

APPENDIX B

BRIDGEND REPLACEMENT LOCAL DEVELOPMENT PLAN (LDP) 2018-2033 TECHNICAL REPORT 2: STRATEGIC GROWTH OPTIONS

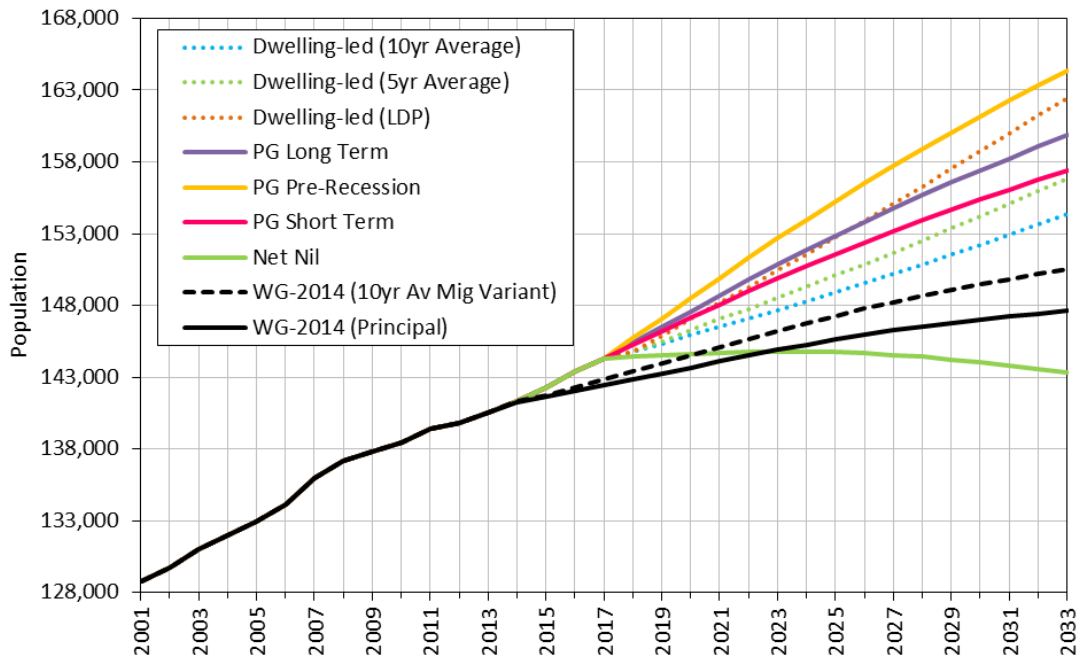
1. PURPOSE OF THE REPORT

- 1.1 To report the strategic growth options for the Replacement LDP (2018-2033).

2. INTRODUCTION

- 2.1 The Vision of the Replacement LDP is focused on the continued transformation of Bridgend County Borough into an interrelated network of safe, healthy and inclusive communities that connect more widely with the region to catalyse sustainable economic growth. This is to be achieved by maintaining and developing strong, interdependent, cohesive settlements whilst also protecting and enhancing the County Borough's environmental and heritage assets. Additional employment, commercial and residential development is to be focussed around the primary key settlement of Bridgend and the other main settlements to achieve sustainable patterns of growth that support existing local services and facilities.
- 2.2 In order to inform the appropriate level of housing and employment provision to deliver this Vision, a range of trend based assumptions need to be duly considered to identify how existing household compositions, characteristics and employment growth will influence future household formation rates and levels of in-ward migration. The 2014 based Welsh Government (WG) Population and Household Projection Variants form a key part of the evidence base in this respect, although it is also important to consider alternative scenarios to test the impacts of different assumptions over the 2018-2033 period.
- 2.3 The Council has therefore commissioned Edge Analytics to produce a technical paper (Bridgend Demographic Analysis & Forecasts 2019) to provide a range of population, housing and employment growth evidence to inform the emerging LDP. This builds on the WG variants to provide a range of other projections that capture the latest historical population estimates for Bridgend and base their migration flow assumptions on alternative histories. The technical paper also provides a demographic profile of Bridgend, illustrating its geographical context and components of population change before examining how much housing growth might be needed should different scenarios take place.
- 2.4 In addition to the WG 2014-based 'Principal' and '10yr Average Migration' variant projections, four demographic and three dwelling-led scenarios have been developed as part of this technical paper. Population change for the 2018–2033 period ranges from -0.8% under the Net Nil scenario to +12.8% under the POPGROUP Pre-Recession scenario as outlined in Figure 1 overleaf. In order to translate household projections to potential dwelling requirements, it is important to apply an allowance to take account of second homes and a level of vacancy necessary to sustain an efficient housing market. Hence, each of the scenarios have been estimated in conjunction with a vacancy rate of 4.8%, based on the 2011 Census vacancy rate for Bridgend County Borough.

Figure 1: Bridgend Population Growth 2001-2033



Source: Edge Analytics

- 2.5 This range of population based scenarios form the basis for nine separate household and employment projections, which are summarised later in this paper, before being translated into three primary growth options (low, mid and high). These three growth options are then analysed in terms of how far they align with the issues the replacement LDP is seeking to address. The recommended growth option to deliver the Objectives of the Replacement LDP is then ultimately justified.

3. LINKING POPULATION, HOUSEHOLD AND EMPLOYMENT GROWTH

- 3.1 Whilst there is not always an unequivocal relationship between homes and jobs, it is vital to consider the two elements in tandem when determining a sustainable level of growth to underpin the Replacement LDP. Analysis has therefore been undertaken by Edge Analytics to determine the likely demographic impact of different growth trajectories on homes and jobs. The relationship between the two variables has effectively been quantified by measuring the link between employment growth and the changing size of the resident population. Employment growth estimations have specifically been driven by forecasting population size and structure, estimating the size of the labour force, considering commuting ratios and making assumptions on unemployment rates. This exercise has provided different levels of employment that could be supported under the projected scenarios.
- 3.2 As the nature of the assumptions made do influence the estimated employment growth that could be supported by the population forecast, it is important to consider some of these elements in more detail.
- 3.3 In terms of commuting, the 2011 Census recorded 61,551 workers living in Bridgend and 60,767 people working in Bridgend, which produces a net out-commuting ratio of 1.01 (i.e. there are slightly more workers living in the County Borough than employment available). More recent Welsh Government data on commuting patterns (2018) also reaffirms this net out-commuting ratio, meaning 1.01 has been applied and fixed throughout the forecast period.

