

# PEMBROKESHIRE DEMOGRAPHIC EVIDENCE

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2022-based Welsh Government Projections

March 2026

**EDGE**  
ANALYTICS

## ACKNOWLEDGEMENTS

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# I INTRODUCTION

## Requirements

- 1.1 Pembrokeshire County Council is currently at Examination for its Local Development Plan 2 (LDP2), submitted to the Welsh Government (WG) in July 2025.
- 1.2 Pembrokeshire's LDP2 identifies a housing requirement of 5,840 new homes between 2017 and 2033, an average of 365 homes per year - excluding the Pembrokeshire Coast National Park (PCNP).<sup>1</sup>
- 1.3 The LDP2 requirement was informed by a suite of scenario evidence, underpinned by 2018-based WG population and household projections.<sup>2</sup> The LDP2 growth scenario was identified as the average of the following three scenarios:
- Long Term Population Projection which forecasts a need for 295 dwellings p.a.
  - Dwelling-led, 5-year average completion rate (2014/15–2018/19) of 413 dwellings p.a.
  - Dwelling-led, 10-year average completion rate (2009/10–2018/19) of 378 dwellings p.a.
- 1.4 Since LDP2 was submitted for Examination, the WG has published its 2022-based population and household projections, superseding the 2018-based projections. As part of the Examination process, the Inspector has requested that the Council review the latest WG projections, assessing their material impact upon the LDP2 evidence.
- 1.5 This briefing note presents an overview of the 2022-based population and household projections for the Pembrokeshire Unitary Authority (UA) - including the portion of the UA within the PCNP (Section 2).
- 1.6 To enable direct comparison between the LDP2's scenarios and the new 2022-based projections, the latter have been apportioned to the geography of the Pembrokeshire Local Planning Authority (LPA), excluding the portion of the UA covered by the National Park (Section 3).

## WG Projections

- 1.7 The WG's 2022-based projections provide estimates on the future potential size and structure of the population, and the number and type of households that might form between 2022 and 2047. These latest statistics include a suite of scenario variants, which examine the long-term effect of alternative assumptions for migration, fertility, mortality on both population and household growth.
- 1.8 A central or 'Principal' scenario is accompanied by five projection variants (Table 1). Each scenario variant has a 2022 mid-year estimate (MYE) base year, and for each there is a corresponding household projection, derived through the application of household 'membership rates' to the variant population growth outcomes.

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<sup>1</sup> Pembrokeshire County Council [Local Development Plan Review](#)

<sup>2</sup> Edge Analytics [Updating the LDP Demographic Evidence, December 2020](#)

Table 1: Welsh Government projection variants

Projection	Description
Principal	Migration (internal and international), fertility and mortality assumptions all derived from 5-year trends
High Population	High fertility and high life expectancy, migration assumptions aligned with the Principal projection.
Low Population	Low fertility and low life expectancy, migration assumptions aligned with the Principal projection.
10-year	10-year average migration (internal and international).
15-year	15-year average migration (internal and international).
Zero migration	Natural change only (the balance between births and deaths).

Source: WG

## 2 WG 2022-BASED PROJECTIONS

### Population

2.1 Figure 1 compares the population growth outcomes for the 2022-based population projections for the Pembrokeshire UA. The chart includes an illustration of annual MYE - the historical population estimates that have informed the development of the official projections.

2.2 The Principal scenario estimates a 13.9% growth in the population (+17,318 people) over the 25-year projection horizon. With no migration, the Zero migration scenario results in population decline in Pembrokeshire (-13.9%), the consequence of a population that ages rapidly, with an excess of deaths over births. The remaining scenario variants result in growth ranging from 5.9% under the 15-year scenario to 15.9% under the High Population scenario, the latter differing from the Principal outcome in its higher fertility and life expectancy assumptions.

