employment Forecast as the basis of a scenario is neither realistic nor desirable as it would result in a significant decline in overall population of the County Borough, and the working age population. These forecasts represent a 'policy off' scenario based on what may happen based on outlooks and historic trends, whereas in reality the 2RLDP represents a 'policy on' approach which will seek to address the fundamental demographic and structural changes identified in these forecasts through the allocation of appropriate employment and housing sites to encourage in-migration and job opportunities.

7.136 These forecasts form part of the wider evidence base for employment, but the ELR considers a range of methods of forecasting as advocated in the Welsh Practice Guidance when determining the level of employment growth.

8. Stakeholder Engagement

8.1 A series of seminars were held with internal CCBC officers, key stakeholders, elected members and community councils and the Council's Youth Forum in September 2021 to discuss the level of growth that the 2RLDP should accommodate.

8.2 A presentation was given to participants with the opportunity to engage in discussions around the following matters linked to the level of growth:

- Policy context – Future Wales and CCR and Caerphilly's position within a National Growth Area.
- Considerations for determining housing requirements – including the projections, the LHMA, the Well-being Plan, alignment of jobs and homes, Welsh language considerations and wider social, economic, environmental, and cultural factors.
- Positives and negatives of growth.
- Demographic trends.
- Past housebuilding rates and existing supply.
- Population and housing scenarios.

8.3 As part of the seminar, the population and housing scenarios that had been tested were presented to participants. The implications of each population scenario in terms of the working age, school age and older person population together with a consideration of the contribution the option could make to the delivery of affordable housing and how each fitted within the context of long-term house building trends and land supply were presented.

8.4 To aid discissions, the long list of scenarios was narrowed down to a short-list of 4 scenarios. The short-listed options included the WG Principal Projection, as this should form a fundamental part of the evidence base, together with the three options that promoted a level of housebuilding that would accord with Caerphilly County Borough's designation within the national growth area.

- A – WG 2018-based Principal Projection (198 units per annum)
- I – Long term housebuilding rates (373 units per annum)
- J – CCR working age population growth (450 units per annum)
- H – Continuation of the adopted LDP (575 units per annum)

8.5 At the end of the seminar, stakeholders were asked to complete a survey identifying which of the options they considered to be most appropriate for the 2RLDP. If respondents did not support any of the four shortlisted scenarios, the opportunity was available for them to indicate which other scenarios they considered to be appropriate. Figure 41, below, identifies the output on the poll. Over half of respondents (51%) expressed support for Scenario J CCR Growth in Working Age Population as the preferred scenario, with 29% supporting Scenario I Long-Term Housebuilding Rates, 16% supporting the WG Projection and 4% supporting the continuation of the adopted LDP.

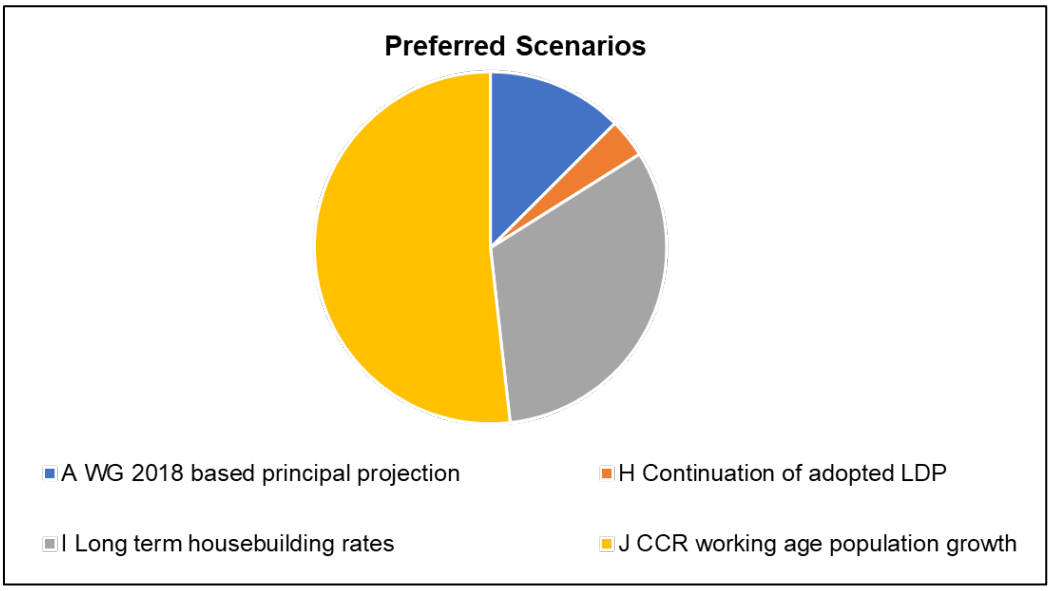

Figure 41: ***Stakeholder Preferences for Growth Scenarios***

8.6 Based on discussions at the seminars and the demographic analysis contained within the Evidence Base Paper, a number of advantages and disadvantages can be identified for each of the projections, which are set out below. A full copy of the notes from the Levels of Growth Seminars can be found in the Background Paper on Pre-Deposit Participation.

A WG 2018-based Principal Projection

Population Change (MR Adjustment) 2020-2035	1,881
Change in working age population	-2,868
Total dwelling requirement	2,996
Annual dwelling requirement	198

Advantages

- The projection assumes a lower level of in-migration than other options, which will be more in line with past trends.
- As this option would result in the lowest level of housebuilding, it is considered to have the lowest overall impact in terms of climate change.
- The level of housebuilding is considered deliverable as annual housebuilding rates have in most years exceeded this figure, even in times of recession.

Disadvantages

- The decline in the working age population, together with an increase in the older population, would have an impact on the economic prosperity of the County Borough. A decline in the local workforce may result in an increase in in-commuting to the County Borough, or businesses relocating to other areas.
- The projection would result in a significant decline in the school age population. This may have implications for the sustainability of local schools.