- 3.4 The proportion of the labour force that is unemployed also has to be duly considered. Despite higher unemployment in the 2009-2012 period (akin to national trends), Bridgend's unemployment rate was lower than that recorded for Wales and Great Britain between 2012 and 2016 before rising slightly to 5.2% in 2017. The modelling tracks historical data to 2017, remaining fixed thereafter. However, an Experian based alternative unemployment rate has also been modelled that forecasts the unemployment rate will reduce over the plan period, from 5.2% in 2018 to 4.2% by 2033. This would represent the lowest recorded unemployment rate for Bridgend and has been used in tandem with the fixed rate for comprehensiveness; producing somewhat more immoderate results as a proxy.
- 3.5 These core assumptions have been used to estimate the level of employment growth that could be supported by the six demographic and three dwelling-led scenarios. The assumptions have also been used to generate an Employment-Led Scenario by linking employment growth to population growth.
- 3.6 Overall, the population growth rate range of -0.8% (under the Net Nil Scenario) to +12.8% (under the POPGROUP Pre-Recession Scenario) is estimated to support an employment change of -239 per annum to +524 per annum over the 2018–2033 plan period. Each of the scenarios will now be outlined in turn.
- 3.7 **Scenario 1: WG 2014-Based Principal Scenario.**
- 3.8 The first scenario replicates the WG 2014-Based Projection, incorporating trends on births, deaths and migration from the preceding five years. This projection presents the lower end of the household growth range identified in the paper, estimating an average annual dwelling growth of **271 dpa** (dwellings per annum) over the 2018–2033 plan period. This is partly due to the derived assumptions being based on a period of reduced net migration flows to the area from 2009/10 to 2011/12. The figure of 271 dpa is lower than the current LDP dwelling requirement of 646 dpa and also below average completions over the last 5 (491 dpa) and 10 years (422 dpa).
- 3.9 The previously outlined core assumptions on economic activity rates, commuting ratios and unemployment levels can be used to estimate the extent of employment growth that can be supported by this scenario. Assuming no change in the unemployment rate over the plan period (i.e. 5.2%) results in an estimated decline in average employment by -30 per annum. However, with an improvement in the employment rate over the plan period (i.e. with unemployment reducing from 5.2% in 2018 to 4.2% by 2033), there will be an estimated annual change of +13 pa. This is because a slightly higher level of employment is estimated to be supported. In either case, the decline or minimal growth in the labour force over the plan period is driven by low net migration flows operating together with a more rapidly ageing population profile.
- 3.10 **Scenario 2: WG 2014-Based (Ten Year Average Migration) Scenario.**
- 3.11 This scenario replicates the WG Ten Year Average Migration Variant, which takes migration trends into account over a longer time period (i.e. 2004/05–2013/14); a period that encompasses a diverse range of economic conditions. Population growth is higher than estimated in the previous scenario (which only took five years of migration history into account) and an additional 995 households are projected to form from 2018-2033. In order to accommodate the estimated demographic change suggested by the Ten Year Variant, **340 dpa** would therefore be required over the

plan period. This scenario would produce a dwelling requirement below recent average dwelling completion numbers across Bridgend County Borough.

3.12 This level of household and dwelling growth would support a modest increase in employment of +78 per year on average assuming the fixed rate of unemployment, or +122 per year based on the reducing level of unemployment. This is due to the higher levels of migration and population growth underpinning this scenario and therefore a greater labour force working in the County Borough over the plan period.

3.13 **Scenario 3: POPGROUP Short Term Scenario.**

3.14 The Short Term Scenario is based on internal migration rates plus international migration flow assumptions over a six-year historical period (2011/12–2016/17). This time period is akin to the WG projection (i.e. 5–6 years), although also includes the latest three years of population statistics to derive assumptions. This scenario captures the lower net international migration evident since 2011, although estimates higher population growth than the previous projection, supporting an average annual dwelling growth of **505 dpa** over the 2018–2033 plan period. This level of growth is closer to that identified in the current LDP and is broadly in line with (albeit very slightly exceeding) the five-year dwelling completion average.

3.15 The six year post-recession demographic trends that form the foundation for this projection would support a greater level of employment growth (+219 per annum based on the fixed rate of unemployment) than in any of the WG 2014-Based Scenarios. This is not only driven by higher population growth *per se*, but an increase in working age households, particularly around the 35-44 age group. Assuming a reduction in unemployment levels over the life of the plan would lead to a higher employment estimation of +266 per annum under this scenario.

3.16 **Scenario 4: POPGROUP Long Term Scenario.**

3.17 The Long Term scenario varies to the previous projection in that it is based on internal migration rates and international migration flows from a full sixteen-year period (2001/02–2016/17). Therefore, it captures high net international migration prior to 2011 along with lower net international migration in the latter half of the historical period. These longer-term migration flow trends produce a higher estimated growth rate of **570 dpa** over the plan period. This level of growth is more than double the WG 2014-Based Principal Scenario and exceeds both the five year and ten year dwelling completion averages for Bridgend County Borough.

3.18 The population change and younger age profile estimated under this scenario reflects the continuation of longer-term migration trends. This level of growth could support an annual employment change of +332 per annum based on the fixed unemployment rate assumption or +380 based on the reduced unemployment rate assumption.

3.19 **Scenario 5: POPGROUP Pre-Recession Scenario.**

3.20 This scenario bases its migration assumptions on the seven year period prior to the recession (2001/02–2007/08), thereby factoring in a significant period of high net migration (internal and international) to Bridgend. Consequently, this projection represents the highest of the ten scenarios as it is not fettered by lower migration rates evident post 2011. Therefore, significant population change of 12.8% is estimated by this scenario, translating into an average dwelling growth of **681 dpa**.

This exceeds the current LDP dwelling requirement and is nearly 1.5 times the average number of residential completions over the past five years.