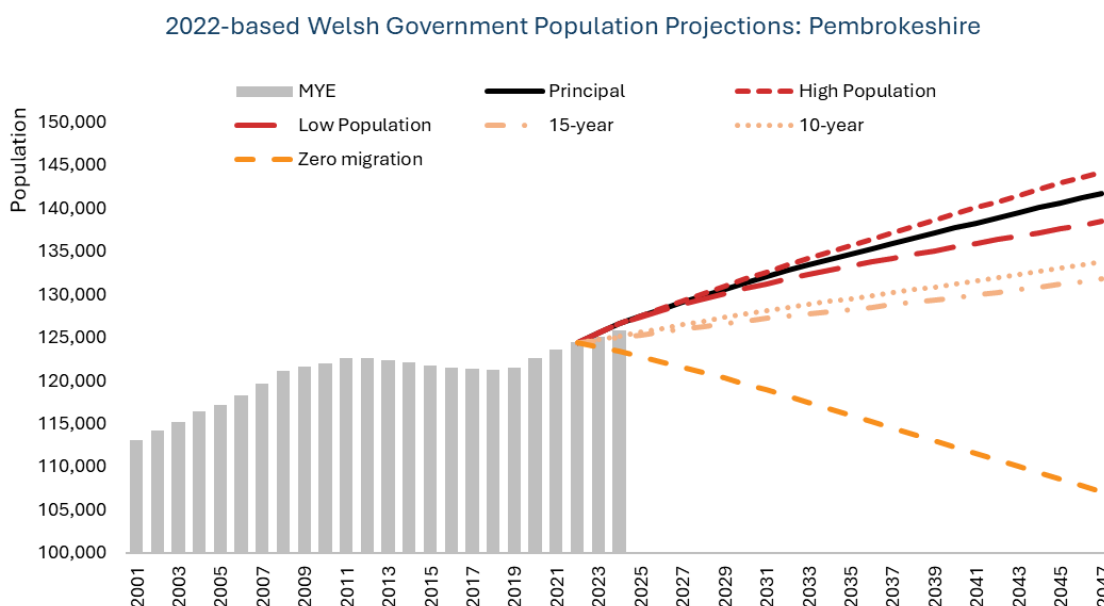


Figure 1: Pembrokeshire UA: WG population projections

Source: WG, ONS

2.3 The demographic components of change that underpin the Principal projection are presented in Figure 2, alongside an equivalent components illustration for the 15-year variant. These scenarios differ only in their migration assumptions, the Principal using the most-recent 5-year history and the 15-year using the longer-term perspective. The latter is included as a comparison as it is a ‘long term’ scenario comparable with a similar scenario that Pembrokeshire has used as part of its calculation of its preferred housing growth requirement in LDP2.

2.4 For context, the historical components of change are included in the illustrations, up to 2021/22. The future fertility, mortality and migration estimates used in the WG variants have been derived using these historical statistics.

2.5 Under both scenarios, the projected components of change for 2022–47 continue the positive contribution that recent net internal (domestic) migration has had on population growth in the Pembrokeshire UA: +1,469 per year under the Principal scenario, compared to +1,045 under the 15-year alternative. The net migration effects differ as the Principal scenario draws its migration assumptions from the 5 years preceding 2022, whilst the 15-year uses the longer-term history.