- The existing land supply, including sites with planning permission and assumptions for small and windfall sites, would exceed the total dwelling requirement. There would therefore be no need to allocate any additional housing sites over the plan period.
- The annual dwelling requirement under this scenario is lower than the level of housebuilding identified by past trends. A projection which promotes a decline in housebuilding compared to what has been achieved in the past would not accord with Future Wales, which identifies Caerphilly as part of a national growth area and would not support the growth aspirations of the Cardiff Capital Region.
- The low dwelling requirement would limit the opportunities to deliver affordable housing to address the need identified in the LHMA.
- As there would be no need to allocate housing sites, this will limit opportunities to promote regeneration schemes or diversify the housing stock in areas where new housing is needed.

I Long term housebuilding rates

Population Change (MR Adjustment) 2020-2035	7,990
Change in working age population	1,944
Total dwelling requirement	5,595
Annual dwelling requirement	373

Advantages

- As the assumptions reflect past build rates over the last 15 years, which includes periods of economic boom and recession, the annual dwelling requirement is considered realistic and deliverable.
- This scenario would result in an increase in the working age population, which will support the economic prosperity of the County Borough.
- New housing allocations would be required to deliver around 1,700 new dwellings, once the existing supply is discounted from the figures; this will contribute towards the delivery of affordable housing to address the need identified in the LHMA.

Disadvantages

- As Caerphilly is within the Future Wales national growth area, the assumption that housebuilding will continue at past rates may not be ambitious enough.
- There will continue to be a decline in the school aged population over the plan period due to a projected fall in birth rates, albeit not at the levels identified in Scenario A.
- As growth is driven by migration, this option would rely on an increase in internal migration above levels experienced in recent years.

J CCR Growth in Working Age Population

Population Change (MR Adjustment) 2020-2035	10,685
Change in working age population	4,126
Total dwelling requirement	6,750
Annual dwelling requirement	450

Advantages

- The level of growth is higher than past build rates but is still at a level that is achievable based on past completions the plan period. The annual dwelling requirement figure is therefore considered deliverable.
- The level of growth is considered consistent with Caerphilly's position as a national growth area in Future Wales; it is more ambitious that basing growth on past building rates.
- This scenario would result in an increase in the working age population of around 3.5%, which will support the economic prosperity of the County Borough. The increase in the working population is at a level that would support the jobs growth aspirations of CCR.
- New housing allocations would be required to deliver around 3,000 new dwellings, once the existing supply is discounted from the figures; this will contribute towards the delivery of affordable housing to address the need identified in the LHMA.

Disadvantages

- There will continue to be a decline in the school aged population over the plan period, but the decline is not as significant as in Scenarios A and I.
- As growth is driven by migration, this option would rely on an increase in internal migration above levels experienced in recent years.

H Continuation of the adopted LDP

Population Change (MR Adjustment) 2020-2035	15,058
Change in working age population	7,668
Total dwelling requirement	7,095
Annual dwelling requirement	575

Advantages

- The level of growth is considered consistent with Caerphilly's position as a national growth area in Future Wales.
- New housing allocations would be required to deliver around 5,000 new dwellings, once the existing supply is discounted from the figures; this will make the most

significant contribution towards the delivery of affordable housing to address the need identified in the LHMA.

- This scenario would result in an increase in the working age population, which will support the economic prosperity of the County Borough.

Disadvantages

- The LDP requirement of 575 dwellings per annum has consistently not been achieved during the previous plan period, and there are concerns about the deliverability of this figure.
- There will continue to be a decline in the school aged population over the plan period, but the impact is lower than in the other scenarios.
- As growth is driven by migration, this option would rely on a significant increase in internal migration above levels experienced in recent years.

LDP Focus Group

8.7 The LDP Focus Group considered the outputs of the seminars, including the advantages and disadvantages of each of the shortlisted growth options and agreed the following recommendation:

That Projection J, the CCR Working Age Population Growth Projection, be used as the base projection for the LDP

9. Aligning Population Growth to Employment

9.1 The alignment of housing and jobs is important when determining the level of growth. The Development Plans Manual is clear that "*LPAs should not consider employment forecasts in isolation, but the relationship between economic and demographic/population projections*." It is recognised that there is no direct mathematical relationship to determine this, but there needs to be sufficient homes to support a growth in jobs, without increasing in-commuting, and sufficient jobs available to support the projected increase in population.

9.2 Scenarios A to K, presented in the previous section, consider what the level of growth identified under each of the scenarios would mean for the working age population of the County Borough. However, when seeking to align the population with the number of jobs required, consideration must also be given to three other factors: economic activity rates; commuting; and unemployment, as these all have an impact on how many jobs are required.

Economic Activity Rates

9.3 As not all people of working age will be economically active, it is necessary to take into account the economic activity rates for different population groups over the plan period. The ratios on economic activity by age group are taken from the 2011 Census and adjusted from forecasts from the Office of Budget Responsibility (OBR) Fiscal Sustainability Report for each year of the plan period, utilising the PopGroup Labour Force data module. It will be noted that for both males and females there is a forecast increase in the economic activity ratio for older age groups by 2035.