3.21 This level of household and associated dwelling growth supports the highest estimated employment change across the ten scenarios, at +475 pa based on the fixed unemployment rate assumption or +524 pa based on the reduced unemployment rate assumption. This is primarily due to the extent of the predicted population change driven by a more youthful population as a result of unusually high net in-migration trends.

3.22 **Scenario 6: Net Nil Scenario.**

3.23 The purpose of this scenario is to test the impact of zero net migration. Internal and international migration in-flows and out-flows are effectively balanced to depict how natural change alone could affect future household growth. This scenario projects a decline in population and only a relative minor increase in households over the plan period, translating into a **124 dpa** growth rate. This illustrates the extent to which population change in Bridgend is driven by migration and would arguably not provide a robust basis to inform the replacement LDP's housing requirement figure.

3.24 Indeed, this scenario estimates a significant decline in employment (-239 pa based on the fixed unemployment rate or -198 based on the reduced unemployment rate assumption), reflecting the reduction in labour force over the plan period. This is due to the lack of any net migration flows coupled with a significantly ageing, economically inactive population profile.

3.25 **Scenario 7: Dwelling-Led (LDP) Scenario.**

3.26 This scenario replicates the projected growth levels used to inform the existing LDP, utilising a **646 dpa** growth rate in each year of the forecast period. This is the highest of the dwelling-led scenarios considered, reflecting the current LDP's high growth approach, which planned for significant residential development to deliver the Regeneration-Led Strategy. This scenario would support a significant change in employment over the 15 year period, at +404 pa based on the fixed 5.2% unemployment rate or +452 pa using the assumption that unemployment will decrease from 5.2% to 4.2% over the life of the plan.

3.27 **Scenario 8: Dwelling-Led (10 Year Average) Scenario.**

3.28 The 10 Year Dwelling-Led Scenario is based on residential completions in Bridgend County Borough from 2008/09 to 2017/18, producing a dwelling growth rate of **422 dpa**. One key benefit of considering this level of growth is that it's based on local delivery in the decade following the recession, which provides a relatively balanced overview grounded in local socio-economic conditions. Lower dwelling growth under the Dwelling-Led (10yr Average) Scenario captures more modest net in-migration, thus resulting in smaller population change (+6.6%). This has a direct impact on future employment; estimating the lowest level of growth amongst the dwelling-led scenarios at +130 pa to +175 pa based on the fixed or reduced unemployment assumption, respectively.

3.29 **Scenario 9: Dwelling-Led (5 Year Average) Scenario.**

3.30 Similarly, this scenario applies dwelling growth of **491 dpa** in each year of the forecast period, based on the last five years of completions (2013/14–2017/18). This mirrors more recent evidence of dwelling building, with population growth following

housing growth over this period. On average, there have been 69 more units per annum delivered over the last five years compared to the last ten years.

3.31 This level of growth would support an employment change of +214 pa based on the fixed unemployment assumption or +260 pa based on the reduced unemployment assumption. There are thus similarities to the level of employment growth estimated by the POPGROUP Short Term Scenario, which is also based on post-recession trends.

3.32 **Scenario 10: Employment-Led Scenario (Experian Forecast).**

3.33 This scenario differs to the previous nine in that it is employment-led. Therefore, instead of estimating the level of employment that the relevant forecast population growth trajectory could support, it considers the potential impact of employment change on population and housing growth. This has been enabled by measuring the relationship between growth in employment with the changing size of the resident population and its labour force.

3.34 Over the plan period, the Experian forecast estimates a decline in the level of workplace-based employment in the County Borough, from 64,700 in 2018 to 64,500 by 2033. The annual employment change is set to fluctuate over this period, although analysing the fifteen years as a whole reveals a small average annual decline of -13 workplace-based employment places. This forecast therefore suggests lower population change would be required to support the annual change in employment than estimated by the other demographic and dwelling-led scenarios.

3.35 Utilising identical economic activity rates and commuting ratios, this Employment-Led Scenario estimates dwelling growth of **312 per annum** using the fixed 5.2% unemployment rate, or **276 dpa** using the Experian based unemployment rate (that reduces from 5.2% in 2018 to 4.2% by 2033). The reason for the variance is because a lower unemployment rate assumes a smaller proportion of the economically active labour force will be unemployed over the plan period. Therefore, there is less of a need for net in-migration to support the annual change in employment as a greater proportion of new employment opportunities will be taken by previously unemployed households that are already residing locally. In turn, this results in lower population and associated dwelling growth.

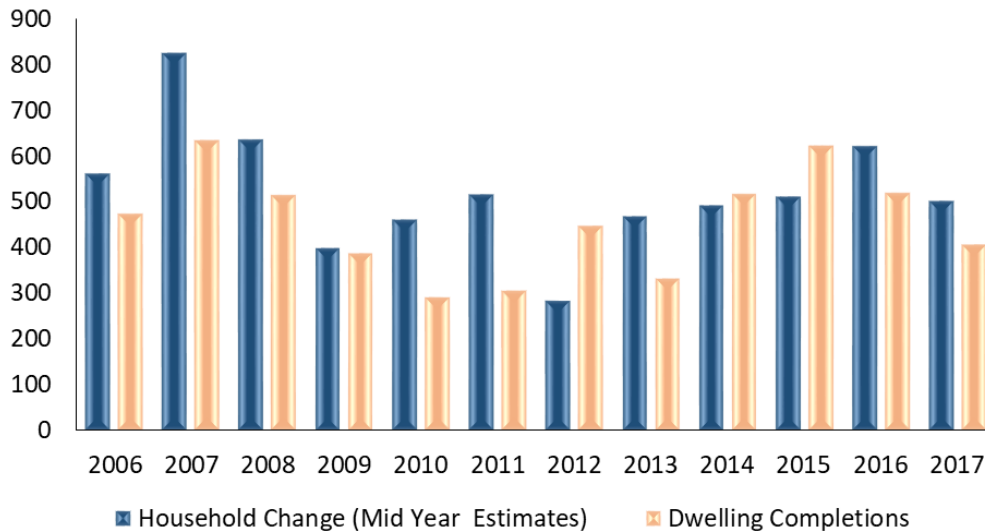
3.36 The lower 276 dpa estimate is closely aligned to the population change projected by the WG 2014-Based Principal Scenario, whereas the higher 312 dpa estimate is closer to the WG 2014-Based Ten Year Average Migration Scenario. However, both Employment-Led estimates of dwelling growth are lower than the levels projected under the other demographic trend (POPGROUP) and dwelling-led scenarios already presented in this paper. This is primarily due to the fact that lower estimated levels of in-migration and population growth are required to support the Employment-Led scenario.