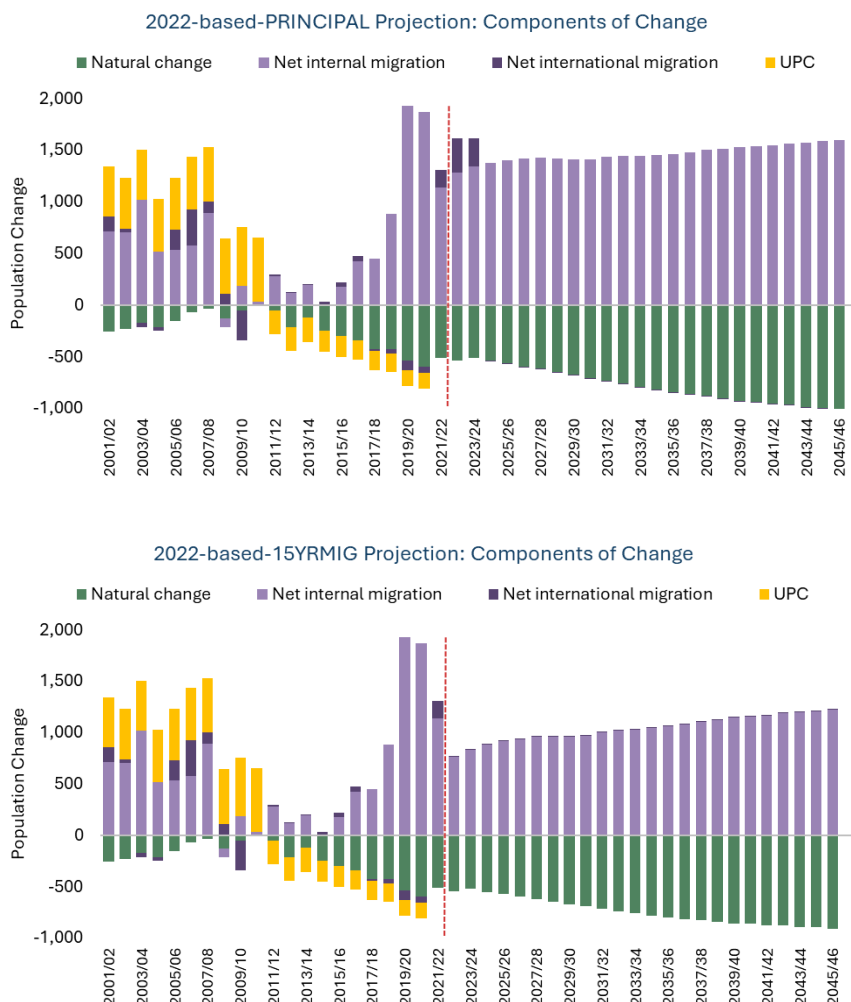


Figure 2: Pembrokeshire UA: MYE and 2022-based projections - components of change, *WG Principal and 15-year scenario variants*

Source: WG, ONS.

Note: UPC = Unattributable Population Change - see paragraph 2.15

2.6 Net migration into Pembrokeshire was relatively low between 2009–2015, but rose thereafter, reaching a peak in 2019/20 and 2020/21. The net inflow has declined since but remains high in comparison to earlier evidence. It is these recent migration totals that are driving the higher population growth evident in the Principal scenario.

2.7 The large majority of Pembrokeshire’s net migration inflow has been from ‘cross-border’ flows, originating from outside Wales, primarily English local authorities. In addition, the age structure of the migration balance has been characterised by a net growth in the older age-groups, particularly 45–64, plus a consistent net loss in the younger 16–24 age category.

- 2.8 Under all scenario variants, natural change (the balance between births and deaths) is expected to have an increasingly negative impact on population growth in Pembrokeshire UA, reflective of a continued falling birth rate and an ageing population. The number of recorded live births in 2021/22 reflected a 22% decline from a high point in 2011/12. The projected decline in natural change mirrors national trends - fertility rates are projected to fall across Wales and the wider UK to 2047 (Table 2).<sup>3</sup>

Table 2: 2022-based national population projection fertility rates

Fertility Rate	Mid-2022	Mid-2047
Wales	1.46	1.40
UK	1.48	1.45

Source: ONS

- 2.9 Also under all scenario variants, net international (overseas) migration is projected to have a minimal impact on population growth in the Pembrokeshire UA over the 2022–47 projection period. It should be noted that in the first two years of the Principal projection, WG has constrained international migration to the published estimates from ONS; this explains the uptick in 2022/23 and 2023/24 in Figure 2 compared to the subsequent projection years.<sup>4</sup>
- 2.10 The long-term impact of international migration upon population change remains uncertain, with the unprecedented net inflows experienced across the UK during 2021–24 now in decline but remaining relatively high. In Pembrokeshire, the effect of net inflows from abroad have historically been light, and this is reflected in the long-term assumptions that are estimated for all scenario variants.