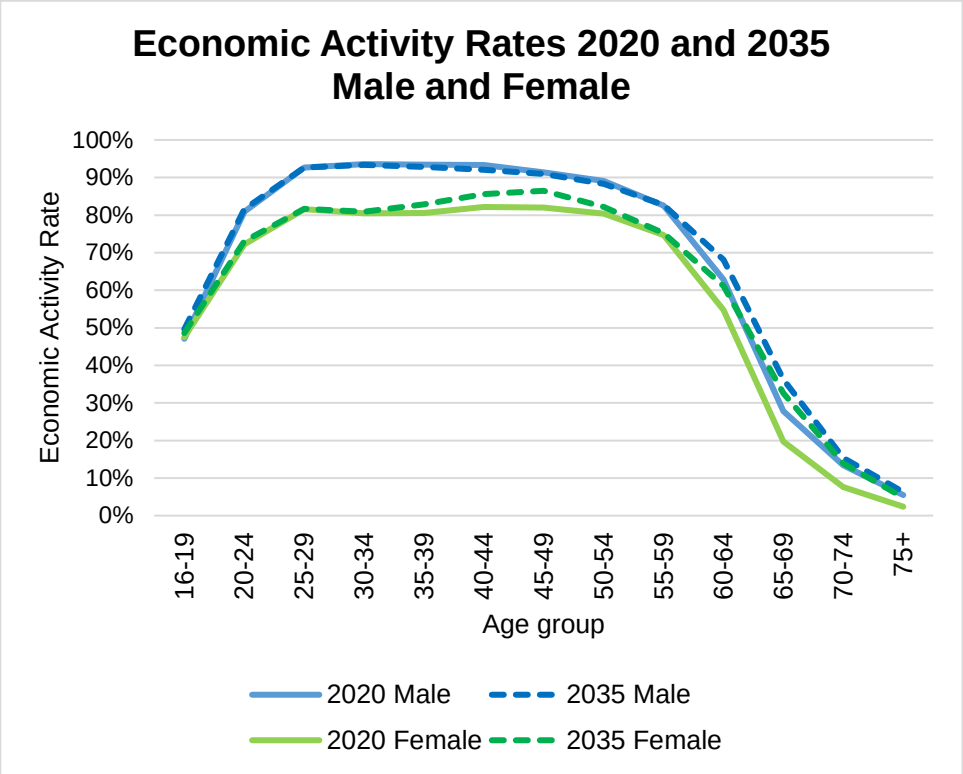

Figure 42: ***Economic Activity Rates 2020 compared to 2035***
Source: 2011 Census and OBR Fiscal Sustainability – Popgroup Labour Force data module

Commuting Ratio

9.4 When determining the number of jobs required, it must be acknowledged that there are people in employment who are resident within the County Borough, but do not work in the County Borough. The commuting ratio is the number of employed residents in the area divided by the number of people with jobs in the area. If the commuting ratio is more than one, more people commute out of the area than commute in, the number of resident workers is greater than the number of jobs. Caerphilly's commuting ratio is high due to its proximity and good transport links to the employment opportunities available in Cardiff and Newport. Data from the 2011 Census indicates that there were 77,488 Caerphilly residents in employment (i.e., the resident workforce) in 2011 and 58,647 jobs in the County Borough (employment – people based). This equates to a commuting ratio of 1.32.

9.5 As detailed in Appendix 5 of the Employment Land Review (ELR), the Oxford Economics forecasts include updated data on the latest figures for resident workforce and jobs. The commuting ratio at the start of the plan period is 1.28. The Oxford Economics forecasts indicate that the commuting ratio is projected to increase slowly to 1.31 by 2035. This ratio has been factored into the jobs calculation.

Unemployment rate

9.6 The third factor is the unemployment rate as a proportion of the total labour force i.e. all those economically active people that are unemployed. A projected decrease in unemployment rates will mean more jobs are required to meet the needs of residents.

9.7 The Oxford Economics forecasts identify an increase in the unemployment rate from 5.6% in 2020 to 6.1% in 2021. The rate is then forecast to fall to 4.9% during the middle part of the plan period, before increasing to 5.1% in 2035. The average unemployment rate for the plan period is 5.2%.

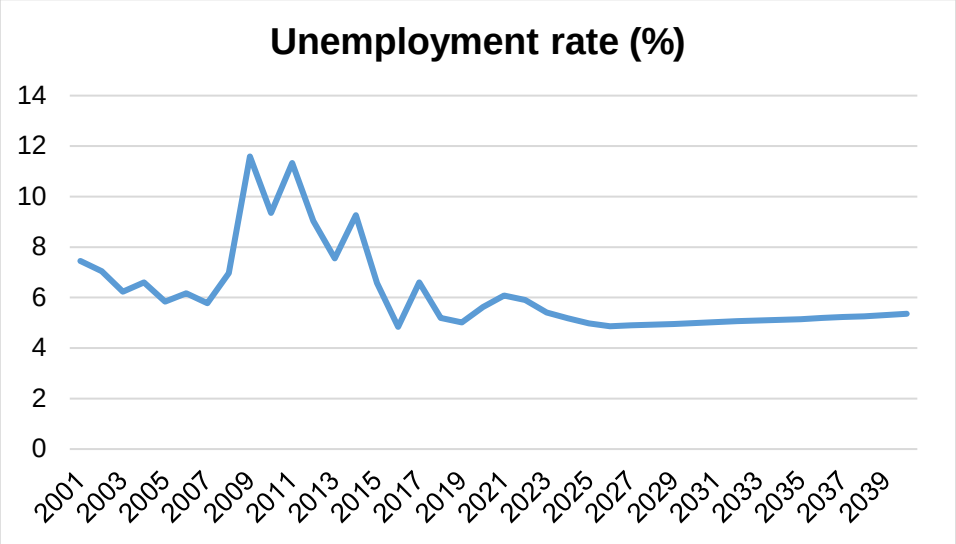

Figure 43: ***Forecast unemployment rate***
Source: Oxford Economics July 2021

9.8 Using these assumptions, the number of jobs that would be required to meet each option is set out below. The figures also include the sensitivity testing for the membership rate adjustments as detailed in the previous section. In the dwelling led scenarios, as the number of dwellings and households are fixed, an assumed continuation of the 2020 household types for the 19-29 age groups rather than an increase in larger households for this age group means that the population to support the same number of households would be lower. This consequently means that less jobs would be required.