4. PAST BUILD RATES COMPARISON AND MID-YEAR ESTIMATES

4.1 The high growth, regeneration-led Spatial Strategy that underpins the current LDP has been broadly successful, especially in bringing forward a number of residential and mixed-use allocated sites (primarily on brownfield land) within the County Borough. In order to provide context, it is helpful to compare the number of dwellings delivered over the course of the current Plan with the annual household change identified in the latest set of WG Mid-Year Household Estimates. Household Estimates are similar to projections, although they are based on past population

estimates as opposed to future population projections. The chart below provides a visual comparative overview for reference.

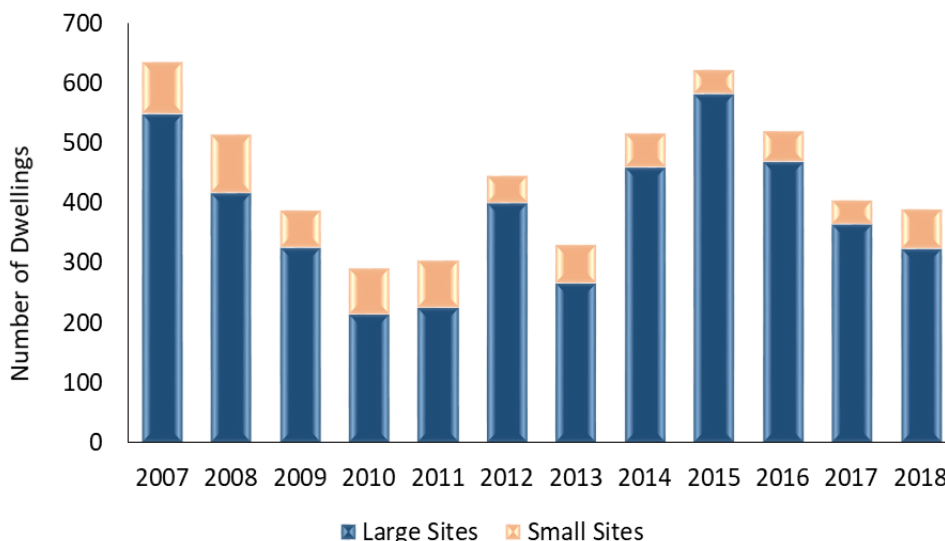
Figure 2: Comparison between Dwelling Completions and Mid-Year Household Estimates



4.2 The current LDP’s high growth strategy is clearly evidenced by the fact that the annual requirement of 646 dwellings has exceeded the annual increase in households by 15% on average (incorporating a 4.8% dwelling conversion factor). However, actual build rates have been broadly in line with the estimated annual household increase, notwithstanding fluctuations across both datasets since 2006. The data identified in the Mid-Year Household Estimates has been incorporated into the three aforementioned POPGROUP based Scenarios (3, 4 and 5) to ensure the most recent demographic information is projected forward as part of the range of alternative scenarios.

4.3 Figure 3 analyses the small and large site completions to a greater extent, including the most recent 2018 based residential completions data. There was undoubtedly a rise in completions following adoption of the current LDP in 2013, although this has gradually levelled off to the 400 unit per annum mark in 2017 and 2018. The five year average of 491 dwellings per annum therefore represents a relatively balanced level of growth over the last decade. Small site completions (sites of less than 10 units) have been generally steady over the period shown, averaging at 51 units per annum over the past five years.

Figure 3: Joint Housing Land Availability Study Completions



5. ALTERNATIVE GROWTH OPTIONS

5.1 Having considered the numerous scenarios and their varying household, dwelling and employment estimations, it is now pertinent to formulate a set of Strategic Growth Options (Low, Mid and High) to help inform the housing requirements of the Replacement LDP. The scenario-derived basis for each of these options will now be duly outlined in turn, as will their appropriateness as growth options to successfully deliver the Key Issues, Drivers, Vision and Objectives of the Replacement LDP.

5.2 Low Growth Option

5.3 Whilst the Net Nil Scenario is effectively the lowest of the ten growth scenarios outlined previously, it only tests the impact of zero net migration. This is not a robust basis to inform potential housing supply considering migration will play a significant role in Bridgend's household and employment growth over the plan period.

5.4 The Low Growth Option will therefore be based on the WG 2014-Based Principal Scenario, which incorporates trends on births, deaths and migration from the five years preceding 2014. The base time period includes a phase of reduced net migration flows into Bridgend County Borough meaning this projection estimates the second lowest level of household growth of the ten aforementioned scenarios. It also estimates a negative to minimal change in the labour force over the plan period due to the low level of net migration coupled with a rapidly ageing population profile that contains a smaller proportion of economically active workers. This is due to the large numbers of people born after the war moving into the 60+ age group over the next several years along with a simultaneous decline in many younger age groups (most significantly the 45-54 age category due to the impacts of lower net migration growth). The Low Growth Option therefore presents limited scope to counter balance this ageing population despite estimating some minor growth in the 40-44 age group category.

5.5 This level of growth would result in a modest 3.3% population increase (+4,743 individuals) or 6.3% increase in households (+3,865) across the County Borough up until 2033, with a resulting dwelling requirement of 271 units per annum. This would necessitate a lower level of house building than witnessed in recent years, with build rates reducing to just over half the number delivered over the past five years on average. Employment is also set to decline by -30 per annum on average based on a fixed unemployment rate assumption, or increase only slightly by +13 per annum based on a reduced unemployment rate assumption. Even the more optimistic unemployment rate scenario would still therefore not support significant employment growth within the replacement Plan. For purposes of comparison, the Employment-Led Scenario estimates very similar levels of dwelling growth and a small decline in workplace-based employment places per annum; suggesting lower population change would be required to support the annual change in employment.