## Households

- 2.11 The number of households under the 2022-based Principal scenario is projected to increase by +11,098 (19.8%) between 2022 and 2047, compared to +5,898 (10.5%) under the 15-year variant (Figure 3). The High Population variant achieves the highest household growth at +21.3%, lowest under the Zero migration variant at -11.5%.<sup>5</sup>

<sup>3</sup> ONS [National population projections, fertility assumptions: 2022-based](#)

<sup>4</sup> WG [Local authority population projections 2022-based](#)

<sup>5</sup> WG [Local authority household projections 2022-based](#)

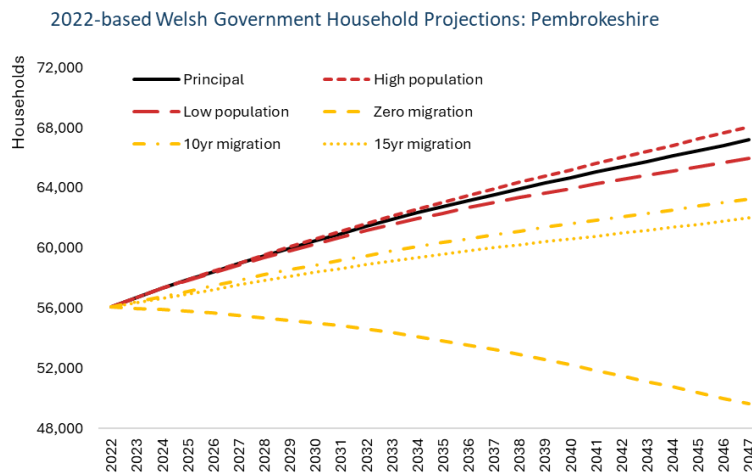


Figure 3: Pembrokeshire UA: WG household projections.

Source: WG

### Comparison with Previous WG Projections

2.12 The 25-year population growth expectation under the 2022-based Principal projection (13.9%) exceeds the growth projected under previous WG scenarios, to a significant degree. The 2014-based and the 2018-based Principal projections estimated a -1.2% decline and a 4.1% growth respectively (Figure 4).