	Scenario	Population Change 2020-2035	Population Change 2020-2035 MR Adjustment	Jobs Change 2020-2035	Jobs Change 2020 – 2035 MR Adjustment	Average Jobs Change per annum	Average jobs change per annum MR Adjustment
A	**WG 2018-based Principal Projection**	1,881		-180		-12	
B	**WG 2018-based High Population**	5,499		464		31	
C	**WG 2018-based Low Population**	-3,313		-852		-57	
D	**Zero Net Migration**	-2,789		-2,336		-156	
E	**Long Term Average Migration (19 Year)**	-1,002		-1,740		-116	
F	**Long Term Average Migration (10 Year)**	-1,137		-1,765		-118	
G	**South-East Wales average migration**	5,212		942		63	
H	**Continuation of adopted LDP**	16,004	15,058	6,404	5,954	427	397
I	**Long term housebuilding rates**	8,884	7,990	3,021	2,596	201	173
J	**CCR Growth in Working age population**	11,598	10,685	4,311	3,876	287	258
K	**Oxford Economics Employment Forecast**	-8,806		-1,355		-90	

Table 18: *Jobs requirements linked to growth scenarios*

9.9 Table 18 indicates that there would be no requirement for additional jobs within the plan period, under several of the scenarios. Scenarios A, C, D, E, F and K all indicate a negative requirement for jobs, linked to the decline in the working age population in these scenarios. Scenarios B (WG 2018 based High Population) and G (South-East Wales average migration) both show a jobs requirement associated with the overall population and working

age population growth. The three dwelling led scenarios (H, I and J) indicate a requirement for jobs of between 201 and 427 jobs per annum, or between 173 and 397 jobs per annum using the membership rate adjustment scenario.

Employment Land Review

9.10 As part of the Employment Land Review, the BE Group were asked to review four of the growth scenarios to determine what impact the increase in the working age population would have on the job requirements. This approach formed part of a resident workforce forecast, in line with the Practice Guidance.

9.11 The four scenarios tested were:

- Scenario A: 2018-based Welsh Government Projections
- Scenario I: Long Term Housebuilding Rates
- Scenario J: Cardiff Capital Region Growth in Working Age Population
- Scenario H: Continuation of the Adopted LDP

9.12 Scenario A was considered as the Welsh Government projections are essentially the starting point in the consideration of a range of scenarios. The other three scenarios were the only scenarios that showed an increase in the working age population, which is necessary to support jobs growth. Scenarios I, J and H were considered using the figures derived from the membership rate adjustment sensitivity testing.

Scenario A	2020	2035	Change in Population
0-15	33,490	30,817	-2,673
16-66	116,571	113,703	**-2,868**
67+	31,678	39,100	7,422
Total	181,739	183,620	1,881
Scenario I	**2020**	**2035**	**Change in Population**
0-15	33,489	31,475	-2,014
16-66	116,564	118,508	**1,944**
67+	31,677	39,739	8,062
Total	181,731	189,721	7,990
Scenario J	**2020**	**2035**	**Change in Population**
0-15	33,489	31,740	-1,749
16-66	116,564	120,690	**4,126**
67+	31,677	39,985	8,308
Total	181,731	192,416	10,685
Scenario H	**2020**	**2035**	**Change in Population**
0-15	33,489	32,171	-1,318
16-66	116,564	124,232	**7,668**
67+	31,677	40,386	8,709
Total	181,731	196,789	15,058

Table 19: ***ELR tested population growth scenarios***
Source: Employment Land Review, BE Group 2021

9.13 The approach taken in the model was to split the additional/reduced working age population by business sector. This is done by applying the same proportional split of sectors as the Oxford Economics jobs forecast for the end of the Plan Period, 2035. This reflects the BE Group's best estimate of what the economy of Caerphilly might look like in 2035. The Model Two method can then be applied to identify the floorspace and land need generated by this working age population growth or decline.

9.14 In this model the floorspace and employment land needs generated by the full additional working age population growth/decline are measured. In practice, only a proportion of that new working age population will be economically active/in employment, and some will commute out of the County Borough to work. However, it is a policy priority of the Council to ensure as much of the working age population is employed as possible and that as much labour is retained locally as possible. This Model shows the highest premises/land requirement that would be generated from high employment/high labour retention levels. It should thus be treated as a maximum requirement.

9.15 The land needed to fully support those four population growth scenarios is set out below.

Scenario A: 2018 -based Welsh Government Projections

2,868 *less* working age people would generate a need of:

- B1 Offices – 743 less workers at 16 sqm per worker and a 40 percent plot ratio = -2.97 ha
- B2/B8 Industrial – 561 less workers at 67 sqm per worker and a 40 percent plot ratio = -9.40 ha
- Total net need = **-12.37 ha.**

Scenario I: Long Term Housebuilding Rates

1,944 more working age people would generate a need of:

- B1 Offices – 503 additional workers at 16 sqm per worker and a 40 percent plot ratio = 2.01 ha
- B2/B8 Industrial – 380 additional workers at 67 sqm per worker and a 40 percent plot ratio 6.37 ha
- Total net need = **8.38 ha.**

Scenario J: Cardiff Capital Region Growth in Working Age Population

4,126 more working age people would generate a need of:

- B1 Offices – 1,066 additional workers at 16 sqm per worker and a 40 percent plot ratio = 4.26 ha
- B2/B8 Industrial – 808 additional workers at 67 sqm per worker and a 40 percent plot ratio 13.53 ha
- Total net need = **17.79 ha.**

Scenario H: Continuation of the Adopted LDP

7,668 more working age people would generate a need of:

- B1 Offices – 1,982 additional workers at 16 sqm per worker and a 40 percent plot ratio = 7.93 ha
- B2/B8 Industrial – 1,502 additional workers at 67 sqm per worker and a 40 percent plot ratio 25.16 ha
- Total net need = **33.09 ha.**

9.16 The ELR caveats the assessment, stating that this represents the maximum employment land requirement specifically from these population growth scenarios and is not a forecast of objectively assessed need for the whole Caerphilly County Borough economy. However,

it does illustrate the maximum economic impacts of the projected working age population growth rates under the four scenarios. It should be noted as part of this scenario testing that, based on the Oxford Economics forecasts, only a proportion of the resident workforce would be working in jobs that require a B Class premise and therefore the B1/B2/B8 has been calculated accordingly. There would also be a significant number of jobs in sectors that are forecast to grow such as wholesale and retail trade, accommodation and food services, health, education, and public administration.