5.6 Underpinning the replacement LDP on the Low Growth Option (with a dwelling requirement of 271 units per annum and employment of +13 per annum) would be likely to result in:

- An increase in the proportion of older and elderly people living in the County Borough, impacting upon the type of housing required (i.e. more ground floor level access properties) and service providers across public and private sectors.
- A smaller growth in school aged children, placing less pressure on the capacity of existing schools, although providing reduced scope to secure additional provision through planning gain.

- A decline in working aged people residing within the County Borough and a minimal growth in the local labour force to support local employment provision.
 - A reduction in the levels of nil grant affordable housing secured through the planning system.
 - Deficiencies in access to good quality open space being exacerbated due to insufficient growth to support additional provision and/or upgrades to existing provision.
- 5.7 A significant proportion of the 4,065 dwellings required under this Growth Option could be accommodated on existing LDP allocations and/or sites that already form part of the five year housing land supply. As such, minimal additional allocations would be required to accommodate this level of growth, thereby reducing pressure on greenfield sites. Protection and enhancement of the County Borough's environmental and heritage assets is undoubtedly a key issue for the replacement LDP, although this equally has to be balanced against the economic and employment growth ambitions of the Plan. The Low Growth Option would therefore not catalyse a level of growth that would support economic development or indeed the wider plethora of issues that the Replacement LDP is seeking to address.
- 5.8 Put succinctly, the projection does not take into account more recent household formation and migration patterns that have been evident since the recession. The residential build rate would therefore be too low to provide sufficient accommodation for newly forming households based on these phenomena. A Plan founded on such negative trends would be likely to lead to a decline in the number of economically active households both remaining within and being attracted to Bridgend County Borough, with notable depopulation amongst the established 35-44 age group. This would simultaneously lead to a proportionate increase in households aged 60+ and therefore a growing number of economically inactive people residing within the County Borough. In the medium term, the area could become increasingly unattractive to new employers and major employers may also be inclined to leave Bridgend over time due to the lack of an active, skilled labour force within the local population base.
- 5.9 Many of the key issues and drivers of the revised Plan seek to secure sustainable economic growth, diversify the employment sector and attract inward investment across the County Borough. Proceeding with the Low Growth Option would render this very difficult to achieve and could affect Bridgend's ability to continue performing a sub-regional employment and service centre role that promotes sustainable forms of travel. This is a crucial point given that the revised Plan also aims to maximise the County Borough's ability to both secure socio-economic benefits from and contribute towards the success of the Cardiff Capital Region City Deal. The level of growth associated with this Option would not provide the level of infrastructure, connectivity improvements and economic opportunities required to achieve this aim.
- 5.10 With supply constrained to this level, house prices are also likely to increase locally due to insufficient supply, thereby worsening affordability issues across the County Borough. The revised Plan seeks to address affordability by delivering affordable housing to meet identified need, extending housing choice in the Valleys areas, and creating places with a balanced mix of housing that promote sustainable, active travel opportunities. All of these issues are difficult to address with such low growth and the scope to secure affordable housing as part of private developments will be severely hampered, thereby limiting the scope to deliver socially balanced, mixed tenure communities.

5.11 In summary, therefore, the Low Growth Option is heavily influenced by recession laden trends and it is questionable as to how far this Option could deliver a Vision that seeks to catalyse sustainable economic growth that will connect the County Borough with the wider region. Perhaps most notably, this Option would lead to significant out-migration amongst economically active households and an increasingly ageing population residing locally, which could impair the County Borough's ability to attract and retain employers. Whilst pressure on greenfield sites would be lower, this level of growth would therefore not deliver significant long term economic well-being, new supporting infrastructure and services for the local population to utilise. It would also perform poorly in terms of providing affordable housing and could result in house prices increasing due to lack of supply. For these reasons, this Option is not considered optimal to provide a sufficient level of housing development and employment growth to underpin the replacement Plan. Proceeding on this basis would render it difficult to deliver against the range of issues the Plan is seeking to address.

5.12 Mid Growth Option

5.13 A number of different scenarios provide growth levels that can be used to inform a Mid Growth Option. The WG 2014-Based Ten Year Migration Scenario captures longer term migration trends for 2004/05–2013/14, which somewhat fetters the reduced migration flows in more recent years. This scenario projects a level of growth that is just below the 10 Year and 5 Year Dwelling-Led Scenarios. However, the POPGROUP Short Term Scenario is based on migration over a six-year historical period (2011/12–2016/17); updated to include the latest three years of population statistics. This means there are more recent components of change (i.e. births, deaths, internal and international migration trends) used to calibrate the assumptions. This latter scenario reflects the most recent post-recession trend based data available, would appear deliverable based on recent trends and would also facilitate an element of economic aspiration to inform the housing requirement within the replacement LDP. The Mid Growth Option will therefore be based on the POPGROUP Short Term Scenario.

5.14 The Mid Growth Option would result in a population increase of 8.4% or 12,151 people. This would equate to an 11.6% (+7,219) increase in households or 505 dwellings per annum from 2018-2033. As with the other growth options, a significant proportion of people will move into the 60+ age category, signifying an ageing local population. However, much of the **household change** is projected to emulate from the 35-44 age group category with a modest growth in children and teenagers. Other working age groups are nonetheless set to decline, although not to the same extent as with the Low Growth Option. This is primarily because this Option incorporates more recent mid-year population estimates (2014/15–2016/17) that have recorded higher net in-migration to Bridgend.

5.15 This is linked to the housing completions over a similar period, which have been higher in the past five years (491 dwellings per annum on average) compared to the preceding five years (353 dwellings per annum on average). The more favourable economic climate since 2014 is significant reason for this change, with an up-turn in house building and mortgage availability. Whilst past build rates are not robust enough in isolation to underpin a revised housing requirement, the more positive trends in recent years do align with the overall direction of the revised Plan, which aims to continue the transformation of Bridgend by catalysing sustainable economic growth.