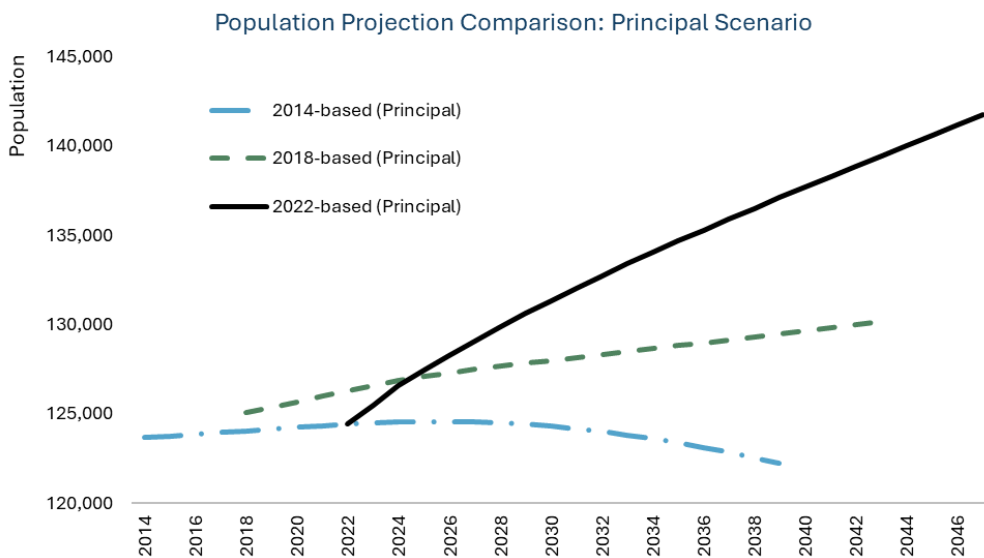


Figure 4: Pembrokeshire UA: WG Principal projection comparison

Source: WG

2.13 An updated Technical Report for the 2022-based round of projections has yet to be published, but it is assumed that there has been no significant change to the underlying methodology used in the development of the new population growth variants. It is recent demographic trends (particularly domestic migration and fertility) that have altered expected growth outcomes, alongside the post-Census rebasing of the historical MYE.

2.14 An important difference between the WG projections and those produced by ONS for English local authorities is that the ONS adjusts migration flows so that all areas sum to the national projection for England. In Wales, migration assumptions are derived separately for each of the 22 local authorities, so the sum of local projections does not equal the national projection – exceeding the Wales total (in the Principal scenario) by approximately 23.5k by 2047.

2.15 Regarding the rebasing of the MYE, ONS conducts this statistical exercise in order to align population estimates between successive Census counts. Following a Census, ONS revisits the intercensal MYE and applies adjustments where appropriate, to births, deaths and migration counts. When population change cannot be attributed to any one component of change, it is classified as unattributable population change (UPC). The 2021 Census population estimate in Pembrokeshire was lower than the pre-Census MYE, resulting in a negative UPC contribution between 2011/12–2020/21. In all Welsh authorities, apart from Newport, the MYE were adjusted downwards following the 2021 Census.

2.16 For Pembrokeshire, the trajectory of year-on-year population change pre- and post-revision is quite different (Figure 5).

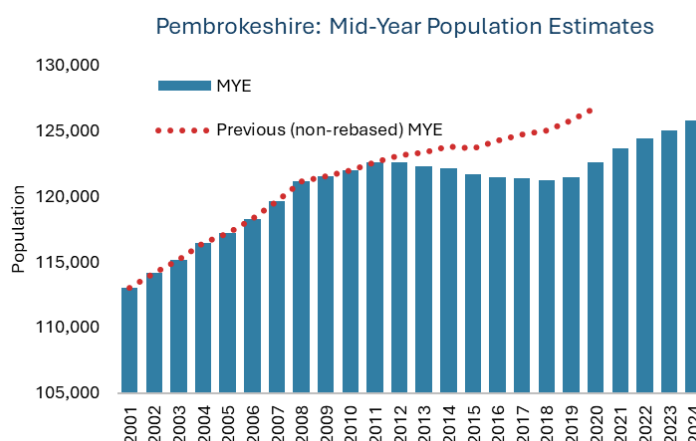


Figure 5: Pembrokeshire UA: Mid-Year Population Estimates

Source: ONS

2.17 It is these rebased MYE that have informed the development of the 2022-based official projections. The previous 2014-based and 2018-based were configured using older and now outdated MYE populations. Note that the scenario evidence formulated by Edge Analytics on behalf of Pembrokeshire Council, and used in the derivation of LDP2 housing requirements, was also configured using this older MYE data.

2.18 In terms of household numbers, the 2022-based Principal household projection projects a higher level of growth (19.8%) than the 2018-based or 2014-based WG Principal household projections (9.3% and 4.0%, respectively) (Figure 6).