9.17 The ELR considers a range of scenarios for land forecast modelling, including scenarios around past building completions and labour demand forecasting based on projected employment change across sectors and projected growth sectors. This is summarised in the Employment Background Paper.

9.18 Paragraph 5.39 of the DPM states that the LDP must contain "…a broad assessment of expected employment change by sector and land use [and] include quantitative targets for Class B employment use (land and jobs).

9.19 The jobs requirements set out in Table 19 are total jobs requirements based on the structure of the population projected in each of the scenarios with appropriate assumptions for economic activity, unemployment and commuting factors included. Based on the Preferred Scenario (J), with membership rates adjusted, there would be a requirement for a total 3,876 jobs over the plan period, which equates to 258 jobs per annum. For the purposes of the plan, it is necessary to consider how many of these jobs would be within B Class uses to accord with the requirements of the DPM. This is considered in the Employment Background Paper, where the proportional sectoral analysis from Oxford Economics Forecasts has been applied on the basis of the number of jobs identified in Scenario J. Overall, 1,766 of the 3,876 jobs identified in Scenario J are projected to be within Use Class B with the remaining jobs in the non-B Use sectors. On this basis, the Employment Background Paper recommends that the plan includes a Use Class B jobs target of 1,766 jobs per annum or 118 jobs per annum.

10. Comparison with Land Supply

10.1 To assess how much land would need to be released under each of the growth options, consideration needs to be given to the existing land supply. A separate Background Paper on the Housing Land Supply has been prepared, which considers the number of units on sites with planning permission as well as housing completions in the first year of the plan period, units under construction and assumptions for windfall and small sites. Overall, there are **4,411 units** within the existing land supply.

10.2 A flexibility allowance of 10% has been applied to each of the options, in accordance with the Development Plans Manual. To calculate the housing allocations that would be required in the plan, the existing land supply has been deducted from the total dwellings plus flexibility allowance.

10.3 Under Scenario A, the WG 2018-based projections, there is sufficient land available in the existing land supply to meet the dwelling requirement, without having to allocate any additional land. This is also the case with Scenarios B, C, D, E, F, G and K, although a very small new allocation requirement would be required in Scenarios B and G if the membership rates are adjusted,

10.4 The only scenarios that would require a land allocation for new housing within the plan are dwelling-led Scenarios H, I and J. Scenario H would require land to be allocated for approximately 5,100 dwellings, Scenario I would require land for 1,700 dwellings and Scenario H would require land for approximately 3,000 dwellings.

10.5 Based on an average density of 30 dwellings per hectare, the land requirements for the dwelling-led scenarios range from 58 Ha to 169 Ha.

10.6 A direct comparison with housing land requirements in the adopted LDP is not possible due to the differences in assumptions used, including flexibility allowances and the treatment of sites with permission. However, as a broad indication, the adopted LDP allocated 260 Ha of land or 6,673 units over a 15-year period, equating to 17.3 Ha/485 units per annum so the land allocations in all of the other scenarios are lower than past housing land allocations.

	Scenario	Total Dwellings	Total Dwellings MR Adj	Plus 10% flexibility allowance	Plus 10% flexibility MR Adj	Existing Land supply	Housing allocations required (dwellings plus 10% minus existing supply	Housing allocations required (dwellings plus 10% minus existing) MR Adj
A	**WG 2018-based Principal Projection**	2,550	2,966	2,805	3,263	4,411	-1,606	-1,148
B	**WG 2018-based High Population**	3,979	4,395	4,377	4,835	4,411	-34	424
C	**WG 2018-based Low Population**	648	1,064	713	1,170	4,411	-3,698	-3,241
D	**Zero Net Migration**	534	917	587	1,009	4,411	-3,824	-3,402
E	**Long Term Average Migration (19 Year)**	1,403	1,756	1,544	1,932	4,411	-2,867	-2,479
F	**Long Term Average Migration (10 Year)**	1,344	1,696	1,479	1,866	4,411	-2,932	-2,545
G	**South-East Wales average migration**	3,983	4,348	4,381	4,783	4,411	-30	372
H	**Continuation of adopted LDP**	8,622	8,625	9,484	9,488	4,411	5,077	5,077
I	**Long term housebuilding rates**	5,595	5,595	6,155	6,155	4,411	1,744	1,744
J	**CCR Growth in Working age population**	6,750	6,750	7,425	7,425	4,411	3,014	3,014
K	**Oxford Economics Employment Forecast**	-1,355	-1,355	-1,490	-1,490	4,411	-1,491	-1,491

Table 20: ***Housing allocations required under each scenario***

11. Conclusions

11.1 This evidence base paper considers a range of scenarios for the total population, households, dwellings, and the working age population to inform the housing requirements in the 2nd Replacement Local Development Plan. Planning Policy Wales is clear that the latest Welsh Government projections will form a fundamental part of the evidence base for the plan, but that planning authorities need to consider whether the various elements of the projections are appropriate for their area, and if not, undertake modelling, based on robust evidence, to identify alternative options.

11.2 Caerphilly County Borough has an ageing population, with a significant increase in the number of people older than state retirement age projected over this plan period. In recent years there has been a decline in the number of births and an increase in the number of deaths, and for the first time in 2019-20, the number of deaths exceeded the number of births, resulting in negative natural change, with this trend projected to continue. Whilst in the past, population growth has been driven by both natural change and migration, it is now the case that migration is the key driver of population growth.