- 5.16 Correspondingly, the post-recession trends that form the foundation for this Option would support a much more notable level of employment growth (+219 per annum based on the fixed rate of unemployment) than estimated under the Low Growth Option. This is primarily driven by the increase in those working age households around the 35-44 age group, notwithstanding the ageing population structure more broadly. Future unemployment rates are difficult to predict at this stage and changes to unemployment rates over the next fifteen years would influence the level of employment growth that could be supported. However, in order to remain optimistic in the context of a revised Plan that seeks to facilitate the delivery of high quality workspaces and job opportunities, the reduced unemployment assumption will be utilised to show the level of employment that could be supported by the population forecast. This estimates +266 growth in jobs per annum. Relatively speaking, the Dwelling-Led (5 Year Average) Scenario estimates a very similar level of employment growth, reaffirming that this level of growth appears pragmatic based on recent delivery in Bridgend County Borough.
- 5.17 For purposes of comparison, the Economic Evidence Base Study (EEBS) has analysed the Experian economic forecast of job growth by sector across the County Borough, estimating that there will be 2,400 more jobs in 2033 compared to 2018 (i.e. 160 per annum). The difference between this employment growth forecast and the aforementioned Employment-Led Scenario is that employment growth by sectors is usually measured as 'Full Time Equivalent' posts, whereas demographic projections are based on a 'people' measure of employment (i.e. workplace-based employment). As acknowledged in the EEBS, the headline forecast of total job growth hides growing and declining sectors. Some of the largest growing sectors are not those that conventionally occupy 'employment space', such as health, residential social care and education. However, there is some growth in the B class uses, such as office sectors, some construction and warehousing / wholesale, which normally require employment land, albeit offset by a decline in traditional manufacturing. When considering sector change, the size of stock and land requirements, the EEBS suggests there is effectively zero change in floor space required over the plan period, as 'gains in office jobs are offset by losses in industrial sectors'. However, 2ha of new land has been delivered in recent years with no increase in floor space stock, which suggests 2ha of land is needed per annum over the plan period to allow for any unexpected losses from the stock. This conclusion is further reinforced by the findings of a 'past-take up approach'.
- 5.18 However, the Experian forecast is effectively driven by the Low Growth Option (i.e. the Welsh Government Principal Projection). There is a distinct acknowledgement in the EEBS that the Mid Growth Option could result in a boost in labour supply over and above this forecast, although the associated additional number of new jobs is deemed to be an upper estimate. As the baseline forecast shows, net additional job growth is primarily expected to be outside of the B Class sectors. However, planning on the basis of zero additional B Class growth would introduce a risk that too little land is provided, which could act as a constraint to growth. This would certainly not accord with the Strategic Objectives of the revised Plan, in particular Strategic Objective 3, which aims to 'create Productive and Enterprising Places' across the County Borough.
- 5.19 Therefore, the EEBS also presents a converse assumption that all the additional jobs estimated under the Mid Growth Option would require B Class land and floor space on the basis that the boosted, skilled labour force would encourage firms to locate or expand in Bridgend. This is admittedly considered a highly optimistic assumption as only half of new jobs are typically B class jobs. However, this assumption would ensure that sufficient employment land is allocated in the event that this prospect

occurred. Hence, the EEBS suggests it would be sensible for up to 4 ha of employment land to be provided for per annum; 2 ha to manage 'baseline growth' and an additional 2 ha to manage the potential labour supply and job demand flowing from the Mid Growth Option. An additional margin is not deemed necessary as this assumption is deemed likely to be an overestimate.

5.20 Basing the LDP on this Mid Growth Option would require residential build rates to continue on a relatively similar scale to those achieved in recent years, with a 3% annual average increase. This would produce an annual requirement of 505 dwellings with employment growth of +266 per annum. The Mid Growth Option is likely to produce:

- Growth in school aged children, placing some pressure on existing schools. However, this level of residential delivery would provide scope to secure additional provision through planning gain to fund extensions and/or new schools.
- An increase in the proportion of older and elderly people living in the County Borough; impacting upon the type of housing required (i.e. more ground floor level access properties) and service providers across public and private sectors.
- Growth in established households around the 35-44 age group, which will primarily fuel employment growth, notwithstanding a proportion of other working aged people leaving the County Borough.
- Opportunities to secure significant affordable housing through the planning system.
- Opportunities to secure and/or enhance public open space and recreation provision through planning gain.

5.21 In comparison to the previous option, the Mid Growth Option would undoubtedly place some pressure on greenfield sites. This is especially given that the majority of existing, viable, brownfield regeneration sites have recently been delivered under the current LDP or are committed and expected to come forward within the next few years. However, after all remaining viable opportunities on previously developed land and/or underutilised sites are exhausted, this level of growth could still be accommodated in a sustainable manner through complementary allocations on the edge of existing settlements. This approach would not be to the detriment of the strategic objectives that seek to protect and enhance the distinctive and natural places across the County Borough, rather conducive to delivery of the full plethora of issues that the replacement plan is seeking to address.

5.22 Fundamentally, the Mid Growth Option would incite sustainable levels of development that would meet the needs of newly forming households and lead to more established households both moving into and remaining within the County Borough. The more recent trend based levels of growth would also result in less outward migration across other economically active age groups. These phenomena would counter-balance the naturally ageing population in Bridgend and provide more scope to incite job creation. Put succinctly, areas with housing growth will attract skilled workforces within their growing populations and thereby act as alluring bases for new employers to consider moving into or expanding within.

5.23 The Mid Growth Option would enable sustainable economic growth in the County Borough in accordance with many of proposed strategic policies. It would notably help to achieve a better balance between the location of jobs and housing, facilitate delivery of job opportunities and provide a realistic level and variety of employment land. Indeed, the findings of the EEBS suggests that the replacement LDP will

require less employment land than the current LDP to achieve these objectives (i.e. 4 ha per annum) as there was significant over-allocation of employment land previously. However, this forecasted level of provision is considered more than sufficient to help maintain an accessible, long term supply of local employment land, which is key to creating productive and enterprising places, whilst also helping deliver the ambitions of the Cardiff Capital Region City Deal.