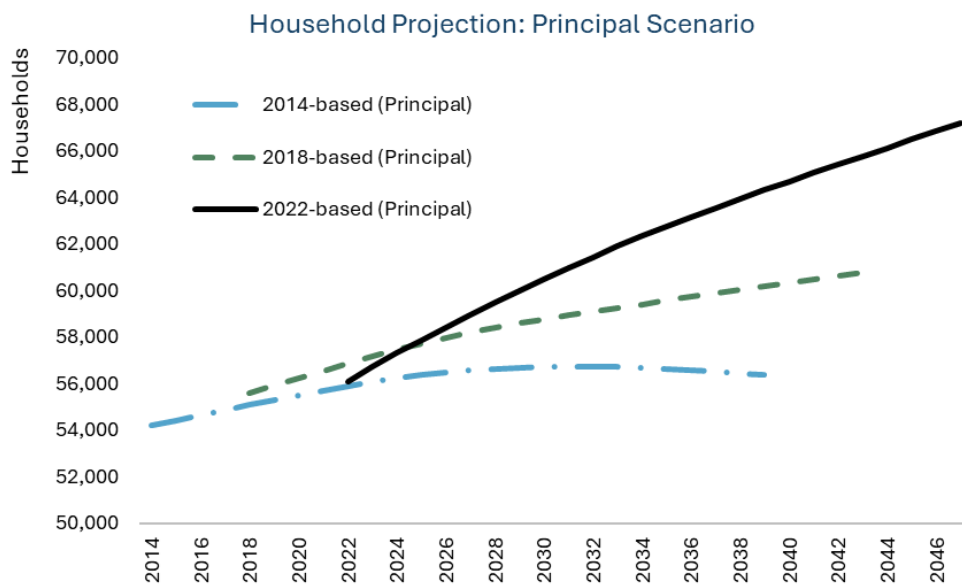


Figure 6: Pembrokeshire UA: WG *Principal* household comparison

Source: WG

- 2.19 The key reasons for the different trajectories of household growth are, first and foremost, the underpinning population growth trajectories, plus associated changes to the household projection methodology. The 2022-based household projection membership rates (which determine household composition) have been updated by WG using data from the 2021 Census. Historical trends between 2001, 2011, and 2021 have been used in the calibration of the membership rates, as opposed to just the 2001 and 2011 Censuses that were used for estimation in the 2018-based household projections.
- 2.20 As with the WG’s population projections, an updated Technical Report for the 2022-based round of household projections has yet to be published, although the core projection method (multiplying household membership rates by projected household populations) remains the same. It is the revised, post-Census population inputs and membership rates that are the key changes to the latest household model.

### 3 LDP2-WG SCENARIOS COMPARED

3.1 Pembrokeshire’s LDP2 housing requirement for 5,840 new homes (365 per year) between 2017 and 2033, was derived from the average of three scenarios:

- Long Term Population Projection which forecasts a need for 295 dwellings p.a.
- Dwelling-led, 5-year average completion rate (2014/15–2018/19) of 413 dwellings p.a.
- Dwelling-led, 10-year average completion rate (2009/10–2018/19) of 378 dwellings p.a.

3.2 These scenarios had a 2018 base year and were formulated from a mix of pre-Census population data and associated evidence on migration, fertility, mortality and household formation. They were also specifically for the Pembrokeshire LPA, excluding the National Park. For direct comparison with this LDP2 evidence, WG 2022-based scenarios have been scaled for consistency with the LPA geography.<sup>6</sup>

3.3 The population growth trajectories for the LDP2 scenarios are presented alongside the WG Principal and WG 15-year projections, the latter included to illustrate an updated ‘long term’ perspective – a key component of the LDP2’s preferred scenario calculation (Figure 7). The latest MYE evidence is included for context.