11.3 Consideration has been given to the latest WG Population and Household Projections – the 2018-based projections. These projections identify a low level of population growth over the plan period, driven by migration. However, in terms of the population structure, the projections identify a significant increase in older people and a decline in the working age and school age populations. This will result in an unbalanced population structure, which will have significant implications for the sustainability of schools and our ability to support economic growth and service and infrastructure provision.

11.4 As the WG Projections are not considered to represent a desirable option from a policy perspective, ten other scenarios have been tested to consider the implications of other assumptions around natural change and migration, the number of dwellings and jobs.

11.5 The issue of concealed households is a significant concern, with Caerphilly having the second largest average household size in Wales. The 2018-based projections indicate that the proportion of 19–29-year-olds living alone (1 person households) or in 2 person households is projected to decline significantly, whereas the number of people aged 19-29 living in larger households is projected to increase significantly. This is an indication of young people being unable to form their own households for affordability reasons. The level of housing that the plan makes provision for has the potential to address these trends, as the delivery of a sufficient supply of new housing, including affordable housing for both social rented and intermediate tenures, will offer young people who may be living as concealed households the opportunity to form their own households.

11.6 Membership adjustment rate scenarios have been tested to consider what the impact of addressing this issue would be. The alternative scenario assumes that the membership rates for the 19-29 age group will remain constant at 2020 rates throughout the plan period, rather than declining to levels that may not be considered realistic or desirable. The membership rates of all other age groups have not been adjusted and have been projected to change in accordance with the projections. The consequence of this is that more younger people will be living in smaller households, so the overall average household size will decrease slightly. As less people are projected to be living in each household, more houses will be required. This means a slight increase in the number of dwellings in the population led scenarios and a slight decrease in the overall population in the dwelling led scenarios, to meet the same number of dwellings.

11.7 The membership adjustment scenarios are considered more desirable from a policy perspective, and these are therefore listed as the preferred potential scenarios in the table

below. The scenarios also include a further adjustment to consider the 2019 and 2020 Mid-Year Estimates.

	Scenarios (incorporating MR adjustments and adjusted for latest MYEs)	Population Change 2020-2035	% Population Change 2020-2035	HH Change 2020-2035	% HH Change 2020-2035	Total Dwellings	Dwellings per annum	Change in working age population
A	**WG 2018-based Principal Projection**	1,881	1.0	2,862	3.7	2,966	198	-2,868
B	**WG 2018-based High Population**	5,499	3.0	4,241	5.5	4,395	293	-1,842
C	**WG 2018-based Low Population**	-3,313	-1.8	1,026	1.3	1,064	71	-3,938
D	**Zero Net Migration**	-2,789	-1.5	884	1.1	917	61	-6,413
E	**Long Term Average Migration (19 Year)**	-1,002	-0.6	1,695	2.2	1,756	117	-5,380
F	**Long Term Average Migration (10 Year)**	-1,137	-0.6	1,636	2.1	1,696	113	-5,443
G	**South-East Wales average migration**	5,212	2.9	4,195	5.4	4,348	290	-756
H	**Continuation of adopted LDP**	15,058	8.3	8,323	10.8	8,622	575	7,668
I	**Long term housebuilding rates**	7,990	4.4	5,399	7.0	5,595	373	1,944
J	**CCR Growth in Working age population**	10,685	5.9	6,513	8.4	6,750	450	4,126
K	**Oxford Economics Employment Forecast scenario**	-8,805	-4.8%	-2031	-2.6%	0	0	-11,231

Table 21: ***Growth Scenarios including Membership Rate adjustments and MYEs***

11.8 The number of dwellings that would be required under each of these options is summarised in Figure 44, considering the membership rate adjustments. The number of dwellings ranges from no requirement in the Oxford Economics Employment Forecast (policy off) scenario, to 575 dwellings in the Scenario that continues the adopted LDP housing requirement. The long-term average build rate of 373 dwellings per annum is identified, with two options proposing a level of growth that exceeds it.