- 5.24 In addition, this level of growth would capitalise upon existing service and employment facilities, thus inducing a local multiplier effect to increase revenue for and therefore vitality of local business and services. Simultaneously, residents would be able to benefit from sustainable access to service centres and public transport links; helping minimise additional traffic congestion by improving active travel infrastructure and reducing car dependencies. Development of this scale and nature would contribute towards several strategic aims of the revised Plan that seek to support the viability of town and district centres, build a more self-reliant economy and deliver accessible well-connected neighbourhoods.
- 5.25 This level of growth would also provide significant opportunities to secure affordable housing as part of private residential schemes, which will deliver the right level and type of residential development; ensuring that a significant proportion is affordable and accessible to all to meet the identified needs of the County Borough.
- 5.26 Overall, the Mid Growth Option is based on post-recession demographic trends (from 2011/12 to 2016/17), that have recorded higher net in-migration to Bridgend over this period, linked to the build rate. Progressing along this trajectory would induce similar levels of residential development to those witnessed in recent years and see more established working aged households both remaining in and being attracted to the County Borough. It therefore follows that the size of the available labour force is likely to be higher than estimated under the Low Growth Option, which would in turn encourage firms to locate or expand in Bridgend County Borough. Whilst this Option would place an element of pressure on some greenfield sites, growth would be accommodated in a sustainable manner at the edge of existing settlements. This would provide significant scope to deliver necessary infrastructure, secure affordable housing and complement existing centres by linking new homes to jobs and services via sustainable multi-modal forms of transport. This Growth Option would deliver against the full range of issues the replacement Plan is seeking to address and enable realisation of all four Strategic Objectives.
- 5.27 **High Growth Option**
- 5.28 The POPGROUP Pre-Recession Scenario projects the highest level of growth across the ten scenarios, primarily because its migration assumptions are based on a period of significant economic growth from the seven years (2001/02–2007/08) prior to the recession. This represents a level of growth that just exceeds the existing Dwelling-Led LDP Scenario, which was grounded in similarly favourable socio-economic trends to deliver high regeneration-led growth aspirations. The Pre-Recession Scenario will therefore form the basis for the High Growth Option, which indicates the level of growth conceivable with significant, sustained economic growth and particularly favourable market conditions.

- 5.29 This High Growth Option would result in a significant (12.8%) increase in the County Borough's population, with population growth of 18,683 over the life of the revised plan. This would produce a 15.6% increase in households (+9,725), translating into an annual dwelling requirement of 681 from 2018-2033. For context, proceeding with this High Growth Option would require a 39% increase in house building based on the last 5 year average, or a 61% increase in house building based on the last 10 year average. The change in households is primarily driven by growth in the 35-44 age category and it is also worth noting that other working age groups exhibit far more negligible declines than in other scenarios. However, as with the Low and Mid Growth options, a growing proportion of the population is set to move into the 60+ age category.
- 5.30 This level of population change and the younger age profile estimated under this scenario assumes that the pre-recession period of high net migration into Bridgend will re-occur over the life of the replacement Plan. In turn, this level of growth could support an annual employment change of +475 per annum based on the fixed unemployment rate assumption or +524 based on the reduced unemployment assumption. Again, to remain consistent and optimistic regarding levels of unemployment over the life of the plan, the latter assumption will be used to inform this Option.
- 5.31 The High Growth Option (projecting growth of 681 dwellings and +524 employment growth per annum) would likely result in:
- Significant growth in school aged children, placing more pressure on existing schools. However, this level of residential delivery would provide a more substantial opportunity to secure additional provision through planning gain to fund extensions and/or new schools.
 - The most significant increase in the proportion of older and elderly people living in the County Borough (compared to the other two Options); impacting upon the type of housing required (i.e. more ground floor level access properties) and service providers across public and private sectors.
 - A more stable number of working aged people residing within the County Borough, with a notable increase in established households around the 35-44 age group, justifying relatively large growth in employment provision.
 - Opportunities to secure more significant affordable housing through the planning system than has been achieved in recent years.
 - Increased opportunities to secure and/or enhance public open space and recreation provision.
- 5.32 This Option is estimated to support nearly double the number of jobs compared to the Mid Growth Option, owing to a more youthful and economically active projected population. This is based on an assumption that the high period of net migration during the lead up to the recession will be repeated and sustained over the life of the revised Plan, which will, in turn, attract a much larger labour force into the County Borough. The EEBS concluded that the number of jobs supported under the Mid Growth Option is likely to be an upper estimate of what can be delivered and that any further uplifts in growth are unlikely to be realised. This is because the labour supply within the regional population is relatively fixed over the life of the Plan and it is questionable as to whether the high levels of international migration exhibited prior to the recession will be replicated over the duration of the next 15 years. The EEBS also warns against the cumulative effects of several Councils within the region planning for more homes than demographic trends suggest are required. It states that household sizes would need to fall further (notwithstanding the already

increasing prevalence of smaller households) and that formation rates would need to increase in order to support delivery of such a high number of additional homes.

- 5.33 This level of growth would conceivably support a far more considerable number of jobs than the Mid Growth Option based on the projected population change. However, there is an element of uncertainty as to whether planning for this level of growth would help achieve an equilibrium between the number of economically active people moving into the County Borough and the number of employers relocating and/or expanding within the same vicinity. As the EEBS states, Bridgend is currently rather self-contained in this respect, with no significant commuting imbalance. The Mid Growth Option would help to grow the County Borough in a similarly sustainable manner, with balanced numbers of homes and jobs. However, planning for much larger scale growth could undoubtedly alter this balance, leading to a notable increase in out-commuting for work purposes and additional traffic congestion along the major highway network. This is because employment land take-up has been around 2 ha per annum in recent years and the EEBS recommends planning for no more than 4ha of new land per annum over the life of the revised Plan. It is therefore highly unlikely that employment land take-up will exceed this level, meaning the High Growth Option would considerably increase the chance of new households living in the County Borough and working elsewhere. This would certainly contravene some of the key issues the revised plan is seeking to address, such as promoting sustainable forms of transport and reducing the need for people to travel long distances to work.
- 5.34 Moreover, this level of growth does not align as closely with the Strategic Objectives of the replacement LDP. There is specific emphasis on providing a **realistic** level and variety of employment land to facilitate delivery of high quality workspaces and job opportunities. The High Growth Option would necessitate planning for a much higher level of employment than what the EEBS deems practical. Equally, the replacement LDP seeks to achieve a better balance between the location of jobs and housing and there is a risk that planning for too high a level of growth would undermine this objective.
- 5.35 Another key point to note is that residential build levels of this scale have not been achieved in the County Borough and it is highly doubtful that there will be a sudden and sustained upturn in build rates in the region of 39% to 61% (based on the last 5 to 10 year average, respectively). Planning for a level of housing provision that is significantly in excess of the need for the County Borough could result in unnecessary environmental and landscape impacts, especially considering that many of the existing brownfield land opportunities have already been developed or are committed under the current LDP. Therefore, approximately 7,000 dwellings would need to be allocated on new greenfield sites to deliver this Option. This level of growth may prove undeliverable if demand is not forthcoming, which is pertinent considering the High Growth Option is reliant on in-migration returning to the unprecedented levels witnessed prior to 2008/09.
- 5.36 There can be no dispute that the High Growth Option would help address the affordability issues of the County Borough as it would provide the most significant scope to deliver additional affordable units per annum. However, this is not considered an over-riding factor as the housing need identified in the LHMA could be met through the Mid Growth Strategy in combination with Social Housing Grant delivered schemes over the life of the Plan.
- 5.37 The Vision of the replacement Plan seeks to deliver sustainable levels of growth to the established towns in a manner that supports existing local services and facilities,