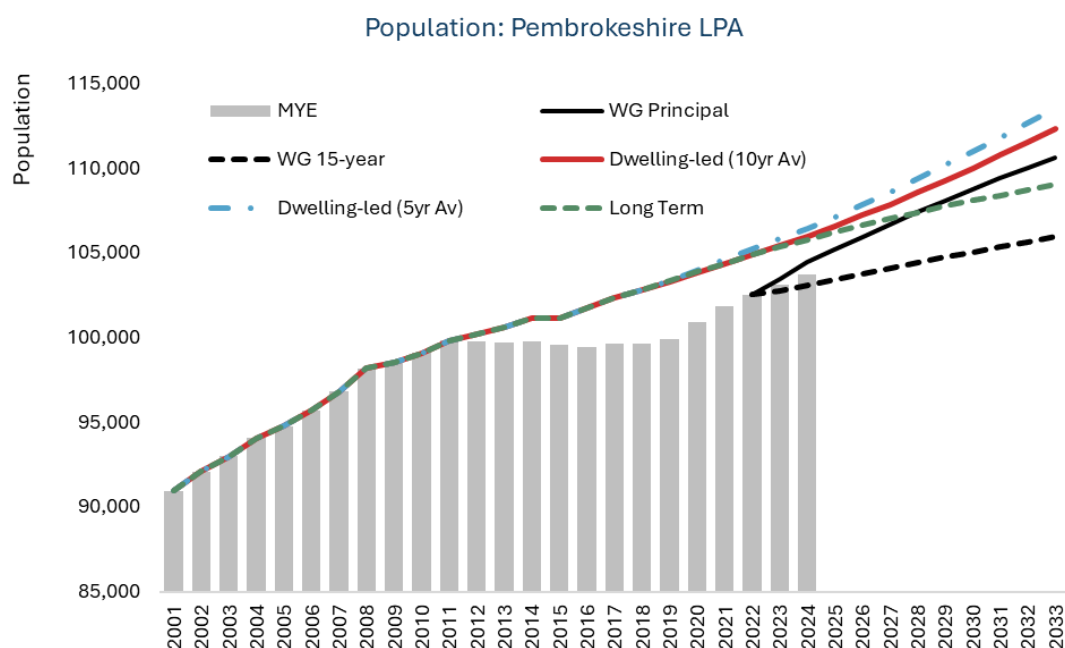


Figure 7: LDP2 scenarios and WG 2022-based *Principal and 15-year* projection

Source: ONS, WG, Edge Analytics

3.4 Two features of this chart make visual comparison difficult: (1) the discrepancy between the previous LDP2 scenarios and the post-Census, UPC-adjusted MYE totals; and (2) the different base years for

<sup>6</sup> Alignment has been achieved by estimating the proportion of residential addresses inside and outside the National Park, using 2021 Census Output Areas and the Ordnance Survey AddressBase Plus database

the LDP2 and WG scenarios. Table 3 assists the comparison, presenting population, household, net migration, and natural change estimates for each of the scenarios, together with ‘averages’ for the grouped LDP2 and WG scenarios.

Table 3: LDP2 scenarios and WG 2022-based projections

Scenario	Change 2017–2033				Average per year	
	Population	%	Households	%	Net Migration	Natural Change
Dwelling-led (10yr Av)	9,986	9.8%	5,577	12.4%	955	-331
Dwelling-led (5yr Av)	11,199	10.9%	6,058	13.5%	1,023	-323
Long Term	6,681	6.5%	4,342	9.7%	771	-353
<b><i>LDP2 Average</i></b>	<b><i>9,289</i></b>	<b><i>9.1%</i></b>	<b><i>5,326</i></b>	<b><i>11.9%</i></b>	<b><i>916</i></b>	<b><i>-336</i></b>
WG Principal*	11,030	11.1%	7,017	15.8%	1,089	-382
WG 15-year*	6,328	6.4%	4,741	10.7%	801	-382
<b><i>WG Average</i></b>	<b><i>8,679</i></b>	<b><i>8.7%</i></b>	<b><i>5,879</i></b>	<b><i>13.3%</i></b>	<b><i>945</i></b>	<b><i>-382</i></b>
<b><i>WG Average vs LDP2 Average</i></b>	<b><i>0.93</i></b>	<b><i>0.96</i></b>	<b><i>1.10</i></b>	<b><i>1.12</i></b>	<b><i>1.03</i></b>	<b><i>1.14</i></b>

\* Estimates include the 2017–2021 ONS MYE and WG household estimates. Note that UPC has been included within the apportioned MYE history in the WG 2022-based scenarios for comparability with the LDP2 scenarios.