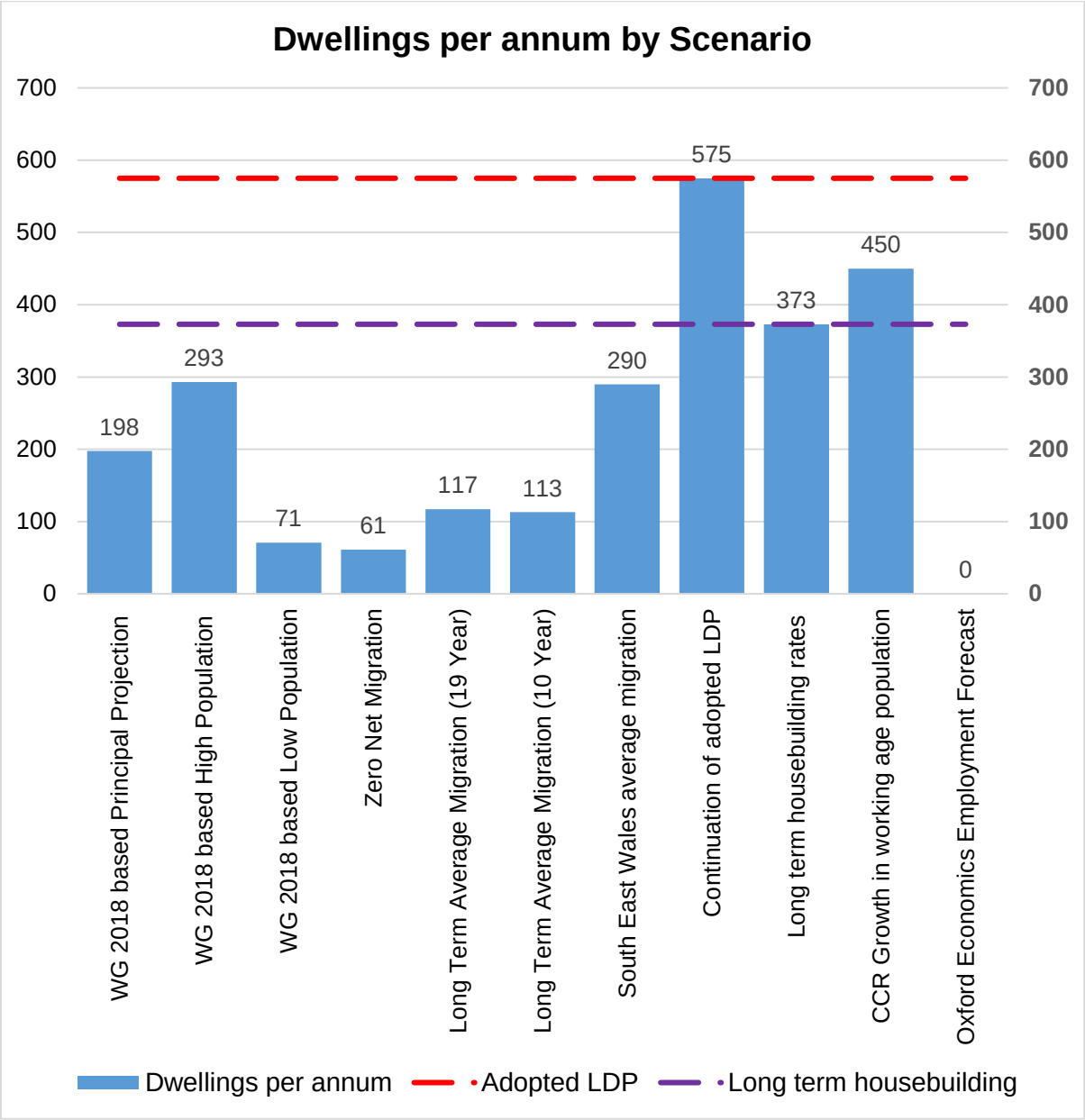

Figure 44: ***Dwellings per annum for each scenario***

11.9 The number of jobs that would be required to support each of the growth options has also been calculated, factoring in forecasts on economic activity rates, unemployment and commuting ratios. The decline in the working age population projected in a number of the scenarios has resulted in projected loss of jobs per annum, rather than growth. Only 5 of the options would result in a positive jobs requirement ranging from 31 jobs per annum to 427 jobs per annum in the highest growth scenario.

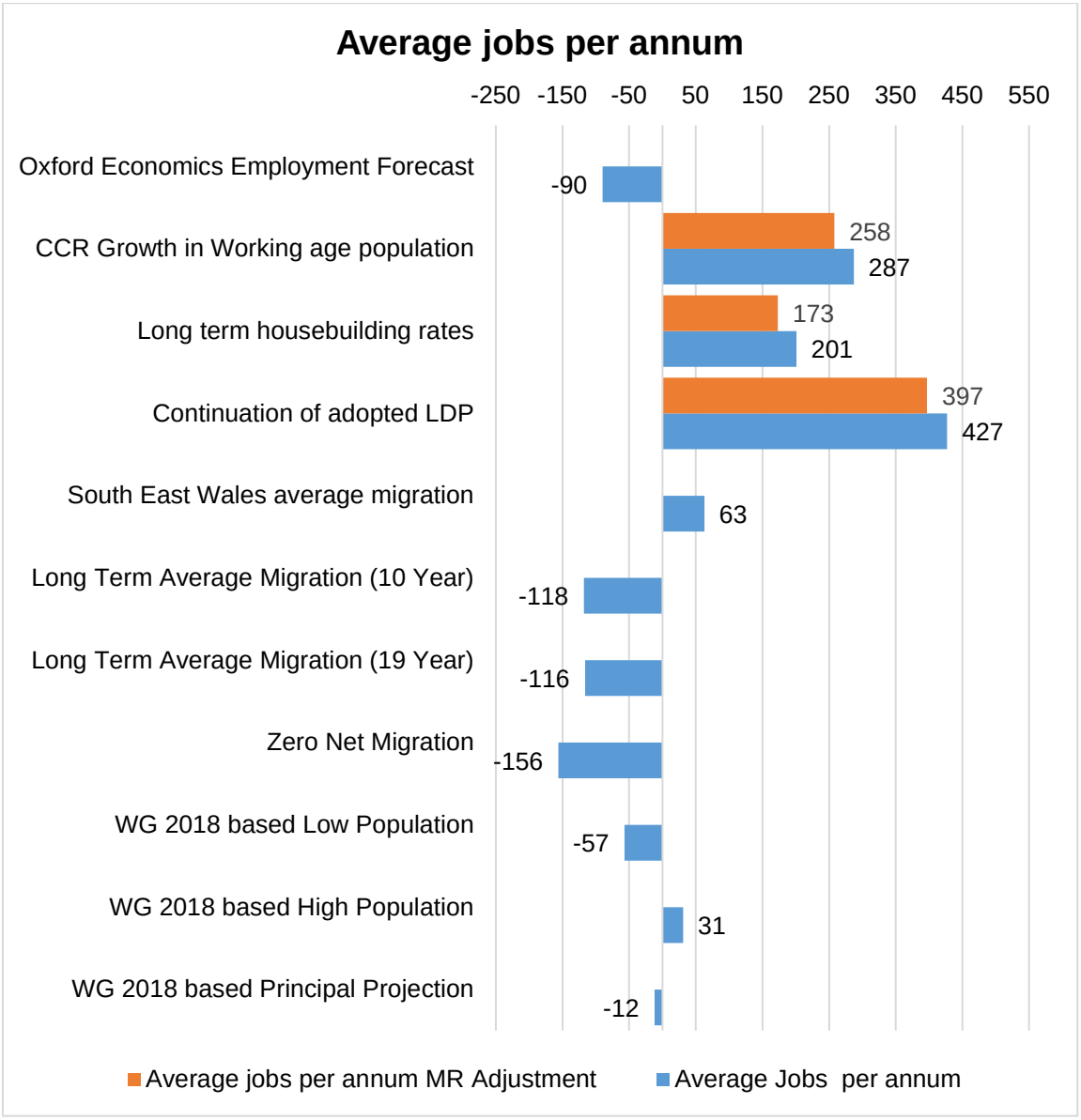

Figure 45: ***Jobs per annum by scenario***

11.10 Each of the scenarios has also been assessed in relation to the existing land supply for housing. A flexibility allowance of 10% was factored into the housing requirement derived under each cenario and the existing land supply deducted from the total requirement