whilst also protecting and enhancing the County Borough's environmental and heritage assets. It also aims to channel regeneration led Growth towards Porthcawl and the valley settlements; most notably Maesteg and the Llynfi Valley. The risk with the High Growth Option is that it may place too much emphasis on outright economic growth and could lead to delivery of excessive greenfield sites at the expense of more sustainable urban extensions and regeneration schemes. This may render it difficult to balance the four strategic objectives and achieve an equilibrium between economic growth and sustainable development. The Mid Growth Option would conversely facilitate more sustainable levels of growth to enable these objectives to occur without being reliant on a significantly high and unprecedented level of net migration.

6. CONCLUSION

- 6.1 This paper has outlined a range of evidence to inform the basis for Bridgend's housing and economic growth from 2018-2033. The core Welsh Government Population and Household Projection Variants have been analysed alongside a range of alternative trend based projections. The latter incorporate more recent data from Mid-Year Estimates and a broad range of historical demographic scenarios with varying migration assumptions. These scenarios have been benchmarked against recent dwelling completions to help add context in terms of past build rates. As suggested in the draft Development Plans Manual, this evidence base has been translated into a Low, Mid and High Growth Option to inform the Replacement LDP.
- 6.2 The Low Growth Option requires significantly less housing than the Mid Growth Option (just over half the requirement) as it is based on a period of reduced net migration flows to the area from 2009/10 to 2011/12. It therefore estimates a low build rate of 271 dpa, which may well assist with easing pressure on service provision, infrastructure and greenfield sites, although would not catalyse a level of growth that would support economic development or indeed the wider plethora of issues that the Replacement LDP is seeking to address. The residential build rate would ultimately be too low to provide sufficient accommodation for newly forming households, leading to out migration of economically active households and an increasing ageing population profile. This Option would therefore support minimal employment growth per annum (+13), hampering development of a skilled, local labour force, which could significantly impact upon the County Borough's attractiveness to employers. In time, this could hinder Bridgend's ability to continue performing a sub-regional employment and service centre role that will benefit from and contribute towards the success of the Cardiff Capital Region City Deal. As such, this Option is not considered optimal to provide a sufficient level of housing development and employment growth to underpin the replacement Plan.
- 6.3 The Mid Growth Option would see a population increase of 8.4% to 155,013 by 2033, with a dwelling requirement of 7,575 (505 dpa) and employment growth of 3,990 (266 pa) over the plan period. This appears to be a level of growth that is realistic based on the past five year average build rate whilst also being robustly grounded in post-recession demographic and migration trends (from 2011/12 to 2016/17). Whilst there is not an abundance of viable, previously developed sites and/or underutilised sites remaining in Bridgend, this level of growth could still be accommodated in a sustainable manner through complementary allocations on the edge of existing settlements. Delivering this level of growth would meet the needs of newly forming households, enabling the attraction and retention of an economically active labour force to counter-balance the naturally ageing population in Bridgend. This growing pool of skilled labour would subsequently render Bridgend County Borough an attractive prospect for employers to move into or expand within. The Mid Growth

Option would therefore help to achieve a better balance between the location of jobs and housing, facilitate delivery of varied job opportunities and provide a level of employment land deemed realistic by the EEBS. This will prove key to creating productive and enterprising places, whilst also helping deliver the ambitions of the Cardiff Capital Region City Deal. In addition, this Growth Option would provide significant scope to deliver necessary infrastructure, secure affordable housing and complement existing centres by linking new homes to jobs and services via sustainable multi-modal forms of transport.

- 6.4 The High Growth Option would result in delivery of 681 dpa, based trends that incorporate pre-recession migration levels. This Option is estimated to support nearly double the number of jobs (+524 pa) compared to the Mid Growth Option, owing to a more youthful and economically active projected population. However, it is questionable whether planning for this level of growth would help achieve an equilibrium between the number of economically active people moving into the County Borough and the number of employers relocating and/or expanding within the same vicinity. The EEBS concluded that the number of jobs supported under the Mid Growth Option is likely to be an upper estimate of what can be delivered in Bridgend County Borough and additional over-supply of dwellings could lead to a proliferation in unsustainable commuting patterns. Residential build levels of this scale have also not been achieved in the County Borough and it is highly doubtful that there will be a sudden and sustained upturn in build rates to this extent. The High Growth Option is reliant on in-migration returning to the unprecedented levels witnessed prior to 2008/09, which is unlikely, and it also places too much emphasis on outright economic growth. Proceeding on this basis could lead to delivery of excessive greenfield sites at the expense of more sustainable urban extensions and regeneration schemes, thereby rendering it difficult to achieve an equilibrium between economic growth and sustainable development.
- 6.5 Overall, the Mid Growth Option therefore appears to be the most appropriate to achieve a balanced and sustainable level of economic growth that will facilitate the continued transformation of the County Borough into a network of safe, healthy and inclusive communities that connect more widely with the region. Progressing along this trajectory would induce similar levels of residential development to those witnessed in recent years, see more established working aged households remaining in the County Borough to support realistic levels of employment growth and provide significant scope to secure complementary infrastructure. This Growth Option would deliver against the full range of issues the replacement Plan is seeking to address and enable realisation of all four Strategic Objectives.