- 3.5 In terms of population growth, the WG Principal scenario is most similar to the LDP2’s Dwelling-led (5yr Av) scenario, with approximately 11% growth estimated between 2017–2033. Likewise, the LDP2’s Long Term scenario and the WG 15-year scenario reveal a similar growth outcome of approximately 6.5% over the projection horizon.
- 3.6 Annual net migration impacts are similar for these scenarios, although the natural change (births minus deaths) component of growth is higher in the WG scenarios, reflecting the lower fertility assumptions in combination with the ageing population.
- 3.7 Household growth differences are noticeably higher in the WG variants, where post-Census population inputs and revised membership rates have lifted the estimated rate of household growth over the 2017–33 projection period. An evaluation of associated dwelling growth has not been possible at this stage, whilst awaiting further data releases from the WG projections. But the household growth comparisons are broadly indicative of the likely dwelling growth discrepancies between scenarios.
- 3.8 Adopting the ‘averaging’ approach used in the LDP2 evidence, reveals that the population growth average of the WG Principal and WG 15-year scenarios is lower than that of the LDP2 scenarios. Conversely, household growth averages are higher, confirming the combined effect of altered population inputs and revised household membership rates.

## 4 SUMMARY COMMENTS

- 4.1 The LDP2's preferred growth strategy strikes a balance between a continuation of recent housing growth and consideration for Pembrokeshire's long-term (17-year) demographic history.
- 4.2 Demographic evidence underpinning the LDP2 strategy was sound at the time of formulation. However, five years have passed since the evidence was produced, with the 2021 Census providing the basis for a redefinition of demographic histories, and the formulation of new population and household growth estimates.
- 4.3 Updated post-Census, the WG has published revisions to its population and household growth outlook. The latest Principal projection estimates population growth in line with that previously estimated from the LDP2's scenario that continued a 5-year average housing growth trajectory. Similarly, the WG 15-year scenario outlook aligns to the growth estimated under the LDP2's Long Term scenario.
- 4.4 Awaiting further key assumptions on the WG's household model, a dwelling-growth impact assessment is not included here, but anticipated household growth under the WG scenarios is noticeably higher due to the important revisions to population and household inputs and assumptions.
- 4.5 The updated evidence has been profiled to enable an assessment of the material impact of the Welsh Government's new projections upon the defined LDP2 housing strategy. The WG Principal scenario, driven by key assumptions from a five-year history, certainly presents a higher growth outcome compared to earlier scenarios. The WG 15-year scenario, drawing its key assumptions from an extended history, estimates a lower growth alternative.
- 4.6 Migration is projected to be the key driver of future population change across much of Wales. For Pembrokeshire, higher net-migration inflows have been a feature of its demographic profile post-2015, peaking in 2019/20 and 2020/21, reducing thereafter. Much of the net inflow has been 'cross-border' from English local authorities, with high net gains of 45–64 year-olds, countered by net losses of 16–24-year-olds. A continuation of these recent trends is not a certainty but is the key driver of the high growth outcome of the latest WG Principal scenario.
- 4.7 The review of evidence reported here has been conducted without the benefit of full methodological documentation from the Welsh Government on both its population and household projection methods and assumptions. These will be released later in 2026. A key methodological difference with ONS equivalents is the lack of 'national' constraint on the Welsh population growth outcomes, so the sum of local projections does not equal the national projection.
- 4.8 Balancing the short-term and long-term historical perspective in judging the material impact of the new WG output upon LDP2 evidence would seem to be an imperative given the continuing uncertainty associated with the longer-term impact of social, economic and political events upon the UK landscape.

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