11.11 Only 3 of the options tested, specifically the three dwelling-led options, would require new sites to be allocated in the development plan:

- I - Long term housebuilding rates – Land to be allocated for 1,700 new dwellings
- J – CCR working age population growth – Land to be allocated for 3,000 new dwellings
- H – Continuation of adopted LDP – Land to be allocated for 5,100 new dwellings

11.12 In the other eight scenarios, the existing land supply exceeded the dwelling requirement so no new housing allocations would be required.

11.13 Stakeholder engagement through a series of seminars was undertaken which set out the demographic profile of the County Borough and the long list of options that were tested. A

short list of options was presented to stakeholders comprising the WG Principal Projection (A), together with the three dwelling-led options (I, J, K), as these options would provide a more balanced age structure through an increase in the working age population and a requirement for land to be allocated for both jobs and houses, including affordable housing.

11.14 Overall, stakeholders considered that Scenario J CCR working age population growth option was the most appropriate to inform the Preferred Strategy, as the level of growth was considered to reflect the County Borough's position within a National Growth Area in Future Wales by being ambitious but still realistic, as well as supporting the regional level of job creation identified as part of City Deal.

11.15 In line with the recommendation of the LDP Focus Group, it is considered that the Preferred Strategy be informed by the following growth option:

Scenario J - CCR Working age population growth

Population Change (MR Adjustment) 2020-2035	**10,685**
Change in working age population	**4,126**
Total dwelling requirement	**6,750**
Annual dwelling requirement	**450**

11.16 When determining housing requirements, PPW also states that the projections should be considered alongside other evidence including:

- the Well-being plan for a plan area.
- other key evidence in relation to issues such as what the plan is seeking to achieve.
- links between homes and jobs.
- the need for affordable housing.
- Welsh language considerations.
- the deliverability of the plan.
- wider social, economic, environmental, and cultural factors in a plan area in order to ensure the creation of sustainable places and cohesive communities.

11.17 These matters have been given due consideration as part of the evidence base, and a summary of how these matters have been considered is included in Appendix 1.

Appendix 1 - Assessment against PPW requirements

An assessment of how each of the requirements of PPW have been considered when determining the level of growth are summarised in the Table below. This references evidence in this background paper and the wider 2RLDP evidence base.

PPW requirement	How it has been considered
The latest Welsh Government Projections	In accordance with PPW and the Development Plans Manual, an assessment has been undertaken on the various elements of the projections to determine if they are appropriate for the area. Modelling, based on robust evidence to identify alternative options, has also been undertaken.
Local Housing Market Assessment and need for affordable housing	The 2018 LHMA is summarised in Section 2 of this paper. It identifies a need for 282 affordable units per annum, with the highest need being identified in the Northern Connections Corridor and Caerphilly Basin. It is recognised that a higher total housing requirement would increase the ability for the local authority to deliver affordable housing, both through Section 106 agreements and through the allocation of land for affordable housing led schemes. This has been a consideration in determining the level of growth. It will also be a factor in determining the spatial strategy for the plan to ensure that land is promoted in areas with affordable housing need. An updated LHMA which reflects the recently published new methodology on preparing an LHMA will be prepared to support the Deposit LDP.
Well-being plan	The objectives of the Council's well-being plan are set out in Section 2. Developing suitable housing to meet a variety of people's needs, including affordable housing is one of the key issues identified through stakeholder engagement and one of the 4 Objectives is "Enabling our communities to be resilient and sustainable," of which affordable and sustainable housing is a key element.
Links between homes and jobs	Section 9 of the report sets out how the jobs requirements have been considered as part of each of the growth scenarios, and how this has been aligned with the findings of the Employment Land Review.
Welsh language considerations	The 2011 Census identified that 11.2% of Caerphilly's population were Welsh speakers. The Integrated Sustainability Appraisal scoping report, which incorporates a Welsh Language Impact Assessment identifies the Welsh Language as a consideration. This issue will be considered in more detail in subsequent stages of the ISA process.

	The Council's Welsh language strategy identifies an action to "establish Welsh language implications as an integral part of planning developments in terms of housing and education expansion, particularly in terms of Welsh medium school places." The sustainability of all schools is a key consideration in determining housing requirements, with growth proposed at a level which minimises the decline in the school aged population. The greatest driver of population is from in-migration from places within the UK, with a significant proportion of this in-migration from neighbouring authorities. The linguistic skills of in-migrants are not something that the plan can influence but encouraging in-migration from other local authorities In Wales may have the potential to support the Welsh language. Scenarios which would result in low levels of net in-migration and higher out-migration of younger people and those of working age may have a more detrimental impact on growth rates when compared with higher growth scenarios.
Deliverability	The deliverability of each of the growth options has been considered within the context of past build rates for housing and this is included in the commentary in Section 7.
Wider social, economic, environmental, and cultural factors	The pre-deposit participation paper sets out a wide range of social, economic, environmental, and cultural factors that were considered by stakeholders when discussing the levels of growth. This included issues such as the need for a balanced population with a growing working age population to encourage economic prosperity and support the ageing population. A level of population that minimised the decline in the school aged population to help the sustainability of schools is also an important consideration. Climate change and the impact of new development on the environment is a key consideration which needs to be balanced against the need for development, particularly affordable housing, with the candidate site process ensuring that placemaking principles are followed and that housing is focused in the most sustainable areas.